AN INVESTIGATION OF THE RELATIONSHIP BETWEEN RESILIENCE, 'RACE' AND TRAUMA AMONGST UNIVERSITY STUDENTS

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A mini-thesis submitted in partial fulfillment of the requirements for the degree of Magister Psychologiae in the Department of Psychology, University of the Western Cape.

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KEYWORDS

Resilience

Sense of coherence

Potency

Hardiness

Learned resourcefulness

Fortitude

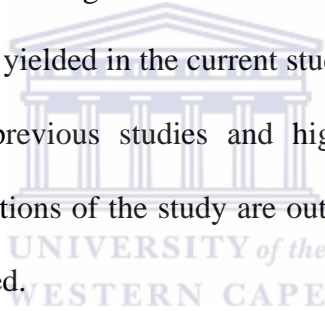Trauma

Stressful life events

'Race'

Students

ABSTRACT

South Africans are exposed to many traumatic events and exposure to such events is associated with negative emotional and behavioural outcomes. However, there are those who are still able to remain psychologically well amidst their difficulties. Resilience is the motivation to be strong in the face of unwarranted demands and this study proposes that it could serve as a buffer against the harmful effects of traumatic events. It is assumed that traumatic events present with demanding circumstances and further that resilience plays a role in the relationship between trauma, the challenges these events present and one's ability to function in these circumstances. Furthermore, 'race' may have a particular influence on this relationship as the level and severity of trauma among different 'racial' groups may vary. The link between resilience and trauma has been investigated, but little focus has been given to how 'race' may influence this relationship among students in the South African context. The aim of the current study was therefore to investigate the interaction between these three variables and add to existing knowledge related to resilience. Constructs related to resilience include sense of coherence, potency, hardiness, learned resourcefulness and fortitude. The two 'racial' groups included in the sample include 'African' and 'Coloured' students (categories created by the past apartheid government). Resilience was measured by the Resilience Scale for Adults (RSA), trauma was measured by the Harvard Trauma Scale (HTS) and violence exposure was measured by the Childhood Exposure to Community Violence Scale (CECV). Participants included 249 students at the University of the Western Cape. Results indicate that 'Coloured' students report similar levels of violence exposure and trauma symptoms as 'African' students do. 'Coloured' students report higher scores on overall resilience and resilience sub-scales

(except the structured style sub-scale) than 'African' students as measured on the RSA. With regard to the trauma versus no trauma groups, the results indicate that 'African' students who form part of the no trauma group score higher on resilience than those who form part of the trauma group and within the trauma group 'Coloured' students score higher on resilience than 'African' students. In analyses amongst the high and the low trauma groups, the results indicate that those who form part of the low trauma group score higher on resilience than those who are among the high trauma group; 'African' students who form part of the low trauma group score higher on resilience than those who form part of the high trauma group; and 'Coloured' students who form part of the low trauma group score higher on resilience than those who form part of the high trauma group. The results yielded in the current study are both similar to and differ from findings presented in previous studies and highlight the complexity of the construct of resilience. Limitations of the study are outlined and recommendations for future research are also provided.

DECLARATION

I declare that *An investigation of the relationship between resiliency, 'race' and trauma amongst University students* is my own work, that it has not been submitted before for any degree or examination in any other university, and that all the sources I have used and quoted have been indicated and acknowledged as complete references.

UNIVERSITY *of the*
WESTERN CAPE

Amy Veenendaal   March 2008

DEDICATION

This work is dedicated to my parents, Robert and Cathy Veenendaal, who *always* believed I could achieve whatever I set out to do and whose love, guidance and support have been my source of strength.

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I thank Almighty God for His boundless love, grace and mercy and for blessings in great abundance.

Ad Deo Majorem Gloria

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SECTION ONE: INTRODUCTION

CHAPTER 1

OVERVIEW OF THE STUDY

1.1 General Introduction

South Africans are exposed to many traumatic events and exposure to such events is associated with negative emotional and behavioural outcomes. A vast majority of students at the University of the Western Cape (UWC) come from historically disadvantaged backgrounds where there is a greater risk of exposure to such events (traumatic events) which has the potential to hinder their development or ability to remain well. However, there are those who are still able to remain psychologically well amidst their difficulties. That is, in a group who share similar unfavourable circumstances, many will perform poorly but a small percentage within this group will maintain a good level of performance and health. The question is what is it that separates or differentiates this small percentage of students from the rest of the group? Why is it that they are able to function optimally when others are not? There are many theories, which attempt to answer this question, but this particular study focuses on the role resilience plays and the various facets thereof.

Resilience is the motivation to be strong in the face of unwarranted demands (e.g., traumatic events) (Rutter, 1987). It is assumed that traumatic events present with demanding circumstances and further that resilience plays a role in the relationship between trauma, the challenges these events present and one's ability to function in these circumstances (Waller, 2001). Furthermore, 'race' may have a particular

influence on this relationship as the level and severity of trauma among different 'racial' groups may vary. The link between resilience and trauma has been investigated but little focus has been given to how 'race' may influence this relationship among students in the South African context.

1.2 Aim of the study

The present study investigates the interaction between resilience, 'race' and trauma. The main aim of this study is therefore to explore the relationship between these three variables.

1.3 The value of the study

Utsey, Bolden, Lanier and Williams III (2007) have indicated that there is a gap in resilience research pertaining to the study of specific demographic variables and they motivate for researchers in this field to give greater attention to the understudied and at-risk populations, "bringing us closer to a more culturally congruent and empirically sound model of risk and resilience." (p. 76). The present study is therefore important for at least two reasons. Firstly, it extends the current boundaries of resilience research as little focus has been given to 'race' in the relationship between trauma and resilience. Secondly, once particular risk and protective factors have been identified as either positive or negative contributors to resilience, steps may be put in place to promote the positive and address the negative factors in order to contribute towards increased psychological well-being among students.

1.4 Research questions

1. Does 'race' affect the level of exposure to trauma?

2. Does 'race' affect the presentation of trauma?

3. Does 'race' influence levels of resilience?

4. Does 'race' play a role in the relationship between resilience and trauma?

1.5 Overview of the manuscript

Section two reviews relevant literature related to the present study. It discusses the three main constructs utilised in this study, namely, resilience, trauma and 'race'.

Chapter 2 presents definitions and discussions on key concepts such as resilience and other constructs within the salutogenic and fortigenic paradigm.

Chapter 3 considers trauma and violence in pre- and post-Apartheid South Africa and discusses Fanon's theory of the psychological effects of trauma and violence.

Chapter 4 looks at 'race' and racism, the various manifestations of racism as well as the psychological consequences thereof.

Chapter 5 attempts to locate the population of study (students within a South African university context) and discusses the literature pertaining to all three variables (i.e., resilience, 'race' and trauma). This is followed by a further discussion of the theoretical framework of the study.

Section 3 focuses on the empirical investigations of the study. This includes a discussion on the methodology, the results yielded in the study, a discussion on these results and finally a word on limitations and recommendations for future research.

Chapter 6 discusses the methodology utilised in the study. This chapter provides a discussion on the design of the research, the aim of the study, the research questions, the rationale and hypotheses. It also looks at the characteristics of the sample, the instruments used, the procedure of data collection, analysis and ethical considerations.

Chapter 7 reports the results yielded from the analyses of the research data. The descriptive statistics and reliability of the Harvard Trauma Scale (HTS), The Childhood Exposure to Community Violence Scale (CECV) and Resilience Scale for Adults (RSA) are presented. This is followed by analyses of one-way relationships between variables. T-tests and Mann-Whitney tests are used to determine difference in means between resilience, 'race' and trauma.

Chapter 8 discusses the results as presented in chapter 7. These results are discussed in line with the hypotheses of the study presented in chapter 6. This is followed by a summary and conclusion as well as a discussion on the limitations of the study and recommendations for future research.
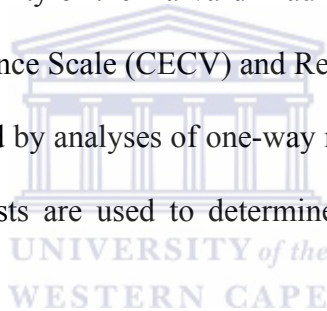
SECTION TWO: LITERATURE REVIEW

CHAPTER 2

RESILIENCE: A DYNAMIC CONSTRUCT

2. 1 Introduction

This chapter focuses on a shift in paradigm from psychogenesis to salutogenesis as well as key concepts related to resilience including sense of coherence, hardiness, potency, learned resourcefulness and fortitude. The focus of this chapter however remains on resilience, the definition thereof as well as a better understanding of the concept.

2.2 A shift in Paradigm

In the study of vulnerabilities and its effects on mental health, a range of literature tends to focus on psychogenesis (an illness model of psychology) (Rak & Patterson, 1996). However, the emphasis on health rather than illness has been somewhat more helpful. Garmezy (1971, 1991) as among the first to examine the occurrence of resistance and growth amidst adversity rather than pathology (cited in Condly, 2006) where adversity can be seen as consisting of two main categories of risk factors namely, challenging life circumstances (e.g., racism, drug abuse, etc.) and trauma (e.g., experiencing community violence, etc.) (Matsen & Coatsworth, 1998 cited in Waller, 2001).

More recently, counsellors have focused on helping clients identify their strengths and improving on these strengths (Rak & Patterson, 1996). Their focus has been on the origins of health or salutogensis (Rak & Patterson, 1996). Salutogenesis may be defined as one's reliance on personal resources that enables one to stay psychologically

well (Antonovsky, 1979; Strümpfer, 1995). This approach is particularly helpful when trying to understand and identify why certain individuals who are exposed to risk factors (i.e., adversity) are in general able to function satisfactorily in their everyday lives. Resilience falls within this paradigm, as it includes a motivation to be strong in the face of challenging demands (Strümpfer, 2001).

2.3 Key Concepts

The key constructs which fall within the salutogenic paradigm include sense of coherence, hardiness, potency, learned resourcefulness and resilience, which is the focus of the current study. Fortitude falls within the fortigenic paradigm and will also be included in the discussion that follows (Barends, 2004). However, it is important to note that even though these constructs are all in some way related to resilience a major difference between these and resilience is that resilience has the prerequisite of adversity. That is, resilience cannot exist without the presence or occurrence of any adversity in combination with the necessary protective processes. The constructs related to resilience therefore differs from this in that no such requirement is needed and they each develop in different ways within the individual. These constructs will be focused on in the following discussion.

2.3.1 Sense of Coherence

Sense of coherence is considered to be synonymous with resilience as it is a characteristic that aids one's ability to bounce back from difficult situations. Antonovsky (1987) defines Sense of Coherence (SOC) as a global construct that expresses the extent to which one has a pervasive feeling of confidence that one's

internal and external world are predictable and that there is a high chance that things will work out as well as can be expected. He maintained that the SOC concept is a "...dispositional orientation rather than a personality trait..." and that the SOC construct is a reflection of one's ability to respond to stressful situations (Eriksson & Lindstrom, 1993, p. 727).

SOC is characterized by three main components that interact to contribute to a person's psychological health, namely: comprehensibility, manageability and meaningfulness. *Comprehensibility* refers to the ability to perceive stimuli deriving from internal and external environments in one's daily life as structured, predictable and explicable. *Manageability* is one's belief that resources at one's disposal are sufficient to meet demands posed by these stimuli. *Meaning* is when these demands and challenges are considered worthy of one's investment and engagement (Antonovsky, 1987).
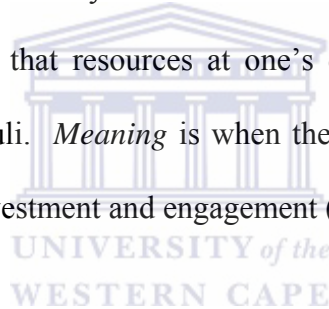
SOC has been studied extensively in South Africa with the use of the SOC Scale. Diraz, Greyling and Ortlepp (2003) found SOC to be a significant moderator of the relationship between conflict and life satisfaction. SOC has been studied in relation to life satisfaction (Mankayi, 1996; Diraz, Greyling & Ortlepp, 2003), life stress (Anson, Carmel, Levenson & Maoz, 1993 cited in Edwards & Besseling, 2003), psychological distress/well-being (Antonovsky & Sagy, 2001; Edwards & Besseling, 2001), and symptoms of physical well-being (Flannery & Flannery, 1990 cited in Diraz, Greyling & Ortlepp, 2003). Within the field of occupational or industrial psychology, SOC has been related to secondary traumatic stress (Ortlepp & Friedman, 2001), and job satisfaction (Levert, Lucas & Ortlepp, 2000).

2.3.2 Hardiness

Hardiness is similar to resilience in that both constructs possess an element of determination and perseverance in the face of difficulty, a measure of tenacity (Dyer & Mcguiness, 1991). This is evidenced in the definition and conceptualisation of the construct as hardiness is referred to as one's inherent ability to overcome the challenges in one's environment by utilising stressful life events as opportunities for personal growth (Kobassa, 1979). As hypothesized by Kobassa (1979), the hardy person displays three basic personality characteristics, namely: a sense of control over what they experience, a great sense of commitment to work and self, and the tendency to perceive change as a challenge and not as a threat. "Persons who view stressful situations as meaningful and interesting (commitment), see stressors as malleable (control), and construe difficulties as challenges are defined as hardy" (Lightsey, 1996, p. 629).

Those higher in hardiness have been found to experience less frequent stressors and to perceive minor stressful events as less stressful than those lower in hardiness (Banks & Gannon, 1988). Feinhauer, Hilton and Callahan (2003) found that hardiness served as a significant moderating factor in the negative impact of internalised shame on relationship intimacy in adult female survivors of childhood sexual abuse. Ben-Zur, Duvdevany and Lury (2005) found hardiness to contribute towards the mental health of mothers caring for children with intellectual disabilities. Hardiness has also been associated with better adjustment to college (Mathis & Lecci, 1999).

2.3.3 Potency

Potency highlights the interaction between individual and environment as a key component in establishing and adding to one's ability to cope. It is therefore similar to resilience in that it also follows a systemic and dynamic view of interaction between factors, which contribute to coping. Potency is regarded as, "a person's enduring confidence in his/her own capacities, as well as confidence in and commitment to his/her social environment, which is perceived as being characterized by a basically meaningful and predictable order and by a reliable and just distribution of rewards." (Ben-Sira, 1985, p. 399).

When one's resources are insufficient to meet the demands of a given stressful situation, it leads to a state of tension. Potency will then allow the individual to restore homeostasis and prevent this tension from leading to sustained stress. It is one's subjective experience (individual) of an external event (environment) that influences one's capacity to cope. In this sense, an individual may experience an event as being very threatening whereas the same event may be experienced by another as posing very little or no threat at all. In addition, it is assumed that individuals high on potency are also able to elicit more social support (Ben-Sira, 1985).

2.3.4 Learned Resourcefulness

Learned resourcefulness refers to behaviour and skills that are learned and help individuals self-regulate or control their behaviour (Rosenbaum & Jaffe, 1983; Serap, 2004; Zauszniewski, 1995). It differs from resilience in that it is considered to be a personality repertoire, which implies that it is a fixed rather than fluid construct.

Learned resourcefulness consists of three main functions: *regressive self-control*: the ability to regulate internal responses such as emotions and cognitions that hamper the execution of an ongoing task, *reformative self-control*: the ability to change current behaviour for greater rewards in future by planning skills, problem-solving strategies, and the delay of immediate gratification, and *experiential self-control*: the ability to experience and enjoy new and pleasurable activities to the full (Rosenbaum & Jaffe, 1983).

It is believed that people who possess a wide range of self-control skills are able to deal with negative emotions, end bad habits, follow through on boring but necessary tasks and overcome everyday obstacles (Rosenbaum, 2000 cited in Kennett & Keefer, 2006). Learned resourcefulness has been related to a belief in one's ability to succeed, and application of greater effort in the event of setbacks (Kennett & Keefer, 2006). Students high in learned resourcefulness have been found to have higher self-efficacy expectancies, use more problem-focused coping, more positive appraisal and are more likely to seek social support (Akgun, 2004). Higher levels of learned resourcefulness among students has also been linked to better academic performance even in the face of high academic stress (Akgun & Ciarrochi, 2003; Kennett & Keefer, 2006).

2.3.5 Fortitude

According to Pretorius (1998), fortitude is the strength one has to manage stress and stay well. This strength is seen to be the result of the positive appraisal of oneself, one's family and support from others. It is therefore similar to resilience in its ability to assist in overcoming stress and health sustaining qualities. However, this construct falls within the paradigm of fortigenesis and therefore differs from resilience, which falls

within the salutogenic paradigm. Pathogenesis and salutogenesis are said to fall along a continuum with health on the one end of the spectrum (salutogenesis) and disease on the other (pathogenesis). However, this assertion implies that one is either completely well or completely ill, that is, health and wellness are seen as existing completely exclusively from each other. Fortigenesis however, is referred to as a process of producing strength not only at the point of health but on the entire range of the continuum from health to illness (Strümpfer, 1995).

Pretorius (1998) proposes that the difference between fortitude and constructs within the salutogenic and fortigenic paradigm is that these concepts are "a mixture of both self-assessment and objective factors" (p. 28) while fortitude is based purely on a theory of appraisal (purely self-assessment). In other words, it is not so much the objective factors themselves (e.g., home environment, etc.) which are considered, but rather how these factors are interpreted (do we view them as negative factors, which break us down or as positive factors, which help build strength?). Cognitive appraisal is increasingly recognised as playing a major role in children's reactions to specific events (Hasan & Power, 2004). Problem-solving appraisal and negative life events have been found to be significant predictors of suicide ideation and hopelessness amongst a college population (Dixon, Heppner & Anderson, 1991; Pretorius & Diedericks, 1994). The results in a study among college students by Priester and Clum (1993) support the importance of problem-solving appraisal as a moderator of the stress-depression and stress-helplessness relationships.

Barends (2004) found that 'African' students scored higher on fortitude than 'Coloured' and 'Indian' groups. In addition fortitude was found to be a significant predictor of academic adjustment among female students, was significantly associated with academic adjustment and was among the factors that served as a significant predictor of social adjustment among African language speaking students (Barends, 2004). The results found by Julius (1999) indicated that those who scored higher on fortitude presented with fewer problems, thereby supporting the hypothesis that fortitude is associated with lower levels of stress and fewer presenting problems (Julius, 1999). The above discussion reviewed some of the key constructs related to resilience but the focus of this study is on the construct of resilience which is discussed in-depth in the following section.

2.3.6 Resilience

It has been assumed that those who are exposed to oppression grow up to be *damaged* with compromised development as a result of these adverse conditions. However, evidence in resilience research challenges this idea (Walsh, 1998 cited in Waller, 2001). The study of resilience emerged from the study of risk as it was found that many "at risk" children would not succumb to adverse circumstances (as previously theorised) but rather thrive and go on to be healthy in their adult years (Waller, 2001).

Resilience research has mainly focused on intrinsic factors within the individual but more recent literature has attempted to shift or rather expand focus from "…what takes place *within* systems to include what takes place *between* them." (Waller, 2001, p. 291).

This is known as the ecosystemic view of resilience where development is seen as the result of the continuous interaction between individuals and the wide range of systems within which they operate (e.g., family, community, etc.) (Waller, 2001). As a result, resilience research has branched out to include constructs such as community resilience (Clauss-Ehlers, 2003) as well as family resilience (Walsh, 1996 cited in Aisenberg, 2001). However, the current study is mainly concerned with resilience at the level of the individual and the following discussion will focus on this aspect.

The literature indicates that defining resilience has been somewhat problematic for various reasons. Kaplan (1999) states that the variability in the definition of resilience is due to four main factors. *Firstly,* the difference in distinguishing between resilience and outcome is problematic. Certain definitions define resilience in terms of the outcomes or response to adversity while others define resilience as making up part of those factors that interact with stress in order to produce certain outcomes. A *second* reason for such variability is the wide range in outcomes where resilience is defined in terms of those outcomes. *Thirdly*, for those who define resilience as a combination of individual qualities, the variation in such personal characteristics is a source of variability and *lastly,* definitions are inconsistent because of the variability in the definition of risk and protective factors which result in outcomes (Kaplan, 1999).

In light of the above discussion it may said that there are many definitions of resilience. Dyer and Mcguiness (1996) point out that terms such as *invulnerable* and *invincible* were used in earlier literature to describe resilient individuals, but these terms portrayed an inaccurate description of resilience as the mere absence of vulnerability and also

further implied a static or fixed quality. Dyer and Mcguiness (1996) define resilience as a process where people bounce back from adversity and go on to live their daily lives. They too refer to the dynamic quality of resilience (as originally theorised by Rutter, 1987) by highlighting the interaction between risk and protective factors that result in a shift of balance between vulnerability and resilience.
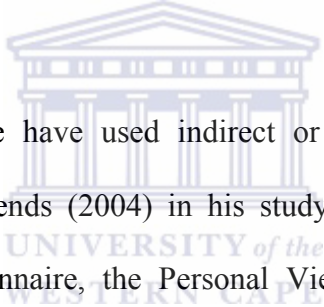
However, the definition which seems most useful for the current study is that provided by Rutter (1987). Rutter (1987) views resilience as the individual variation in response to risk or adversity, i.e., how some individuals submit to such stressors while others are able to overcome them. This variation of which Rutter (1987) speaks, pertains to resilience as a disposition that is only temporarily stimulated by certain demanding situations; that is, resilience motivation and resilient behaviour will be triggered only in situations that are continuously and excessively demanding after which resilience will eventually subside and the individual will focus on other matters until an event or circumstance activates the resilient behaviour again. Similarly, Walsh (1998) states that resilience does not occur in spite of adversity but rather because of it (cited in Waller, 2001). In other words, adversity may be seen as an *opportunity* in which one develops resilience.

However, an individual may not always respond resiliently in a given situation. Waller (2001) asserts that no one person can either be resilient or vulnerable all of the time. Moreover, Condly (2006) states that, "Resilience should not be considered a single dichotomous variable (you either are or not resilient in any and all situations)" but that it is more accurate to consider resilience in continuous terms (Condly, 2006, p. 213).

Therefore, resilience may be seen as a disposition that is not fixed or constant in the individual in that some people who manage their difficulties successfully at one point in their lives may respond differently to other difficulties when in different situations (Rutter, 1987; Strümpfer, 2001; Egolf, Herrenkohl & Herrenkohl, 1994). Even though these demands or difficulties cause a measure of pain it may also be seen as an opportunity to learn. Therefore, resilience may be viewed as a continuing exploration of capacities and knowledge through the interaction between risks and protection in one's life (Saleeby, 1996).

Garmezy, Masten and Tellegen (1984 cited in Luthar & Zigler, 1991) provide three models that describe the effects that personal characteristics and stress have on one's adjustment: the *compensatory* model, the *protective versus vulnerability* model and the *challenge* model. The *compensatory* model refers to the mechanism of counteracting; it is the process where stress lowers the levels of individual competence and the individual counteracts or compensates for this process by means of the range of personal attributes to assist in improving adjustment. The *protective versus vulnerability* model involves a process where the interaction between stress and personal attributes is said to predict adjustment. For example, those who display high levels of a particular trait may be unaffected by stress and the vulnerability process would be the inverse. The *challenge* model postulates that stress has the potential to increase competence provided that stress levels are not too high. This is also referred to as the curvilinear relationship between stress and adjustment (Garmezy et al., 1984 cited in Luthar & Zigler, 1991).

Monaghan-Blout (1996 cited in Ahmed, Seedat, van Niekerk & Bulbulia, 2004) responds to these models by questioning the linear relationship between risk and available resources stating that it is incongruent with the complex and dynamic relationship proposed by Rutter (1987). In addition, Rutter (1987) responds to such literature by proposing that "…understanding individual responses to adverse life circumstances lies in identifying protective *processes*, not identifying factors that *counter risk*." (cited in Dyer & Mcguiness, 1996, p. 277). These processes include the following: 1) *reduction of risk impact,* 2) *reduction of negative chain reactions,* 3) *establishment and maintenance of self-esteem,* and 4) *opening up of opportunities* (Rutter, 1987, p. 316).

Previous studies on resilience have used indirect or partially related measures of resilience. For example, Barends (2004) in his study of resilience among students utilised the Fortitude Questionnaire, the Personal Views Survey and the Sense of Coherence Scale to measure resilience. However, Hjemdal (2007) points out that the use of a variety of measures reduces power, complicates comparison of results from different studies and also makes it difficult to identify which specific factors are involved in certain processes and how they can contribute towards healthy adjustment, which may affect validity as outcomes may be better accounted for by constructs other than resilience. A direct measure of resilience may address these difficulties, be more cost effective and less time-consuming. A direct measure may also help clarify the debate of whether protective factors provide protection regardless of stress (compensation model) or whether the negative impact of specific risk factors is moderated by resilience (protective model) (Hjemdal, 2007). The present study makes

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use of a single, direct measure of resilience (The Resilience Scale for Adults), which will be discussed in more detail in chapter six.

2.3.6.1 Factors influencing resilience

The factors that influence resilience are defined as protective factors and risk factors. Protective factors are those that increase the likelihood of successful recovery from trauma and stress (Saleeby, 1996), and contribute to resilience. Waller (2001) states that protective factors facilitate positive outcomes by serving as buffers between the individual and the risk factors, which threaten their well-being. Luthar, Cicchetti, and Becker (2000 cited in Leon, Ragsdale, Miller & Spacarelli, 2008) highlight the importance of time in their definition, stating that protective factors are positive attributes that lead to more positive outcomes over time, which is why studies of a longitudinal design are essential for investigating such factors. They propose six different protective factor typologies based on youths' strengths and how they interact with stress to influence outcomes: protective, protective-stabilising, protective-enhancing, protective-reactive, vulnerable-stable, and vulnerable-reactive. These typologies have been proposed to highlight the fact that protective factors serve varied functions in response to different stressors and at different periods in one's life (Luthar et al., 2000 cited in Leon et al., 2008).

Waller (2001) highlights that risk and protective factors are not dichotomous categories. That is, a risk factor may become protective if an individual uses it as an opportunity to develop new skills and competencies (Waller, 2001). Furthermore, the same

circumstance may be seen as protective at one point and as a risk at another (Waller, 2001). The interaction between risk and protective factors may therefore be seen as a fluid process that fluctuates with changes in the environment and the individual (Egolf, Herrenkohl & Herrenkohl, 1994). Both protective and risk factors exist within three interrelated domains including individual or personal characteristics, family and interpersonal factors (Rak & Patterson, 1996; `Moleli, 2005; Brooks, 1994).

Resilient children are often found to have easy temperaments which helps them elicit more positive responses from others, have higher intelligence, greater problem solving skills, cognitive-integrative abilities, social skills and coping strategies (Dyer & McGuiness, 1996; Egolf, Herrenkohl & Herrenkohl, 1994; Reynolds, 1998). Factors such as high levels of self-esteem, realistic sense of personal control, and a feeling of hope are also considered to be individual characteristics that contribute to resilience (Brooks, 1994). Gender difference has been identified as a factor that influences resilience (Julius, 1999; Rutter, 1987). The experience of positive emotions has also been found to assist the resilient individual in their ability to recover from stressful situations (Frederick & Tugade, 2004; Bergeman, Bisconti, Ong & Wallace, 2006). Student engagement (Finn & Rock, 1997) and an internal locus of control (Capella & Weinstein, 2001) have been found to be important contributors to academic resilience.

Stein, Folkman, Trabasso, and Richards (1997 cited in Hemenover, 2003) found the ability to develop future plans and goals for the self predicts better psychological well-being following bereavement. Future planning has also been associated with more positive psychological outcomes (Wyman, Cowen, Work, & Kerley, 1993 cited in

Condly, 2006). King (2001 cited in Hemenover, 2003) found that those who write about their best possible future self enhance their health. Positive expectations about the future among youth have also been found to be essential for stimulating successful secondary school adjustment (Schoon, Parsons & Sacker, 2004). It should be noted that although individual protective processes may be highlighted, it does not imply that resilience is an inherent quality within the individual (Waller, 2001) but simply that individuals with their specific individual traits have an influence on their adverse circumstances just as their adversity influences them, highlighting once again the systemic nature of the resilience construct (Waller, 2001).

With regard to the family's contribution, Gribble et al. (1993 cited in Condly, 2006) found that resilience was fostered in families where parents had more positive parental attitudes, were more involved in their child's life, and provided more guidance. These factors resulted in children developing more secure attachments with their parents, which ultimately contributed to resilience. Furthermore, family environments that are characterized by warmth, affection, emotional support and clear and reasonable boundaries influence resilience and homes that do not provide such support are less likely to produce resilient children (Carlson, Egeland & Stroufe, 1993; Egolf, Herrenkohl & Herrenkohl, 1994; Forehand, McVicar & Neighbors, 1993; Muyeed, O'Donnell & Schwab-Stone, 2002; Punamäki, Qouta & El-Sarraj, 2001; Reynolds, 1998; Utsey et al., 2007). Kuther and Fisher (1998) also found in a study of children victimised by community violence that family support had a moderating effect in the relationship between victimisation and distress.

External support provided to the child and family has been argued as being essential in the development of resilience (Garmezy, 1991; Reynolds, 1998). It has also been found that the best results occur in situations where the family as a whole is being supported rather than just the child itself (Condly, 2006). Brookes (1994) highlights the significant effect interpersonal support has on individual self-esteem which in turn adds to resilience. Schools have also been identified as a space where children can have positive experiences that contribute to feelings of self-esteem and self efficacy thus reinforcing resilience (Condly, 2006; Muyeed, O'Donnell & Schwab-Stone, 2002; Rutter, 1987).

According to Waller (2001), "Risk factors are influences occurring at any systemic level (i.e., individual, family, community, society), that threaten positive adaptational outcomes" (p. 295). The risk factors are usually regarded as the inverse of the protective factors identified (Rak & Patterson, 1996). This is particularly true, given the fact that the same circumstance may be seen as protective at one point and as a risk at another (Waller, 2001). Therefore, protective factors and risk factors may be seen as dynamic attributes where their effect is only evident in the context of their interaction, the larger context within which this interaction occurs and the meaning attributed to a particular factor by an individual (Waller, 2001).

2.4 Conclusion

From the above it can be seen that resilience is a complex and dynamic construct. Various related constructs have been discussed. These are similar to resilience mainly

because of their ability to aid the individual in managing and coping with stress. Resilience however, remains unique, as it is the only construct among those mentioned that requires adversity as an antecedent to its development. The following chapter discusses trauma, which in this study is conceptualised as the required antecedent to developing resilience.

CHAPTER 3

TRAUMA: DEFINITION AND RESPONSE

3.1 Introduction

This chapter discusses stressful life events and the difference between such events and trauma. Trauma is then defined, as well as the psychological effects trauma has on the individual psyche. Psychological disorders as a result of trauma (e.g., Posttraumatic Stress Disorder and the range of symptoms involved) are also discussed.

3.2 Stressful life events

Before discussing trauma, it is necessary to consider stressful life events and how this differs from a traumatic event. Stressful life events are linked to trauma as they are events, which at times threaten our lives and our health (Stavrou, 1993). These events also involve the feeling that the demands of a particular life situation are greater than one's ability to cope (Stavrou, 1993). However, stressful life events differ from traumatic life events in that only the latter leads to psychological disorders such as Posttraumatic Stress Disorder (PTSD), Acute Stress Disorder (ASD), and so forth. Individuals face both traumatic and stressful life events. With regard to the history of Apartheid in South Africa, trauma has been of greater concern as evidenced by a range of local studies (Hamber & Lewis, 1997; Stavrou, 1993; Seedat, Nyamai, Njenga, Vythilingum & Stein, 2004; Ward, Flisher & Zissis, Muller & Lombard, 2001). It was therefore, decided to measure trauma rather than stressful life events in the present study. When discussing stressful life events one firstly needs to define stress in order to understand a life event as stressful. There have been many theoretical models attempting to define the physiological, psychological and socio-cultural effects of stress

(Wan, 1982). These models have defined stress as a "state manifested by a specific syndrome which consists of all the non-specifically induced changes within the biological syndrome." (Wan, 1982, p. 3). Woolfe (1992) states that stress is the measure of an event external to the individual. Therefore, much focus has been on both input and output in exploring how an individual responds or adapts to an outside stressor (Woolfe, 1992). This is also known as a stimulus-response model (Woolfe, 1992). The interaction between the environmental stressor and the individual's response is of particular merit where emphasis is on stress and coping as a subjective rather than an objective experience (Woolfe, 1992).

Coping may be defined as a transactional relationship between the individual and the environment or "…a person-environment relationship in an adaptational encounter." (Folkman & Lazarus, 1988, p. 311). Stress thus occurs when there is incongruence between the characteristics of the person and the environment. Coping can therefore be seen as the process in which one works towards a state of congruence or fit between the two (Folkman & Lazarus, 1988). Appraisal is central to this process because it is through the process of one's perceived ability to cope that one makes decisions about the actual adequacy one has to cope in the situation (Woolfe, 1992). Therefore, stress is a product of cognitive processes (thoughts or perception of having the necessary resources to cope sufficiently) (Woolfe, 1992). In other words, when a situation is perceived as manageable, levels of stress decrease, affecting one's ability to cope and vice versa. This view implies that an individual has an active role in creating and coping with his or her experiences (Woolfe, 1992).

Malefo (2000) in a study consisting of 93 African women students found that subjects

who experience fewer stressful life events demonstrate problem-focused coping behaviours, have a tendency to seek help in dealing with stressful life events; and that those with higher negative life change scores display maladaptive, emotion-focused coping behaviours. These results indicate that coping strategies that emphasize problem-focused behaviour serve as a mediator of the influence of stressful life events.

3.3 Trauma

Trauma may be defined as an event that overwhelms the coping resources of the individual, as traumatic situations are those where great danger is present and individuals are left feeling powerless (Hamber & Lewis, 1997). Traumatic experiences are also considered to be unusual and do not make up part of everyday life (Hamber & Lewis, 1997). The Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition or DSM-IV-TR defines a traumatic event as an, "event or events that involved actual or threatened death or serious injury, or threat to the physical integrity of self or others" and where "the person's response involved intense fear, helplessness, or horror." (APA, 2000, p. 467). Janoff-Bulman (1985 cited in Hamber & Lewis, 1997) states that the experience of trauma destroys three basic assumptions one has of the world. They are: the belief in personal invulnerability; the view of the self as positive; and the belief that the world is a meaningful and orderly place, and that events happen for a reason (Hamber & Lewis, 1997).

Trauma has been associated with Post Traumatic Stress Disorder both locally (Hamber & Lewis, 1997; Stavrou, 1993; Seedat et al., 2004; Ward et al., 2001) and internationally (Foy & Goguen, 1998; Guterman & Cameron, 1997; Kuther, 1999; Mazza & Reynolds, 1999). Other negative outcomes associated with trauma include

depression (Armsworth & Holaday, 1993; Mazza & Reynolds, 1999; Ward, Martin, Theron & Distiller, 2007), suicidal ideation (Mazza & Reynolds, 1999), distress (Armsworth & Holaday, 1993; Kuther, 1999), anxiety (Kuther, 1999; Ward, et. al., 2007), conduct problems (Armsworth & Holaday, 1993; Ward, et al., 2007) and aggression (Barbarin, Richter & de Wet, 2001; Kuther, 1999). Traumatic events have also been associated with the alteration of plans for the future. Trauma survivors may develop a more negative view of the future or may struggle to plan for the future as a sense of hopelessness may occur after a traumatic event (Armsworth & Holaday, 1993).

According to the DSM-IV-TR (APA, 2000), the symptoms experienced in PTSD are divided into three categories: the persistent re-experiencing of the traumatic event (these include symptoms such as recurrent and distressing recollections of the event); a persistent avoidance of stimuli associated with the traumatic event as well as a numbing of general responsiveness (symptoms include efforts to avoid thoughts, feelings or conversations associated with the trauma); and persistent symptoms of increased arousal such as hypervigilance, exaggerated startle response, etc.

However, Straker and The Sanctuaries Counseling Team (1987 cited in Hamber & Lewis, 1997) argue that the term posttraumatic stress disorder is incorrect and not completely applicable in the South African context. They make particular reference to South Africans living in 'Black' townships who were subject to continuous trauma attributed to the high levels of political violence taking place in these communities at the time. Straker (1987 cited in Hamber & Lewis, 1997) proposed the concept of "continuous traumatic stress syndrome" to be a more suitable term for those living in conditions of ongoing violence. Similarly, Herman (1992) suggests the term "complex

traumatic stress syndrome" as an appropriate term to describe those who have suffered from long-term trauma and abuse. However, for the purpose of this study, the DSM-IV-TR (APA, 2000) definition of trauma seems most appropriate and will therefore be utilised.

Hamber and Lewis (1997) also state that violence is a form of psycho-social trauma. Violence is argued to be a social construction and what is considered as violence is largely influenced by the culture within a given context (Olivier, 1991). Olivier (1991) defines violence as the infliction of physical harm or damage as well as instances of psychological and emotional harm inflicted upon victims.

There have been historical changes in the presentation and manifestation of trauma in the South African context from pre- to post-Apartheid. This, along with a discussion on the differentiation between traumatic events and stressful life events as well as Fanon's (1967) theory of oppression and violence will be discussed in the following section.

3.4 Trauma in the South African context

The extent of trauma and violence in South Africa is vast (Hamber & Lewis, 1997). From the time of colonization, South Africa has been characterized by violence. During the time of Apartheid, political violence was common (e.g., civil unrest, arbitrary arrests, detention without trial, etc.). Since 1990, with the beginning of political transition in South Africa, the occurrence of political violence has decreased and the presentation of violence has therefore shifted to that of criminal violence, which has been on the increase since (Hamber & Lewis, 1997). Stavrou (1993) makes a distinction between political and criminal violence by defining the former as violence

that is directed at ideological opponents, while the latter targets individuals for what they can 'offer' the violent criminal. The ideological component involved in political violence is said to serve as protection against stress as the individual often feels that they have in some way contributed to a political struggle. These benefits are however seldom experienced in the incidence of criminal violence.

Recent police statistics (Crime Information Analysis Centre – CIAC, 2005) reported the following crime statistics for the Western Cape Province for the period between 2001 and 2005; murder has decreased from 3 447 to 2 680; neglect and ill-treatment of children has increased from 730 to 1 437; carjacking has increased from 793 to 901; house robbery has decreased from 335 (in 2002) to 307; common assault has increased from 47 752 to 48 739 and drug related crime has increased from 13 429 to a staggering 30 432. The incidence of rape throughout the whole of South Africa has increased by 1.5% (a total of 54 293 to 55 114 for the period between 2001 and 2005). Gauteng has the highest incidence of rape for 2005 (11 923) followed by Kwazulu-Natal (9 614), the Eastern Cape (7 405) and the Western Cape is in fourth position with 6 834 reported incidents of rape for 2005.

However, these statistics are probably an underestimation of the incidence of violence as they rely on individuals reporting crime, which does not always occur (Hamber & Lewis, 1997). For example, it is estimated that only 1 in 20 to 1 in 35 rapes are ever even reported to the South African Police Services (Hamber & Lewis, 1997). According to Hamber and Lewis (1997), social inequality and deprivation caused by the Apartheid system are the main cause for much of the violence in South Africa. There is also evidence that higher levels of poverty and related problems such as over-crowding,

family disruption, weak social structures and high population concentrations are associated with greater exposure to violence (Mercy, Rosenberg, Powell, Broome & Roper, 1993 cited in Hamber & Lewis, 1997).

3.5 The psychological effects of trauma

As stated before violence is one form of psychosocial trauma and trauma commonly takes the form of violence in the South African context and this violence may be associated with the oppressive history of the country. It is this violence and trauma that has impacted on the psychological well-being of many South Africans.

Ward, Flisher, Zissis, Muller and Lombard (2001) conducted a study of violence exposure and related symptoms among 104 adolescents across four high schools in Cape Town. They found that most of these learners had been exposed to at least one type of violence, nearly 6% of the sample was likely to suffer from full blown PTSD and 17% had a high number of PTSD symptoms. In a nationwide survey including 3 870 respondents aged 16-64 Hirschowitz and Orkin (1997) found that 23% had been exposed to at least one or more violent events and of these 78% experienced one or more symptoms of PTSD. These results, however, may not be a true reflection of current trends which could be estimated as being higher than in previous years.

Kopel and Friedman (1997) conducted a study with 55 Internal Stability Unit (ISU) members of the South African Police (SAP) in order to determine whether the specific situation, under which they work of continuous and current, as opposed to prior traumatic exposure, would result in a particular constellation of traumatic symptoms. They found that the traumatic stressor of witnessing a traumatic event was predictive of

the symptoms of intrusion, which were correlated with symptoms of avoidance. Among their conclusions was to see this act of avoidance as a defensive response highlighting the need for denial within a 'macho' police culture within a South African context.

Swart, Seedat, Stevens and Ricardo (2002) studied heterosexual dating violence among adolescents attending secondary schools in a township just south of Johannesburg. The sample was predominantly 'Coloured' but 'African' learners also partook in the study. They found that about half of the males and slightly more than half of the females surveyed in the study reported involvement in a physically violent relationship either as a perpetrator and/or victim. The risk factors indicated for such violence include adolescents having violent parents, who may then witness victimisation and perpetration and learn that violence is acceptable in relationships. Witnessing peers and friends display violence in their relationships was also found to be a contributing factor.

The following section will consider the psychological effects such trauma has had on individuals with specific reference to the theory of violence and oppression presented by Fanon (1967).

3.5.1 Fanon's theory of violence

According to Fanon (1967) Apartheid may be described as a tool to seize and maintain power by dehumanising the 'Black' masses in South Africa by internalising within them a sense of inferiority and of less self-worth (this will be discussed in more detail at a later stage). As a result the 'Black' man developed a lack of regard not only for himself but for other 'Black' people as well, since they represent that which is evil, ugly and negative – that which is represented within themselves. This reinforces oppression of

this 'race' in the form of vertical and horizontal violence. Structural and institutional violence are those forms of violence that are embedded in an oppressive system. According to Fanon (1967), these forms of violence are higher order phenomena and supercede personal violence.

Institutional violence refers to violence that occurs on an institutional level and occurs in microsocial systems such as the family. An example of this in Apartheid South Africa was the case of prisons where the detained were often tortured without legitimate reason. Structural violence is built into social structures, social relations, the distribution of goods and services, and so forth. For example in Apartheid 'non-white' citizens were denied access to certain jobs thus directly affecting their ability to sustain themselves and their families financially. This type of violence was also present in the education system which sought to compromise the quality of education provided for 'non-whites' thereby further limiting occupational opportunities.
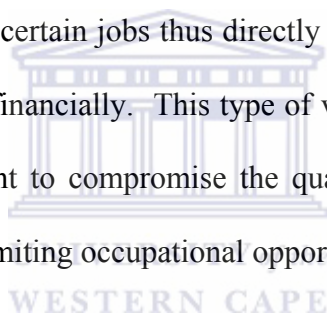
A consequence of these forms of violence in Apartheid included increased mortality rates for 'non-white' citizens in the country. For example, the child mortality rates for children in 1986 in South Africa were as follows: 'Africans' 7.0 per 1000; 'Coloureds' 4.2 per 1000; 'Indians' 1.1 per 1000 and 'Whites' 0.9 per 1000. 50% of all infant deaths were due to malnutrition for 'Blacks' in the same year and only 7% were attributed to malnutrition for 'Whites' (Duncan & Rock, 1995 cited in Lockhat & van Niekerk, 2000).

Vertical violence refers to violence that is directed vertically, that is, either to those above you or those below (for 'Coloureds' those above may be 'White' and those below may be 'Black'). Horizontal violence is violence directed towards those in your own

'racial' group. Essentially, the oppressor's vertical violence (in this context, 'White' on 'Black' violence) changes to horizontal violence among the oppressed ('Black' on 'Black' violence). According to Fanon (1967) the victim of prolonged oppression, after submitting to his oppressive situation, learns to take violent assaults patiently. He cannot direct his frustrations towards his oppressor (vertical violence) as they seem too powerful to overcome; therefore he eventually turns his anger and frustration against himself and his own people (horizontal violence) (Fanon, 1967).

The unfortunate result, as can be seen in South Africa, is the increase in alcoholism, crime, violence, brutality, and so forth. This could also be the reason why crimes have become acts of such extreme brutality (e.g., assailants no longer just steal from their victims they may also injure, rape or murder them as well). This phenomenon may also be seen as the underlying cause of the shift in the presentation of violence and trauma in South Africa. That is, violence and trauma now take the form of criminal violence because it is the expression of horizontal violence (where the oppressed rather than the oppressor is attacked as the result of prolonged oppression) instead of political violence as it is an expression of vertical violence (attacking the oppressor).

However, this increase in self-destructive behaviour may also be due to institutional and structural violence. For example, many South Africans are only able to do unskilled labour due to restraints imposed by the previous government (i.e., poor quality education, etc.), which limits their ability to find employment. Children living in these families are at times forced to leave school in order to assist the family financially but many are still unable to find employment. These desperate situations lead young people to alternative means of acquiring income, such as through gangsterism, crime and many

other social problems, but are in many cases essentially the result of problems at an institutional level, which is out of the control of the individual and leads to further frustration, violence and oppression.

In oppressed communities, an increase in violence would occur since the oppressed take on the characteristics of the oppressor and incorporates them as their own (Fanon, 1967). There is also an unconscious wish to eliminate that which the oppressor has identified as inferior, in other words the oppressed seeks to kill that detested part of himself, which is mirrored in his own people. Fanon (1967) concluded that the oppressed may attempt to regain their identity, reclaim their history and rehabilitate themselves through violently overthrowing the oppressor.

3.6 Conclusion

From the above it may be seen that the levels of violence and trauma in South Africa are connected to its history of Apartheid. Moreover, evidence suggests that trauma is 'racially' divided in this context as different 'racial' groups had different experiences of oppression in Apartheid. The discussion on trauma has therefore highlighted the importance of 'race' in this study which will be the focal topic in the following chapter.
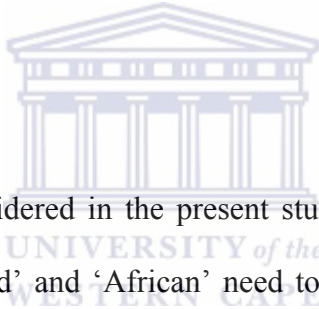
CHAPTER 4

'RACE' AND OPPRESSION IN SOUTH AFRICA

4.1 Introduction

The aim of this study is to determine the relationship between 'race', resilience and trauma within a South African student population. For this reason, it is essential to locate a discussion of 'race' within the unique South African context in order to better understand the subject of study in the current research. This chapter provides a general as well as a more localized discussion of 'race'. This is followed by a look at the various manifestations of oppression and racism and the psychological effects thereof.

4.2 'Race'

One of the factors being considered in the present study is that of 'race'. However, terms such as 'race', 'Coloured' and 'African' need to be problematised. The author strongly objects to the use of these terms and states that their usage in the present study does not refer to fixed differences but are rather seen as social constructions along which people may relate to the world around them. Therefore, 'racialised' terms have been placed in quotation marks. The author would have preferred to use the term 'so-called' as a prefix to 'racialised' terms as it sufficiently foregrounds the problematisation of 'race' but this would have made the current text more challenging to read.

'Race' or ethnicity has been associated with a wide range of variables. These include difference in psychological well-being (Chmielewski, Fernandas, Yee & Miller, 1995; Pierce, 1995 cited in Constantine, 2006), physical health (Black & Krishnakumar, 1998;

Clauss-Ehlers, 2003); academic achievement (De Vetta, 1987; Stinson, 2006); academic coping (Barends, 2004); socio-economic status (Clauss-Ehlers & Levi, 2002; Gutierrez, 1990; O'Connor & Fernandez, 2006) and general delinquency (Windle, 1990). The literature indicates that 'Black' people both internationally and locally may suffer more from psychological disorders such as PTSD because in addition to traumatic events they have also had to deal with the harshest forms of racism, structural and institutional violence and poverty as a result of oppression (Jones, 2007).

4.3 'Race' in the South African context

South Africa has a unique history of segregation and oppression in the form of the Apartheid regime and the issue of 'race' cannot be discussed without considering the tremendous impact this process has had on the development of the country as a whole and on its citizens as individuals.
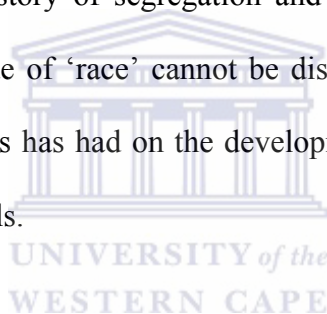
The policy of Apartheid was introduced in 1910. It was a regime that was exclusionary and divisive, premised on racial categories (i.e., 'White', 'Indian', 'Coloured' and 'Black', categories constructed by the Apartheid government) with a central ideology of 'separate development' (Eaton, 2002). It was aimed at maintaining 'White' domination while extending 'racial' segregation and was characterized by the violent oppression, economic exploitation and deprivation of labour of the majority of South Africans (Pretorius-Heuchert & Ahmed, 2001).

'Race' laws touched every aspect of social life, including a prohibition of marriage between 'non-Whites' and 'Whites', the sanctioning of 'White-only' jobs, and

designated living areas for different 'racial' groups (De le Rey, 2001). Citizenship and political representation was denied to the majority of South Africans until 1994. 'Blacks' were seen as a separate 'nation' apart from the 'White nation'. Strict laws were in place to maintain this system and police were given authority to use any means necessary to enforce these laws, which led to the use of extreme violence. For example, penalties for disobedience included fines, imprisonment and whippings. Thousands of individuals died in custody alone, frequently after gruesome torture.

Young (1990) states that oppression is structural in that "its causes are embedded in unquestioned norms, habits, and symbols, in the assumptions underlying institutional rules and collective consequences of following those rules…and structural features of bureaucratic hierarchies and market mechanisms" (p. 41). He goes on to outline five aspects of oppression, which include *exploitation, marginalization, powerlessness, cultural deprivation* and *violence.*
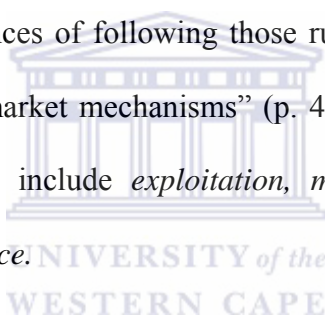
Exploitation occurs through a steady process of the transfer of results of the labour of one social group to benefit another. One of the aims of the Apartheid regime was that of economic exploitation of a cheap labour force in the 'Black' majority, thereby limiting 'Black' economic prosperity and consolidating power and supremacy in the hands of a 'White' minority (Pretorius-Heuchert & Ahmed, 2001). This led to major disparities in the distribution of resources and the South African labour market with 'Whites' enjoying the financial benefits of well-paid, high-skilled jobs and 'blacks' living in poverty, only able to generate minimal income from unskilled labour.

Barker (1999) states that there are still many inequalities in the South African labour market and lists them as follows:

- The development of human capital (education and training), resulting in 41% of the 'African' workforce having an educational level of less than standard four in 1991, and 69% of the 'White' workforce having an education level of standard 10 or more

- High unemployment among 'blacks' and women (which can also be partly ascribed to the combined effect of high population growth rates among 'blacks' and low economic growth rates) with the official unemployment rate among 'Africans' at 47%, and that of 'Whites' below 10%

- Sharp differences in wage earnings and income, with 'Africans' earning on average only 37% of what 'Whites' do

- Occupational inequalities, with 'blacks' forming only 43% of the HLP (high-level personnel), compared to their share of 70% of the EAP (economically active population)

(Barker, 1999, pp. 9-10)

He goes on to say that 'racial' inequality has decreased in recent years but intra-'racial' inequality has increased (i.e., unemployment is still highest among 'blacks'). The effects of restrictive measures put in place during Apartheid will be felt for a long time but since the inception of democracy, attempts have been made to balance the discrepancy in the labour market by means of affirmative action and other similar policies. *Affirmative action* refers to "policies and practices aimed at redressing social, economic or educational imbalances or inequalities arising out of unfair discrimination" (Barker & Holtzhausen, 1995 cited in Barker, 1999, p. 264).

From the above, one can see that 'race' has had and continues to have a direct and indirect impact on one's financial status in South Africa. This lower socio-economic status associated with 'non-Whites' in turn leads to increased exposure to risk factors (e.g., living in townships with high levels of crime, substance abuse, etc.) that compromise early development leading to an array of negative consequences for the individual (Grant, Katz, Thomas, O'Koon, Meza, DiPasquale, Rodriguez & Bergen, 2004; O'Connors & Fernandez , 2002).

Marginals refer to those whom the system of labour cannot or will not use. In the United States of America, 'racial' oppression occurs in the form of marginalisation rather than exploitation. *Powerlessness* designates the oppressed in an inferior position in the division of labour and an associated inferior social position that allows one little opportunity to develop and exercise skills. "The powerless have little or no work autonomy, exercise little creativity or judgment in their work, have no technical expertise or authority, express themselves awkwardly, especially in public or bureaucratic settings, and do not command respect." (Young, 1990, pp. 56-57). *Cultural imperialism* involves the universalization of a dominant group's experience and culture, and its established norms. *Violence* is a form of oppression as the social context surrounding it makes it possible and even acceptable. Young (1990) states that violence is systemic because it is usually directed at members of a specific 'racial' group simply because they belong to that particular group.

Apartheid was the epitome of oppression in South Africa and the aforementioned characteristics of oppression were certainly met within this context. Racism manifested

itself in various ways in South Africa. The following section will discuss racism in the education system.

4.4 Inequality in education

The history of Apartheid has had a significant impact on future development in South Africa and education reform has been contested as being the most complex area of this process of renewal in South Africa (De Jong, 2000). Segregated schooling at primary, secondary and tertiary levels has had a longstanding effect on the quality of education provided for learners and students in this country (De Jong, 2000; Le Grange, 2002). School status was placed on a hierarchy with 'White' at the top of the order followed by 'Indian', 'Coloured' and 'black'. The education system was divided into 19 separate, 'racially' determined education departments, which were characterized by unequal distribution in resources (Florence, 1998). Universities in South Africa were similarly affected creating a dual system that consisted of an advanced system for 'Whites' and an under-developed one for 'blacks', 'Coloureds' and 'Indians' (De la Rey, 2001).

By 1994, a newly democratic South Africa was in existence, which led to drastic changes in the reform of staffing, curriculum, funding and governance in education (Dolby, 2002; Steyn, 1999). Changes in funding led to a shortage of physical facilities (e.g., water and electricity), inadequate textbooks, shortage of learning and teaching aids, lack of and overcrowded classrooms and a shortage of relevant and qualified educators (De Jong, 2000; Florence, 1998; Steyn, 2000; Van der Westhiuzen, Legotlo, Mosoge, Nieuwoudt, Sebego & Steyn, 2002). This has impacted greatly on the quality of education provided to learners attending these schools.

Socio-economic adversity was found to be a significant risk factor for educational failure and poor school adjustment (Schoon, Parsons & Sacker, 2004). Similarly, students with a disadvantaged background are also believed to be under prepared for tertiary education (given the poor state of public primary and secondary schooling as mentioned above) which could add to the difficulty and strain experienced in the transition from secondary to tertiary education (Botha, Brand, Cilliers, Davidow, de Jager & Smith, 2005). These factors may therefore serve as risk processes in students' lives and further hinder the development of resilience among students.

4.5 The psychological effects of oppression

Fanon's (1967) work has focused on different aspects of both violence and oppression. He aimed to analyse the psycho-existential aspects of life in a racist society and emphasized the experience, hidden psychological damage and the various defensive strategies adopted by the oppressed. The following will focus on his views pertaining to the psychological effects oppression has on individual development with particular emphasis on the South African context, which includes a discussion of concepts such as the master-slave dialect, identity, recognition and the other, alienation, assimilation and the 'black' man's inferiority complex.

Fanon (1967) analysed the relationship between the 'white' oppressor (master) and the 'black' oppressed (slave). In his own formulation, Fanon (1967) stated that not only did the 'white' man demand to be recognized but to be worshipped as well. Fanon (1967) believed that the 'white' man had a superiority complex who wanted to ascend to the state of a demigod and keep 'blacks' in their place. The 'black' man in turn had an inferiority complex. He wants to become white and when this is not achieved he

becomes resentful with envy. This can be said for South Africa's situation where a white minority tried to solidify their position of power over a 'black' majority.

The concept of the Other is an essential part of the 'black' man's struggle for identity and for freedom. Identity, or the consciousness of Self, in turn, is closely linked with recognition (Gendzier, 1973). Recognition is of vital importance to the humanity and dignity of the individual. Therefore, recognition by the Other is a means of achieving self-consciousness. However, Apartheid involved a constant negation of the Other and constantly tried to deny this Other all attributes of humanity, it forced the oppressed to ask themselves the question, "In reality, who am I?" (Azar, 1999). Therefore, the real struggle for freedom includes the struggle to free oneself from this externally determined definition of Self imposed by the Other.

Fanon (1967) discussed five facets of alienation, which are as follows, "(a) alienation from the self or personal identity, (b) alienation from the significant other (one's family or group), (c) alienation from the general other (the relation between 'blacks' and 'whites'), (d) alienation from one's culture (language and history), and (e) alienation from one's social praxis (the denial and/or abdication of self-determining, socialized and organized activity – the very foundation of the realization of human potential." (Bulhan, 1985, p. 188). Fanon (1967) believed that once the 'black' man embraced the culture of the oppressor and denied his own, he would be thrust into alienation because no matter what he did the 'black' man would never be accepted as equal by the 'white' man. In turn, the 'black' man would not accept him, as he rejected his 'blackness' in the process of identifying with his oppressor.

Fanon (1967) argued that in Europe there was a link between the nation, the family and one's identity (Bulhan, 1985). However, the indigenous family structure in South Africa was dislocated and disturbed as the oppressor attempted to extinguish the culture, language and history of the oppressed. For example, in South Africa, Afrikaans was used as a tool to oppress African language speakers in the form of Bantu education where all schools were forced to teach in Afrikaans. Fanon (1967) placed much emphasis on the role of language in the alienation of one's culture. He stated that to speak a language is to take on a world, a culture.

Assimilation is defined as the process of adopting the culture (language, lifestyle, etc.) of the oppressor as a defense mechanism. Fanon (1967) proceeds in asking what the origin of this personality change might be. He suggests that the desire to assimilate arises from the inferiority complex one develops. The oppressed is taught that he is different, less than human, the inescapable *other* and he in turn learns to hate what has made him the object of such ridicule and desires to be more than what he is. This may be why 'black' South Africans are drawn to inhabit traditionally 'white' spaces and act accordingly in an attempt to discard themselves of the definition as *other* and the accompanying negative connotations associated with that identity.

Bulhan (1985) after analysing Fanon's theories, proposed three stages, which encompass Fanon's theory of oppression. These three stages are the stage of capitulation (identifying with the oppressor), the stage of revitalization (rejecting the culture of the oppressor and romanticizing one's own culture) and lastly, the stage of radicalization.

4.6 Community resilience and oppression

The theories of Fanon (1967) and Bulhan (1985) are useful in trying to understand a response to oppression but these theories still essentially view the oppressed as damaged when evidence suggests that not all who experience oppression of this nature go on to experience negative outcomes. It is therefore useful at this point to draw on the work of Sonn and Fisher (1998). These authors review the work of Fanon (1967) and Bulhan (1985) and state that communities may not necessarily capitulate under an oppressive order as has been previously noted. They suggest that communities do have the potential to find positive outcomes and alternative means of survival under such conditions. The response of assimilation and capitulation are suggested as being a superficial response on the part of the non-dominant group whilst on a deeper level these groups participate in activities to ensure the preservation of their cultural values and other features of their cultural identity.
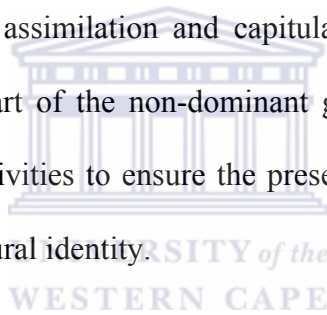
Sonn and Fisher (1998) present a theoretical model to understand community resilience. They outline three possible responses to oppression: *negative*, *recovery* and *positive outcomes*. *Negative outcomes* include pathology; *positive outcomes* include resilience, consciousness and overall well-being; and *recovery outcomes* include revitalization, reconstruction and reinvention (Sonn & Fisher, 1998). It is therefore said that community responses may mediate the impact of oppression.

For example, Ahmed et al. (2004) in a study of community resilience in three low socio-economic communities in the Western Cape (one predominantly 'African' community and two predominantly 'Coloured' communities) found that all three communities

indicated high levels of hope, "…suggesting that despite the assumed impact of past Apartheid generated deprivations, persistent infrastructural limitations and violence, these neighbourhoods are still able to report positive feelings of hope and enthusiasm for the future." (p. 403).

4.7 Conclusion

Overall, the main effect that 'racial' oppression has on personality is that of inferiority, self-hatred and an intense need to be seen as equal by the oppressor. It may therefore be assumed that 'Black' students (having been affected by the harshest forms of 'racial' oppression) deal with this inferiority by trying to assimilate themselves into the culture of the oppressor ('White' minority) or by rejecting this dominant culture and fully embracing one's own culture. The latter would possibly lead to tension in a setting as 'racially' and ethnically diverse as a South African university, which in turn may affect one's ability to remain well. However, it should also be noted that community resilience may assist in protecting against the harmful effects of oppression and result in a wider array of positive outcomes.

CHAPTER 5

THE RELATIONSHIP BETWEEN RESILIENCE, 'RACE' AND TRAUMA

5.1 Introduction

This chapter looks at student identity in post-Apartheid South Africa as it is important to try and understand the population being investigated. This is followed by a discussion on various studies pertaining to resilience, 'race' and trauma specifically, after which a final word on the theoretical framework of the present study is given.

5.2 Student identity in post-Apartheid South Africa

For many students the transition to university represents a significant challenge as it is seen as an important step towards greater autonomy and personal independence (Lopez, Campbell & Watkins, 1988). Upon entering the university environment, students are faced with many stressors arising from a need to achieve this personal independence and to adapt to changes imposed by this new and strange environment.

It has generally been assumed that the primary developmental task of the university student is to achieve psychological separation from the family and to find effective ways of adapting to the adult world (Golan, 1981 cited in Lopez, Campbell & Watkins, 1988). Pascarella and Terenzini (1991 cited in Botha, Brand, Cilliers, Davidow, de Jager & Smith, 2005) argue that the changes that occur at a tertiary level of study are substantial and cover a wide range of domains such as cognitive development, academic achievement, self-concept, psychological well-being, values, morality, interpersonal relations, future goal development and physical well-being.

However, the South African university setting is unique in that it is attempting to redress the inequalities of the Apartheid system. These settings have become increasingly diverse and present with challenges as a result of this diversity. For example, the choice of language as a medium of instruction is problematic in a context where many students do not have English as a first language. Research shows that language and academic success are closely linked, and the use of English as the language of learning and teaching by many second language learners should be seen as a major contributing factor to poor pass rates and drop out rates throughout schooling (Barry, 2002 cited in Alexander, 2004).

In addition, the lack of learning material in the eleven official languages further entrenches English as the language of learning throughout the education system. It is also important to note that "factors such as socio-economic circumstances of students in this country, the high prevalence of trauma and emotional problems, the changing system of education and the lack of preparation for tertiary studies in many high schools all have a direct influence on the wellbeing as well as on the retention and success rates of students." (Botha, et. al., 2005, p. 86).

Burns (1988) discusses the relevance of the South African context with its wide range of minority groups and states that forming one's identity may be easier to achieve for some groups than for others, as each group provides a different setting with different cultural demands with which students must cope. In addition, South Africa is a country in transition (from Apartheid to democracy) and it is within this context that South African students may be grappling with issues of identity based on categories defined within the Apartheid regime ('White', 'Black', 'Indian' and 'Coloured').

In a study conducted with students at a South African university it was found that students define themselves in multiple and complex ways (Carrim, 2000). It has also been found that 'Black' South Africans are most proud of their country and new political era, with 'Coloured' and 'Indian' South Africans being ambivalent (Finchilescu & Dawes, 1999 cited in Eaton, 2002). 'White' South Africans were found to show less pride in the country along with occasional feelings of negativity and alienation towards the new dispensation. Davids (2002) in his study with students at the University of the Western Cape found that students had to some degree internalised racism through discursive practices (e.g., the use if racist language). However, he continues in saying that these practices were adopted mainly as self-protective and defensive measures as they are related to anxiety about being marginalized in post-Apartheid South Africa.
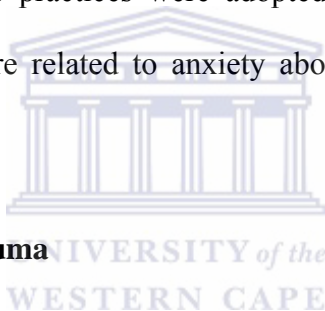
5.3 Resilience, 'race' and trauma

As mentioned above, Walsh (1998) states that resilience does not occur in spite of adversity but rather because of it (cited in Waller, 2001). It is viewed as a continuing exploration of capacities and knowledge through the interaction between risks and protection in one's life (Saleeby, 1996). It may therefore be argued that levels of resilience may be lower among those who have not been presented with painful or challenging experiences where such strengths may be developed whilst it may be higher among those who face stressful and traumatic situations more often. However, it should also be noted that the experience of trauma or adversity alone may not lead to resilience, but is rather dependent upon the interaction between various factors (risk and protective factors). For instance, it has been argued that in cases where threats are

multiple or cumulative, one's capacity to respond is compromised and may therefore hinder potential recovery (Mosavel, Simon, Ahmed, & Van Stade, 2007).

'Race' is linked to poor socio-economic status (due to past Apartheid policies). According to General Household Survey (GHS, 2005), 63% of 'African' children and 24% of 'Coloured' children live in "ultra poor households" with only 15% of Indian and 4% of 'White' children living in such poor circumstances (Leatt, 2006). Poverty results in minimal resources and other vulnerabilities as well as greater exposure to trauma (Clauss-Ehlers & Levi, 2002) but it cannot be said that poverty will always lead to an increase of trauma exposure (Mkabile, 2007). However, it may still be speculated that different 'racial' groups present with varying levels of trauma exposure which will in turn result in different levels of resilience within an individual of that particular 'racial' group.
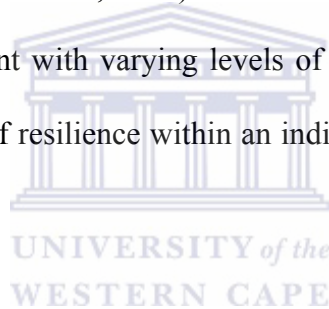
However, with regard to 'race' and trauma exposure Mkabile (2007) found different results. He conducted a study with 1140 learners across nine schools in Cape Town. The sample was 'racially' divided as follows: 29.2% were 'White', 38.3% were 'Coloured', 19.4% were 'African' and 1.9% 'Asian'. He found that 99.2% of adolescents in the sample reported exposure to negative life events, 88.9% were exposed to childhood trauma and 82.7% were exposed to traumatic events. This may suggest that trauma exposure is similar across different 'racial' groups.

The results yielded in a study by Seedat et al. (2004) seem to correspond with these findings. They report that different 'racial' groups experience similar levels of trauma

exposure. However, it should be noted that they studied the lifetime exposure of trauma meaning that if an individual had experienced a specific trauma type (e.g., mugging) at any point in their lives they would respond positively to that particular item. Their findings therefore fail to reflect the intensity or chronicity of trauma exposure, which could account for the similar rates in trauma exposure across the different 'racial' groups. In their study it was found that 86% (19 of 22) of 'Asians', 75% (166 of 221) of 'Blacks', 85% (371 of 437) of 'Coloureds' and 86% (285 of 333) of 'Whites' reported *lifetime* exposure to trauma showing that individuals of different 'race' experience relatively similar levels of *lifetime* trauma exposure. Of those exposed to trauma 32% of 'Asians', 34% of 'Blacks', 29% of 'Coloureds' and 20% of 'Whites' were assessed as having PTSD suggesting that 'Blacks', even though reporting the lowest incidence of trauma exposure yielded the highest percentage of PTSD among participants. Therefore, as mentioned above, these results may be due to the failure to measure the intensity and chronicity of trauma exposure between 'racial' groups because even though 'Blacks' reported fewer trauma types the results do not indicate the number or intensity of exposure.

In this way, resilience may be seen as the outcome variable in the relationship between 'race' and the exposure to trauma associated with 'race'. The current study therefore is different from previous research in that it aims to investigate and bring together these three specific variables and attempts to measure how they interact with each other. As mentioned before, little research has been done pertaining to resilience, trauma and 'race' both locally and internationally. Utsey, et al. (2007) highlight this gap in the literature by stating that resilience research should be geared towards the understudied and at-risk populations, "bringing us closer to a more culturally congruent and

empirically sound model of risk and resilience." (p. 76).   However, the literature indicates that local and international studies have focused on the relationship between 'race' and resilience and international studies have focused on the relationship between resilience and trauma. These are discussed below.

With regard to studies focusing on 'race' and resilience, Ahmed et al. (2004) found in a study of community resilience in three low socio-economic communities in the Western Cape that the African-language speaking community ('Africans') perceived their neighbourhoods to be more cohesive than those living in Afrikaans-speaking communities ('Coloureds'). The authors indicate that one of the factors, which may have led to the difference in resilience between these communities, may be associated with the difference in the impact Apartheid had on these communities. In a sample of 164 third year psychology students at the University of the Western Cape it was found that 'African' students scored significantly higher on resilience factors than 'Coloured' and 'Indian' groups, indicating that individuals of different 'races' present with different levels of resilience (Barends, 2004).   Utsey et al. (2007) conducted a study with 385 African Americans from high-risk urban communities to investigate means of culture-specific coping. Their results indicated that both traditional resilience factors (cognitive ability, social support, and familial factors) and cultural factors (spiritual and collective coping) were predictors of resilient outcomes (i.e., high quality of life) for this specific population group.

The literature indicates that a wider range of studies, both locally and internationally, focus on the relationship between trauma and resilience. Ward et al. (2007) investigated

the extent to which factors in children's individual, family, school, and peer group relations affect resilient responses to violence exposure. The location of study was in a specific community in Cape Town, with 98% being 'Coloured' and characterized by high levels of poverty, unemployment, violence, gang-related crime and crime involving those affected by substances. They found that victimization and not witnessing of violence was most likely to lead to conduct problems in children. In addition, they found an association between school support and decreased depression and conduct problems. Involvement in after-school activities was found to alleviate anxiety. Barbarin et al. (2001) examined the effects of exposure to direct and vicarious political, family, and community violence on adjustment among 625 six-year-old black South African children. They found that community violence rather than family violence were more strongly predictive of negative outcomes. This differed from evidence in international studies and was attributed to a difference in the intensity of family and community violence present within the two different locations. Family coping resources as well as child resilience were also found to mediate the effects of trauma.

Kuther and Fisher (1998) found in a sample of 123 grade six to eight learners that more than one half of the participants had reported being victimized by community violence. The results indicated that family support served as a moderator between victimization and distress among children. Jones (2007) studied the relationship between exposure to chronic community violence and the development of complex PTSD (C-PTSD), a cluster of symptoms, which form as a result of repeated exposure to trauma, in the context of African American cultural beliefs and values used to cope with such events. The sample consisted of 71 African American children (aged 9 to 11) living in a

community with high levels of crime and poverty. She states that children living in these communities are not only exposed to violence but are also subject to the effects of living in a situation of institutionalized poverty, racism and oppression. She found that kinship, spirituality and high levels of support added to children's resilience and seemed to have a buffering effect on exposure to violence (Jones, 2007).

Aisenberg (2001) explored the relationship between exposure to community violence and the psychological and behavioural effects on 31 Latina mothers and their children. He found that maternal distress symptomatology (maternal response to community violence) had a more significant effect on child behaviour problems than the exposure to community violence itself. Leon et al. (2008) conducted a study with 142 youth with identified sexual behaviour problems living in a foster care system. They found that resilience, as indicated by protective factors at the level of the individual, foster family, and youths' interaction with the extended community (club involvement, etc.), were associated with greater changes in trauma symptoms over time among highly disadvantaged youth in the child welfare system. They also found gender (males) and positive parenting practices to predict greater decreases in the negative affect of participants. These results revealed that youth with significant vulnerabilities and risk factors can still demonstrate a degree of protection from trauma symptomatology in the presence of a wide range of personal and social variables assisting in the development of resilience.

Gold, Engdahl, Eberly, Blake, Page and Frueh (2000) found in a sample of 270 prisoners during World War II, that the severity of trauma was best related to trauma symptoms experienced approximately 50 years later. They also found that a greater

education level and age at time of trauma seemed to have a buffering effect on the symptoms experienced.   They therefore found the interaction between trauma and resilience to be the best predictor of current PTSD symptomatology.   Punama¨ki, Qouta and El-Sarraj (2001) questioned 86 Palestinian children three years after their exposure to political violence of the Intifada.   It was found that children, who had an active response to political violence, were more creative and had positive perceptions of parenting, enjoyed greater benefits and were resilient against developing more severe psychological distress as they exhibited fewer PTSD symptoms.

There are various responses to trauma.   Many who experience the negative effects of trauma seek help from mental health professionals.   Hemenover (2003) found that patients' disclosure of trauma not only reduced psychological distress but also positively changed individual self-perception and resulted in a more resilient self-concept.   However, others may have different experiences and therefore seek different means of dealing with their traumatic events (e.g., consulting clergy instead of health professionals).   A response which has gained more attention in recent years is that of spirituality in defence to the negative effects of trauma.   Sigmund (2003) studied the spiritual impact that trauma has on survivors. She states that, "[t]he lack of control, combined with the violent and sometimes hostile nature of the traumatic event, invites a process of existential questioning on the part of the victim." (p. 222).   In her research she found that spiritual intervention provided by clergy, where patients with PTSD could explore trauma-related existential conflicts, was beneficial to the patients.   In a qualitative study to examine the cultural context of recovery from child abuse in those who do not seek professional help, Lake (2003) found that those factors which contributed towards their recovery include education/information, relationships,

attending to one's feelings and beliefs about the abuse, self-care and spirituality. Peres, Moreira-Almeida, Nasello and Koenig (2007) also note the positive effect of spiritual and religious beliefs in their ability to contribute towards the restoration of healthy perspectives, which could facilitate the integration of traumatic events. They state that the study of the role spirituality may play in the development of resilience in those who survive trauma is significant as it may enhance our understanding of the individual's ability to adapt to trauma.

5.4 Theoretical framework

Much of the theoretical framework of this study has been discussed previously, this includes the systemic view of resilience (Waller, 2001) as well as drawing on the work of Bulhan (1985) and Fanon (1967). These theories help conceptualise and frame topics discussed throughout the study and will now be discussed in relation to general systems theory. There are many variants of this theory but this paper will utilise the theory outlined by Donald et al. (1997) and Engelbrecht (1999), which combines Brofenbrenner's ecosystemic theory and the systemic thinking model (cited in Green & Engelbrecht, 2001).

This theory postulates that systems are a blueprint of organization where the properties of the whole stem from the properties of the relationship between different parts. Simply put, the ecosystemic perspective can be seen as "a way of thinking and organizing knowledge that emphasizes the interrelatedness and interdependency" between individuals and social systems (e.g., families, groups, organizations, communities, societies) (Queralt, 1996, p. 17 cited in Waller, 2001, p. 291). Thus, the focus of study in resilience research expands from what happens within systems to what

happens between them as well, where development is seen as a constant process of adapting and accommodating between individuals and their environments (Queralt, 1996 cited in Waller, 2001).

This theory relates well with resilience as it is also defined within an ecosystemic framework where development is seen as the product of a continuous interaction between individuals and the range of systems within which they operate (e.g., family, community, etc.) (Waller, 2001). In addition, the interaction between the factors that influence resilience (i.e., risk and protective factors) is seen as a fluid process, which is modified as change occurs within the environment and the individual (Egolf et al., 1994). The risk and protective factors themselves are also believed to function at any systemic level and have the potential to either promote or prevent adaptational outcomes (Waller, 2001).
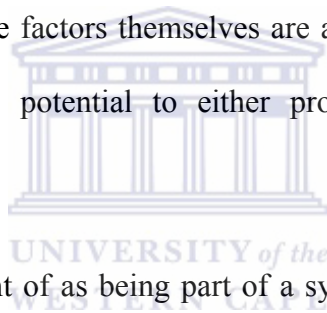
Furthermore, society is thought of as being part of a system of various connected and mutually dependent levels that are in constant interaction. For this reason, change on one level will inevitably affect change on another level/s (Green & Engelbrecht, 2001). Society as a whole is one of the main systems within which we exist and racism, in the form of Apartheid, at the societal level has had a major impact on South Africans. According to Fanon (1967) this form of racism filters through almost every aspect of daily living affecting a variety of systems within which individuals operate. His theory of oppression and violence and its impact on the human psyche have helped to better understand emerging patterns in South African society today. For instance, the increase in psychosocial difficulties, crime and violence in South Africa may be the result of change at the societal level (i.e., institutional and structural violence inherent in

Apartheid policies), which has led to change at the community and individual level in the form of horizontal violence (where anger and frustration due to continued oppression is directed towards oneself and one's own people rather than the oppressor who seems too powerful to overcome) (Fanon, 1967). Apartheid policies at the societal level also aimed to dehumanize 'non-white' South Africans and resulted in change at the individual level by internalizing within them a sense of inferiority and low self-worth. Fanon (1967) states that change at the individual level, as a result of such oppression, include a struggle for identity and recognition by the Other, alienation, attempts at assimilation and according to Bulhan (1985) capitulation, revitalization and radicalization. Therefore, it may be said that in studying the interaction between risk and resilience amongst 'Coloured' and 'African' students, the effects of Apartheid on various systemic levels cannot be ignored as they form part of the risk factors, which may hinder the development of resilience in the individual. In this way, the ecosystemic model is an appropriate model to adapt in the present study as it helps to frame and draw together resilience and racism by showing how these factors interact and influence each other as they form part of different levels within a systemic whole.

5.5 Conclusion

From the above, it is seen that there is a lack of resilience research investigating the role 'race' and other demographic variables may play in the relationship between resilience and trauma. International studies have looked at resilience and trauma but such investigations are lacking in the South African context. The literature however does suggest that 'race' is linked to trauma and that resilience serves as a mediator of trauma.

It is upon these findings that the current study bases its aims and hypotheses, which are discussed in the next section of this paper.

CHAPTER 6

METHODOLOGY

6. 1 Introduction

This chapter highlights the methods utilised in conducting the current research. This includes a discussion on the design of the research, the aim of the study, the research questions, the rationale and hypotheses. It also looks at the characteristics of the sample, the instruments used, the procedure for data collection and analysis and ethical considerations.

6.2 Motivation for the study

It has been said that resilience dimensions should be studied in more specific demographic and clinical populations as this would most likely lead to more context-specific protective profiles as evidence suggests that protective factors vary from one to the other (Leon et al., 2008; Schoon, Parsons & Sacker, 2004). Similarly, Utsey et al. (2007) state that resilience research should be geared towards the understudied and at-risk populations, "bringing us closer to a more culturally congruent and empirically sound model of risk and resilience." (p. 76).

The rationale of this study is therefore to expand on the body of research pertaining to resilience (research focusing on specific demographics, resilience and trauma rather than just resilience and trauma) and to add to existing knowledge regarding the influence that 'race' may have in the relationship between resilience and trauma. There

is also a need for this particular type of research within the South African context. That is, resilience research focusing on populations forming part of particular demographic groups. Furthermore, once particular risk and protective factors have been identified as either positive or negative contributors to resilience, steps may be taken to promote the positive and address the negative factors in order to improve psychological well-being among students.

6.3 Aim of the study

The main aim of this study is to investigate the relationship between resilience, 'race' and trauma. The two main areas considered are as follows:

1. Does 'race' increase risk for negative outcomes?

2. How does 'race' influence both risk and resilience?
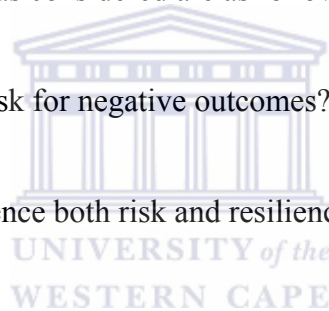
6.4 Research questions

1. Does 'race' affect the level of exposure to trauma?

2. Does 'race' affect the presentation of trauma?

3. Does 'race' influence levels of resilience?

4. Does 'race' play a role in the relationship between resilience and trauma?

6.5 Hypotheses

1. 'African' students will obtain significantly higher scores on the Childhood Exposure to Community Violence questionnaire (CECV) than 'Coloured' students.

2. 'African' students will obtain significantly higher scores on the Harvard Trauma Scale (HTS global) than 'Coloured' students.

3. 'African' students will score higher on the Resilience Scale for Adults (RSA full scale) than 'Coloured' students.

4. 'African' students will score higher than 'Coloured' students will on the RSA for all trauma conditions, namely, trauma, no trauma, high trauma and low trauma.

6.6 Research design

The present study falls within the quantitative research paradigm. It involves the secondary analysis of data collected for a larger study. The main aim of the larger study is to assess the cross-cultural relevance of the RSA where South African data will be compared to Norwegian data. The data set for the larger study included data for the Life Events Scale, The Harvard Trauma Scale, The Childhood Exposure to Community Violence Scale, The Resilience Scale for Adults and the Beck Depression Inventory. Trauma scales were selected for the South African sample because of their relevance for the South African context.

6.6 Sample

The sample consisted of 249 full-time students studying first year psychology. Table 6.7.1 and 6.7.2 describe the characteristics of the sample.

Table 6.7.1 Description of sample characteristics

|	N	%
Sex		
Male	79	31.7
Female	169	67.9
Missing data	1	0.4
Language		
English	115	46.2
Afrikaans	49	19.7
African-language speaking	85	34.1
'Race'		
'African'	89	35.7
'Coloured'	160	64.3
Age		
17-20	177	71.1
21-25	44	17.7
26-30	6	2.4
30+	14	5.6
Missing data	8	3.2
Area		
Historically 'Coloured'	97	39.0
Historically 'African'	28	11.2
'racially' mixed suburbs	79	31.7
Outside the Cape Metropole	18	7.2
Outside the Western Cape	11	4.4
Missing data	16	6.4
Household income		
<R1 000	30	12.0
R1 000 – R2 999	45	18.1
R3 000 – R5 999	40	16.1
R6 000 – R9 999	40	16.1
> R10 000	66	26.5
Missing data	28	11.2

The sample is predominantly female (67.9%), between the ages of 17 and 20 (71.1%),

English speaking (46.2%), 'Coloured' (64.3%) living in historically 'Coloured' areas

(39.0%), with a combined household income of more than R10 000 (26.5%).

Table 6.7.2 'Racial' difference in household income

	'African'	'Coloured'
Household income		
<R1 000	24.7%	5.0%
R1 000 – R2 999	25.8%	13.8%
R3 000 – R5 999	18.0%	15.0%
R6 000 – R9 999	6.7%	21.3%
> R10 000	16.9%	31.9%
Not available	7.9%	13.1%

The majority of the 'African' students (25.8%) have a combined household income of R1 000 to R2 999 and the majority of 'Coloured' students have a combined household income of more than R10 000.

6.8 Instruments
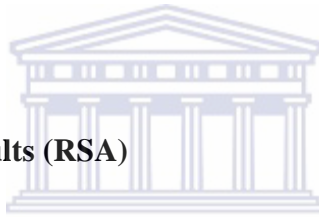
6.8.1 Resilience Scale for Adults (RSA)

The RSA is a 33-item self-report scale measuring resilience among adults (Friborg, Hjemdal, Rosenvinge, Martinussen, Aslaksen & Flaten, 2006; Hjemdal, 2007; Hjemdal, Friborg, Stiles, Rosenvinge & Martinussen, 2006). It was developed to measure interpersonal and intrapersonal protective resources that may assist in adaptation to adversity. It includes six factors: (1) personal strength, which contains two subfactors (1a) positive perception of self (6 items) and (1b) positive perception of the future (4 items); (2) social competence (6 items); (3) structured style (4 items); (4) family cohesion (6 items); and (5) social resources (7 items). The items were scored along a seven-point semantic differential scale. In order to protect against acquiescence bias, half of the positive differentials have been placed to the right of the questionnaire. The total score for the questionnaire ranges from 33-231.

The psychometric properties of the RSA were assessed as being adequate yielding Crochbach alphas of 0.81 for the 'perception of self', 0.78 for the 'planned future', 0.75 for the 'social competence', 0.79 for the 'family coherence', 0.77 for the 'social support', and 0.67 for the 'personal structure' sub-scales. The total RSA scale yielded a Cronbach alpha of 0.88 (Hjemdal, et. al., 2006). Confirmatory factor analysis showed good relative fit for the six-factor RSA model and test-retest correlations (after a period of four months) ranged from 0.84 to 0.73. In a further attempt to study the predictive validity of the RSA a study by Friborg et al. (2006) yielded similar results. The Cronbach alphas were 0.75, 0.68, 0.72, 0.87 and 0.70 for the sub-scales respectively and 0.88 for the total RSA score.

It should be noted that the current study, along with the larger study it forms part of, is the first to use the RSA in South Africa and context specific reliability and validity data is not available. The aim of the larger study is to assess the cross-cultural relevance of the scale.
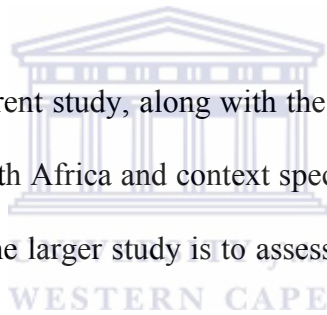
6.8.2 Childhood Exposure to Community Violence Scale (CECV)

The Childhood Exposure to Violence Scale was adapted for use in South Africa from Richters' (1990) "Things I've seen and heard". It consists of 36 items measuring the occurrence of violent events in the past one month period. The CECV is a 3-point Likert scale where respondents are asked whether specific items (e.g., "Have you heard a gun being shot?") are true for them. Respondents may answer one of the following: 1) "Many times", 2) "A few times", 3) "Never". Fehon, Grilo and Lipshitz (2001) administered a 33-item version of Richters' questionnaire. These authors analysed the internal consistency and test-retest reliability of the CECV and found good internal

consistency, with coefficient alphas ranging from .51 to .90 for each violence category. Test-retest reliabilities were also performed and results ranged from .47 to .85 for the different categories of violence.

6.8.3 Harvard Trauma Scale (HTS)

The Harvard Trauma Scale (HTS) was adapted from the Harvard Trauma Questionnaire (HTQ) for use in South Africa (Ward, Flisher, Zissis, Muller, & Lombard, 2004). It is a PTSD symptom checklist and consists of 30 items (Mollica, Caspi-Yavin, Lavelle, Tor, Yang, Chan, Pham, Ryan & Marneffe, 1994). The items are scored along an ordinal scale with four levels: 1) "Not at all", 2) "A little", 3) "Quite a bit", 4) "Extremely". Items 1 to 16 comprise of PTSD symptoms outlined in the Diagnostic and Statistical Manual of Mental Disorders, Third Edition or DSM-III-R while items 17 to 30 refers to responses related to PTSD symptoms (APA, 1987 cited in Mollica et al., 1994).

Inter-rater reliability was assessed and was found to be high for the trauma related symptoms ($r = 0.98$). The test-retest reliability indicated high correlation between scores on both administrations ($r = 0.89$, $p < 0.0001$). The internal consistency of the scale was also high as indicated by the Cronbach alpha ($\alpha = 0.90$). The validity of the questionnaire was accomplished by measuring the extent to which the scale accurately measured the presence and absence of PTSD. A sample of 91 patients was diagnosed by clinicians based on DSM-III-R criteria. These results were compared with the PTSD and non-PTSD groups as measured by the HTS. The findings indicated that 78% of patients with PTSD and 65% of patients without PTSD were accurately classified (Mollica et al., 1994).

6.9 Procedure

The data for the present study forms part of the larger study described previously. A convenience sample was utilised for the study. The sample was chosen from the students attending a Psychology one class where students enrolled for the class are divided into groups of between 150-300 students. The two groups with the largest reported attendance were chosen for this study. The principal investigator distributed the questionnaires at the beginning of the lecture period and the questionnaires were collected once all students had completed them. The approximate time for completing questionnaires was 40 minutes.

6.10 Analysis of the data

All statistical analyses were completed with the use of the Statistical Package for the Social Sciences (SPSS) (Nie, Hull, Jenkins, Steinbrenner & Brent, 1975).

Analyses of one-way relationships were calculated by means of independent-sample t-tests. These analyses include the following: the relationship between 'race' and violence exposure, the relationship between 'race' and trauma and the relationship between 'race' and resilience. T-tests and Mann-Whitney tests were used to determine the difference on resilience scores for the trauma and the no trauma groups and the high and the low trauma groups within and between 'racial' groups. The cut-off for statistical significance was set at the alpha ≤ 0.05 level.
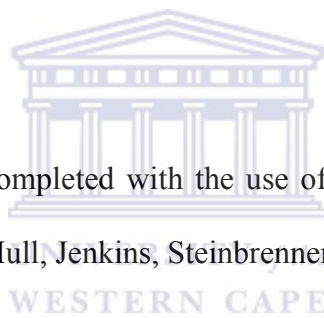
6.11 Ethical Considerations

The principal researcher obtained ethical clearance from the relevant university committees prior to the commencement of data collection. All proceedings were in accordance with the ethical regulations pertaining to research conducted with human participants. In agreement with this, the principal researcher informed all participants of the study as well as its aims and procedures and all participants provided informed consent by means of signature on the relevant forms provided. A copy of the consent form is attached in appendix A. Confidentiality and anonymity was assured. Participation was voluntary and participants were free to withdraw from the study at any point during the research. All those who received questionnaires completed them and only two students chose not to participate in the study.

CHAPTER 7

RESULTS

7.1 Introduction

This chapter reports the results yielded from the analyses of the research data. The descriptive statistics and reliability of the RSA, HTS and CECV are presented first. This is followed by analyses of one-way relationships by means of independent-sample t-tests. These analyses include the following: the relationship between 'race' and violence exposure, 'race' and trauma and the relationship between 'race' and resilience. Independent-sample t-tests were used to determine the difference on resilience scores between the trauma and the no trauma group for the entire sample as well as the 'Coloured' sample; for the trauma group between 'racial' groups and between the high and the low trauma group. Mann-Whitney tests were used to determine the difference on resilience scores for the trauma and the no trauma group in the 'African' sample; for the no trauma group between the 'racial' groups; between the high and the low trauma group for the 'African' sample; for the high and the low trauma group for the 'Coloured' sample; on the low trauma group between the 'racial' groups and on the high trauma group between the 'racial' groups. All analyses are aligned with the hypotheses outlined in chapter three. The cut-off for statistical significance was set at the alpha ≤ 0.05 level.

7.2 Descriptive statistics and psychometric properties

This section outlines the descriptive statistics, as well as reports on the internal consistency and reliability of the two scales used, using Cronbach's alpha coefficient.

A reliability of 0.7 was used to indicate an acceptable reliability (Nunnaly, 1978 cited in Barends, 2004).

Table 7.2.1.1 Descriptive statistics and reliability within sub-scales of the RSA

	N	Mean	No. of items	Alpha
Resilience	249	77.47	33	0.89
Perception of self	249	63.24	6	0.81
Planned future	249	67.24	4	0.84
Social competence	249	62.82	6	0.83
Family cohesion	249	66.97	6	0.83
Social resources	249	55.50	7	0.84
Structured style	249	71.55	4	0.90

The results yielded from the present study indicate a mean of 77.47 for resilience; 63.24 for perception of self; 67.24 for planned future; 62.82 for social competence; 66.97 for family cohesion; 55.50 for social resources and 71.55 for structured style.

The correlations between sub-scales and overall resilience are presented in table 7.2.1.2 below.

Table 7.2.1.2 Correlation between sub-scales on the RSA

		PERCEP. OF SELF	PLANNED FUTURE	SOCIAL COMP.	FAMILY COH.	SOCIAL RES.	STRUC. STYLE	RSA (FULL SCALE)
PERCEPTION OF SELF	Pearson Correlation	1	.729**	.634**	.711**	.782**	.082	.869**
	Sig. (2-tailed)		.000	.000	.000	.000	.197	.000
PLANNED FUTURE	Pearson Correlation	.729**	1	.536**	.613**	.651**	.060	.771**
	Sig. (2-tailed)	.000		.000	.000	.000	.349	.000
SOCIAL COMPETENCE	Pearson Correlation	.634**	.536**	1	.587**	.700**	.247**	.823**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000
FAMILY COHESION	Pearson Correlation	.711**	.613**	.587**	1	.813**	.162*	.842**
	Sig. (2-tailed)	.000	.000	.000		.000	.011	.000
SOCIAL RESOURCES	Pearson Correlation	.782**	.651**	.700**	.813**	1	.286**	.936**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000
STRUCTURED STYLE	Pearson Correlation	.082	.060	.247**	.162*	.286**	1	.349**
	Sig. (2-tailed)	.197	.349	.000	.011	.000		.000
RSA (FULL SCALE)	Pearson Correlation	.869**	.771**	.823**	.842**	.936**	.349**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

a. Listwise N=249

Resilience (full-scale score) is significantly positively correlated with the perception of self (r = 0.869**, p < 0.01), planned future (r = 0.771**, p < 0.01), social competence (r = 0.823**, p < 0.01), family cohesion (r = 0.842**, p < 0.01), social resources (r = 0.936**, p < 0.01) and structured style (r = 0.349**, p < 0.01) sub-scale scores. The *perception of self* sub-scale is significantly positively correlated with the planned future (r = 0.729**, p < 0.01), social competence (r = 0.634**, p < 0.01), family cohesion (r = 0.711**, p < 0.01) and social resources (r = 0.782**, p < 0.01) sub-scale scores. The *planned future* sub-scale is significantly positively correlated with the social competence (r = 0.536**, p < 0.01), family cohesion (r = 0.613**, p < 0.01) and social resources (r = 0.651**, p < 0.01) sub-scale scores. The *social competence* sub-scale is significantly positively correlated with the family cohesion (r = 0.587**, p, 0.01), social resources (r = 0.700**, p < 0.01) and structured style (r = 0.247**, p < 0.01) sub-scale scores. The *family cohesion* sub-scale is significantly positively correlated with the social resources (r = 0.813**, p < 0.01) and structured style (r = 0.162*, p < 0.05) sub-

scale scores. The *social resources* sub-scale is significantly positively correlated with the structured style (r = 0.286**, p < 0.01) sub-scale score.

Table 7.2.2 Descriptive statistics and reliability for the CECV

Scale	N	Mean	Items	Alpha
Total score on CECV	249	92.66	36	0.92

The results yielded from the present study indicate a mean of 92.66 for total score on trauma exposure as measured by the CECV and a reliability coefficient of 0.92.

Table 7.2.3 Descriptive statistics and reliability for the HTS

Scale	N	Mean	Items	Alpha
Total score on HTS	249	54.17	30	0.94

The results yielded from the present study indicate a mean of 54.17 for total score on trauma as measured by the HTS and a reliability coefficient of 0.94.

7.3 The interrelationship between variables

The different variables used in the analyses include 'race', resilience and trauma. This section focuses on one-way relationships between these variables. Independent-sample t-tests and Mann-Whitney tests were used to test the hypotheses as outlined in chapter six. The relationships explored in these analyses include the following: the relationship between trauma and exposure to community violence, the relationship between 'race' and trauma, the relationship between 'race' and resilience and the relationship between resilience, 'race' and trauma/no trauma and high/low trauma.

7.3.1 The relationship between 'race' and community violence exposure

The following hypothesis was tested by means of the Independent-Sample t-test. The results are indicated in Table 7.3.1.

Ho1: 'African' students will not obtain significantly higher scores on the Childhood Exposure to Community Violence questionnaire (CECV) than 'Coloured' students.

Table 7.3.1 'Racial' difference on the CECV

Dep. variable	'African' (I) Mean	'Coloured' (J) Mean	Mean Diff (I-J)	Std. Error	Sig.
Violence exposure	93.25	92.34	.910	1.557	.529

'African' students did not obtain significantly higher scores on the CECV than 'Coloured' students. Therefore, the null-hypothesis cannot be rejected.

7.3.2 The relationship between 'race' and trauma

The following hypothesis was tested by means of the Independent-Sample t-test. The results are indicated in Table 7.3.2.

Ho2: 'African' students will not obtain significantly higher scores on the Harvard Trauma Scale (HTS global) than 'Coloured' students.

Table 7.3.2. 'Racial' difference on the HTS (global)

Dep. variable	'African' (I) Mean	'Coloured' (J) Mean	Mean Diff (I-J)	Std. Error	Sig.
Trauma	58.76	51.62	7.145	2.276	.116

'African' students did not obtain significantly higher scores on the HTS than 'Coloured' students. Therefore, the null-hypothesis cannot be rejected.

7.3.3 The relationship between 'race' and resilience

This hypothesis was tested by means of the Independent-sample t-test. The results are presented in Table 7.3.3.

Ho3: 'African' students will not score higher on the Resilience Scale for Adults (RSA full scale) than 'African' students.

Table 7.3.3 'Racial' difference on the RSA

Scale	'African' (I) Mean	'Coloured' (J) Mean	Mean Diff (I-J)	Std. Error	Sig.
Resilience	73.25	79.61	-6.565***	3.331	.000
Perception of self	14.04	14.33	-2.80**	.753	.002
Planned future	9.81	10.45	-.641***	.562	.000
Social competence	13.22	15.43	-2.207**	.810	.002
Family cohesion	10.46	10.51	-.052*	.560	.013
Social resources	21.03	15.43	-1.448***	1.009	.000
Structured style	4.67	6.61	-1.938	.476	.288

*** The mean difference is significant at the 0.001 level
** The mean difference is significant at the 0.01 level
* The mean difference is significant at the 0.05 level

'African' students did not score significantly higher on overall resilience than 'Coloured' students as obtained on the RSA. Therefore, the null-hypothesis cannot be rejected. Statistically significant differences were also found on all sub-scales of the RSA except the structured style sub-scale.

7.3.4 The relationship between resilience, 'race' and trauma

According to the DSM-IV-TR, a diagnosis of PTSD is given when the person has been exposed to a traumatic event in which the person experienced, witnessed or was confronted with an event that involved actual or threatened death or serious injury or threat to self or others and the person's response involved intense fear, helplessness or horror (criterion A); when at least six of the seventeen symptoms are met [i.e., one or more symptoms in criterion B (persistent re-experience of trauma), three or more in criterion C (avoidance of stimuli) and two or more in criterion D (increased arousal)]; when the duration of the disturbance is more than one month (criterion E) and the disturbance causes clinically significant distress or impairment in important areas of functioning (criterion F) (APA, 2000).

The clinical cut off of five symptoms or less, as outlined in the DSM-IV-TR, was used to categorise the no trauma group. This translated into a score range of 1 to 27 on the HTS. Therefore, participants who scored 1 to 27 (5 or less PTSD symptoms) on the PTSD scale (items 1 to 16) of the HTS were classified as the no trauma group. The remainder of the sample (those who scored 28 and higher indicating the presence of 6 or more PTSD symptoms) fell into the trauma group. The trauma group was then further sub-divided into a low and high trauma group using the mean score for the trauma

group. Those who obtained scores 50% above the mean were categorised as the high trauma group and those who obtained scores 50% below the mean was categorised as the low trauma group. The following hypotheses were tested by means of Independent-Sample t-tests and Mann-Whitney tests. The order in which analyses are presented is as follows: the difference on the resilience scores between the trauma and the no trauma groups within the entire sample, within the separate 'racial' groups, between 'racial' groups; the difference on the resilience scores between the high and the low trauma groups within the entire sample, within the separate 'racial' groups and finally between 'racial' groups. The rationale for these analyses was to determine whether resilience scores would be higher amongst those reporting no trauma than those who report trauma and to determine whether 'race' would influence this relationship. As mentioned above, the trauma group was then divided into a high and low trauma group. Analyses were done within and between these groups in order to determine whether resilience scores would be higher amongst those reporting low trauma than those reporting high trauma and whether 'race' would influence this relationship.

Ho4:   'African' students will not score higher than 'Coloured' students on the RSA for all trauma conditions, namely, trauma, no trauma, high trauma and low trauma.

7.3.4.1 The difference on the resilience scores between the trauma and the no trauma groups

The t-test for parametric data was used, as the cell size was greater than 50. The data is reported in Table 7.3.4.1.

Table 7.3.4.1 The difference on the resilience scores between the trauma and the no trauma groups

Dep. variable	No trauma (I) Mean	Trauma (J) Mean	Mean Diff (I-J)	Std. Error	Sig.
Resilience	82.31	73.31	9.007	3.176	.116

No statistically significant difference was found on the resilience scores between the trauma and the no trauma groups for the entire sample.

7.3.4.2 The difference on the resilience scores between the trauma and the no trauma groups for 'African' students

The Mann-Whiney test for non-parametric data was used, as the cell size for the no trauma group was less than 50. The data is reported in Table 7.3.4.2.
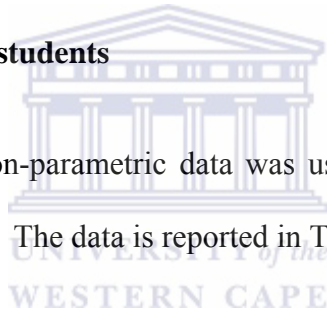
Table 7.3.4.2 The difference on the resilience scores between the trauma and the no trauma groups for 'African' students

Dep. variable	No trauma (I) Mean	Trauma (J) Mean	Mean Diff (I-J)	Std. Error	Sig.
Resilience	78.97	69.88	9.095*	6.891	.02

* The mean difference is significant at the 0.05 level

A statistically significant difference was found on the resilience scores between the trauma and the no trauma groups for 'African' students.
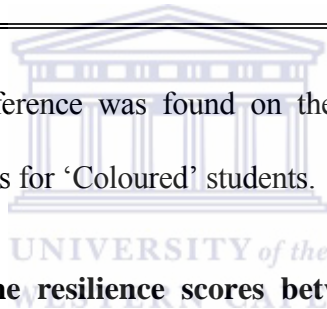
7.3.4.3 The difference on the resilience scores between the trauma and the no trauma groups for 'Coloured' students

The t-test for parametric data was used, as the cell size was greater than 50. The results are indicated in Table 7.3.4.3.

Table 7.3.4.3 The difference on the resilience scores between the trauma and the no trauma groups for 'Coloured' students

Dep. variable	No trauma (I) Mean	Trauma (J) Mean	Mean Diff (I-J)	Std. Error	Sig.
Resilience	83.66	75.77	7.889	3.251	.365

No statistically significant difference was found on the resilience scores between the trauma and the no trauma groups for 'Coloured' students.

7.3.4.4 The difference on the resilience scores between 'racial' groups for the trauma group

The t-test for parametric data was used, as the cell size is greater than 50. The results are indicated in Table 7.3.4.4.

Table 7.3.4.4 The difference on the resilience scores between 'racial' groups for the trauma group

Dependent variable	'African' (I) Mean	'Coloured' (J) Mean	Mean Diff (I-J)	Std. Error	Sig.
Resilience	69.88	75.77	-5.894**	4.554	.003

** The mean difference is significant at the 0.01 level

A statistically significant difference was found on the resilience scores for the trauma condition between 'Coloured' and 'African' students.

7.3.4.5 The difference on the resilience scores between 'racial' groups for the no trauma group

The Mann-Whitney test for non-parametric data was used, as the cell size for the 'African' low trauma group is less than 50. The results are indicated in Table 7.3.4.5.

Table 7.3.4.5 The difference on resilience between 'racial' groups for the no trauma group

Dependent variable	'African' (I) Mean	'Coloured' (J) Mean	Mean Diff (I-J)	Std. Error	Sig.
Resilience	78.97	83.66	-4.689	4.879	.956

No statistically significant difference was found on the resilience scores for the no trauma group between 'Coloured' and 'African' students.

7.3.4.6 The difference on the resilience scores for the high and the low trauma groups

The t-test for parametric data was used, as the cell size was greater than 50. The results are indicated in Table 7.3.4.6.
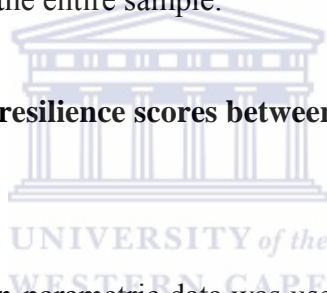
Table 7.3.4.6 The difference on the resilience scores for the high and the low trauma groups

Dep. variable	High trauma (I) Mean	Low Trauma (J) Mean	Mean Diff (I-J)	Std. Error	Sig.
Resilience	64.38	79.72	15.343****	4.384	.000

**** The mean difference is significant at the 0.000 level

A statistically significant difference was found on the resilience scores between the high and the low trauma groups for the entire sample.

7.3.4.7 The difference on the resilience scores between the high and the low trauma groups for 'African' students

The Mann-Whitney test for non-parametric data was used, as the cell size was less than 50. The data is provided in Table 7.3.4.7.

Table 7.3.4.7 The difference on resilience between the high and the low trauma groups for 'African' students

Dep. variable	High trauma (I) Mean	Low Trauma (J) Mean	Mean Diff (I-J)	Std. Error	Sig.
Resilience	57.82	81.93	24.107****	8.001	.000

**** The mean difference is significant at the 0.000 level

A statistically significant difference was found on the resilience scores between the high and the low trauma groups for 'African' students.

7.3.4.8 The difference on the resilience scores between the high and the low trauma groups for 'Coloured' students

The Mann-Whitney test for non-parametric data was used, as the cell size for the high trauma group was less than 50. The results are indicated in Table 7.3.4.8.

Table 7.3.4.8 The difference on the resilience scores between the high and the low trauma groups for 'Coloured' students

Dep. variable	High trauma (I) Mean	Low Trauma (J) Mean	Mean Diff (I-J)	Std. Error	Sig.
Resilience	70.93	78.48	7.551*	4.819	.034

* The mean difference is significant at the 0.05 level

A statistically significant difference was found on the resilience scores between the high and the low trauma groups for 'Coloured' students.

7.3.4.9 The difference on the resilience scores between 'racial' groups for the low trauma group

The Mann-Whitney test for non-parametric data was used, as the cell size for the 'African' low trauma group was less than 50. The results are indicated in Table 7.3.4.9.

Table 7.3.4.9 The difference on the resilience scores between 'racial' groups for the low trauma group

Dependent variable	'African' (I) Mean	'Coloured' (J) Mean	Mean Diff (I-J)	Std. Error	Sig.
Resilience	81.93	78.48	3.449	4.588	.243

No statistically significant difference was found on the resilience scores between 'African' and 'Coloured' students reporting low trauma.

7.3.4.10 The difference on the resilience groups between 'racial' groups for the high trauma group

The Mann-Whitney test for non-parametric data was used as the cell size was less than 50. The results are indicated in Table 7.3.4.10.

Table 7.3.4.10 The difference on the resilience scores between 'racial' groups for the high trauma group

Dependent variable	'African' (I) Mean	'Coloured' (J) Mean	Mean Diff (I-J)	Std. Error	Sig.
Resilience	57.82	70.93	-13.107	8.243	.582

No statistically significant difference was found on the resilience scores between 'African' and 'Coloured' students reporting high trauma.

From the above, it may be said that 'African' students did not score higher than 'Coloured' students on the RSA for all trauma conditions. Therefore, the null hypothesis cannot be rejected. With regard to the trauma versus no trauma groups, the results indicate that 'African' students who form part of the no trauma group score higher on resilience than those who form part of the trauma group, within the trauma group 'Coloured' students score higher on resilience than 'African' students. In analyses amongst the high and low trauma groups, the results indicate that those who form part of the low trauma group score higher on resilience than those who are among

the high trauma group, 'African' students who form part of the low trauma group score higher on resilience than those who form part of the high trauma group and 'Coloured' students who form part of the low trauma group score higher on resilience than those who form part of the high trauma group.

CHAPTER 8

DISCUSSION

8.1 Introduction

This chapter discusses the results as presented in chapter seven. These results will be discussed in line with the hypotheses of the study presented in chapter six. This is followed by a summary and conclusion as well as a discussion on the limitations of the study and recommendations for future research.

8.2 Descriptive statistics and psychometric properties of the RSA

The Cronbach's alpha indicates that the RSA may be considered as a reliable measure of resilience. The reliability of both the overall scale and the various sub-scales of the RSA as reported by the current study are similar to those obtained in the normative data by Hjemdal et al. (2007). The current study yielded an alpha coefficient of 0.86 for total resilience score. This is slightly lower than that found by Hjemdal et al. (2007) (α =0.88), but still within the acceptable range. The alpha coefficients for the perception of self sub-scale were the same for both studies (α=0.81). The alpha for the planned future (alpha=0.84); social competence (α=0.83); family cohesion (α=0.83); social resources (alpha=0.80) and structured style (α=0.90) were all higher than those obtained by Hjemdal et al. (2007) (α=0.78, 0.75, 0.79, 0.77 and 0.67 respectively).

The RSA sub-scales all correlated very highly with the total resilience score. These correlations were all higher than those reported by Hjemdal et al. (2007) except for the structured style sub-scale (r = 0.349**, p < 0.01) which was lower than the correlation

of 0.41 found by Hjemdal et al. (2007). This indicates that the RSA is reliable in terms of the current study and the South African context.

8.3 Descriptive statistics and psychometric properties of the CECV

The results indicate a mean of 92.66 for the total score obtained on the CECV. The reliability reported by the present study ($r = 0.92$) is higher than that found by Fehon et al. (2001) ($r = 0.85$) indicating acceptable reliability.

8.4 Descriptive statistics and psychometric properties of the HTS

The results yielded from the present study indicate a mean of 54.17 for total score on trauma as measured by the HTS. The present study yielded a reliability coefficient of $r = 0.94$, which is slightly lower than the reliability reported by Mollica et al. (1994) ($r = 0.98$) but still acceptable for the present study.
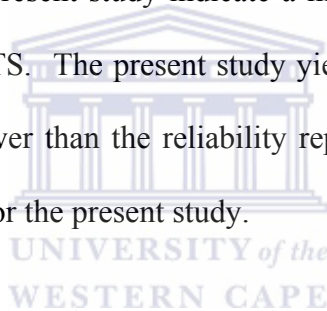
8.5 The relationship between 'race' and community violence exposure

No statistically significant difference was found between 'African' and 'Coloured' students on violence exposure as measured by the CECV (mean difference = .910). This may indicate that 'African' and 'Coloured' students experience similar levels of community violence. The literature supports these findings.

Mkabile (2007) found similar levels of trauma exposure across different 'racial' groups. His sample of 1140 was divided as follows: 29.2% were 'White', 38.3% were 'Coloured', 19.4% were 'African' and 1.9% 'Asian'. He found that 99.2% of adolescents in the sample reported exposure to negative life events, 88.9% were exposed to childhood trauma and 82.7% were exposed to traumatic events. Seedat et al.

(2004) found similar results in their study. They found that 86% (19 of 22) of 'Asians', 75% (166 of 221) of 'Blacks', 85% (371 of 437) of 'Coloureds' and 86% (285 of 333) of 'whites' reported *lifetime* exposure to trauma, suggesting that individuals of different race experience relatively similar levels of violence exposure. However, this similarity across 'racial' groups may be due to the fact that the study investigated *lifetime* trauma exposure and also did not measure the frequency or intensity of trauma of exposure to a particular trauma.

The findings in the current sample may be due to the extremely high rates of trauma exposure in South Africa (Crime Information Analysis Centre – CIAC, 2005). In this way, the exposure to traumatic events would be high amongst all students irrespective of 'race', socio-economic status or culture due to the alarmingly high rates of crime and violence throughout the country. The fact that the current sample consists of a student population should also be considered. In general, those who manage to obtain a tertiary level education are considered to be of middle-income status. This may mean that even though the 'African' students in the present sample report lower socio-economic status than the 'Coloured' participants they may be considered to be more advantaged relative to the low-income 'African' majority. However, this is mere speculation and further research is needed to gain clarity as to why violence exposure is relatively similar across 'racial' groups.

8.6 The relationship between 'race' and trauma

No statistically significant difference was found on the HTS between 'African' and 'Coloured' students (mean difference = 7.145). This may indicate that 'African' and

'Coloured' students experience similar levels of trauma symptoms. This corresponds with the findings reported above (i.e., no difference in violence exposure). These findings are therefore consistent with the literature as evidence suggests that there is a link between violence exposure and trauma symptoms (i.e., higher violence exposure results in a greater number of trauma symptoms and vice versa) (Hamber & Lewis, 1997; Hirschowitz & Orkin, 1997; Stavrou, 1993; 2004; Ward et al., 2001). In this instance, the similar levels of violence exposure are associated with similar levels of trauma symptoms experienced by both 'Coloured' and 'African' students. However, self-report measures are considered to be a less reliable measure of trauma than clinical diagnosis and this may be the reason for the similar levels of trauma symptoms yielded in the study (Ward et al., 2004).
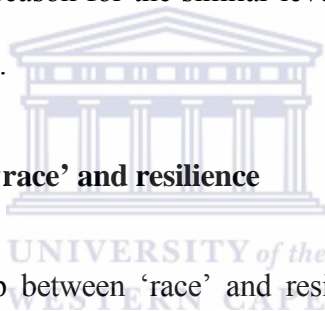
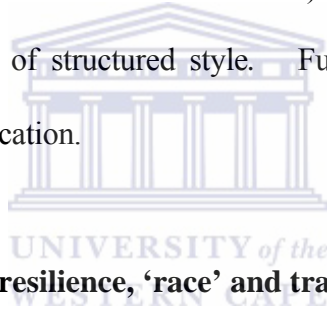**8.7 The relationship between 'race' and resilience**

With regard to the relationship between 'race' and resilience, the results indicate that 'Coloured' students scored significantly higher than 'African' students on overall resilience (mean difference = -6.565; $p < 0.001$), the perception of self sub-scale (mean difference = -.280; $p < 0.01$), the planned future sub-scale (mean difference = -.641; $p < 0.01$), the social competence sub-scale (mean difference = -2.207; $p < 0.01$), family cohesion (mean difference = -.052; $p < 0.05$) and the social resources sub-scale (mean difference = -1.448; $p < 0.001$). This may indicate that 'Coloured' students are more resilient than 'African' students.

These findings differ from what has been reported in the literature. Ahmed et al. (2004) conducted a study on community resilience in three low socio-economic communities in

the Western Cape. They found that the African-language speaking community ('Africans') perceived their neighbourhoods to be more cohesive than those living in Afrikaans-speaking communities ('Coloureds') indicating that the 'African' community was more resilient than the 'Coloured' community. Their study differed from the present study in that they focused on resilience at the community level as opposed to the current study, which focuses on resilience at the individual level. However, Barends (2004) found similar results when focusing on individual resilience amongst students. He found 'African' students to score significantly higher on resilience variables than 'Coloured' and 'Indian' students. The difference in results may be due to the different measuring instruments used. Barends (2004) made use of general measures of resilience rather than a single instrument, which he noted as a limitation to his study as it may have affected the accuracy of his findings on this particular construct. However, the current study makes use of a single instrument to measure resilience which has been noted as being more advantageous in reviewing and comparing results (Friborg, Barlaug, Martinussen, Rosenvinge & Hjemdal, 2005).

The only non-significant result on the RSA was found on the structured style sub-scale (mean difference = -1.938). This result may be due to the low correlation of the structured style sub-scale with overall resilience ($r = .349^{**}$; $p < 0.01$). This may suggest that the structured style sub-scale does not adequately measure what it intends to measure. It should be noted that the cross-cultural validation of the RSA has not been assessed for the South African context and therefore cultural differences between the current and original sample may be the reason for the low correlation found on this specific sub-scale. That is, the items pertaining to the structured style sub-scale may include content that is not of

particular relevance to the culture within the 'African' and/or 'Coloured' group as they both form part of a non-Western culture and differ from the cultural context within which the RSA was validated (Hjemdal et al., 2007). For instance, Mkhize (2004) states that an idea of the self within a traditional Western worldview (defined by internal attributes such as thoughts, emotions and so forth) differs greatly from an understanding of the same concept for those within a non-Western culture (defined in terms of one's relationships with others). It may therefore be speculated that similarly, in the present study, a difference in worldview between 'African' and 'Coloured' students as well as between the South African sample (forming part of a non-Western culture) and those with whom this scale was developed (forming part of a Western culture) may result in a difference in the understanding of the construct of structured style. Further research on cross-cultural validation would assist in clarification.

8.8 The relationship between resilience, 'race' and trauma

As mentioned before, the experience of trauma or adversity alone may not lead to resilience, but is rather dependent upon the interaction between various factors (risk and protective factors). The nature of the trauma experienced (i.e., the intensity and/or frequency of trauma experienced) may also have an impact on the development of resilience (Anderson, 2000 cited in Alvarez-Castillo et al., 2006). Earlier analysis raised hypotheses that trauma influences the relationship between 'race' and resilience. Therefore, the present study sought to further explore the significance of the impact of trauma on this relationship (i.e., the relationship between 'race' and resilience) by

categorising the magnitude of the traumatic symptoms (i.e., the trauma group, the no trauma group, the high trauma group and the low trauma group).

No statistically significant difference was found on resilience scores between the trauma and the no trauma group for the entire sample (mean difference = 9.007). This finding held for the 'Coloured' sample as well (mean difference = 7.889). This is a significant finding as it is contrary to what is indicated in the literature. That is, evidence suggests that less trauma, or in this instance no trauma, would lead to more resilient outcomes and that the presence of trauma would result in less resilient outcomes (Anderson, 2000 cited in Alvarez-Castillo et al., 2006). However, a significant difference was found on the resilience scores between the trauma and the no trauma group in the 'African' group (mean difference = 9.095; $p < 0.05$). This may indicate that resilience is higher among those who do not experience trauma symptoms than those who do within the 'African' sample. This finding corresponds with the literature. Evidence suggests that it may be easier for one to develop resilience in cases where there are fewer threats to hinder one's recovery and more difficult in instances where threats are greater in number and/or severity (Anderson, 2000 cited in Alvarez-Castillo et al., 2006).

In this instance, the absence of trauma symptoms, representing minimal threat to one's ability to recover, may have contributed to the development of resilience. Based on these results it may also be said that the presence of trauma affects the 'African' students' resilience scores but does not affect the resilience scores among the 'Coloured' students. In this way 'race' may be seen as a protective factor as 'Coloured' students may have had to endure less hardship and historical disadvantage at the hand of

Apartheid than 'African' students have, providing them with greater resources to contribute to the development of protective factors which may add to the development of resilience (Eaton, 2002). The results also indicate a statistically significant difference on resilience scores and the trauma groups between 'racial' groups (mean difference = -5.894; $p < 0.01$). This may suggest that amongst those who formed part of the trauma group the scores obtained on resilience by 'Coloured' students were higher than those obtained by 'African' students. This corresponds with findings discussed above where 'Coloured' students were found to score higher on resilience and specific resilience sub-scales than 'African' students. However, this finding did not hold for the no trauma group between 'racial' groups (mean difference = -4.689). These results may be due to the small sample size within the 'African' group ('African' students, N = 33, 'Coloured' students, N = 82)
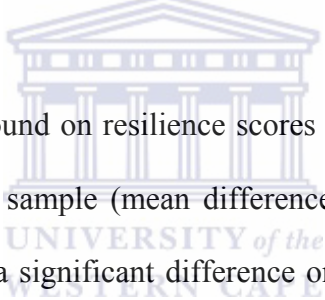
A statistically significant difference was found on resilience and the high and low trauma group for the entire sample (mean difference = 15.343; $p < 0.000$). This may indicate that there is a statistically significant difference between the association between low trauma and higher levels of resilience and high trauma and lower levels of resilience. In other words, low trauma is associated with higher levels of resilience and high trauma is associated with lower levels of resilience where the difference between the two associations is statistically significant. This finding held for both the 'Coloured' group (mean difference = 7.551; $p < 0.05$) and the 'African' group (mean difference = 24.107; $p < 0.000$). This may indicate that lower levels of trauma are associated with higher levels of resilience for the entire sample as well as within both 'racial' groups. This corresponds with findings in other studies. Ward et al. (2007)

found that higher levels of trauma (i.e., victimisation and not witnessing of violence) were most likely to lead to less resilient outcomes (i.e., conduct disorder). In addition, higher levels of resilience or protective factors (i.e., school support and involvement in after-school activities) were associated with more resilient outcomes (i.e., reduction in depressive symptoms and alleviation in anxiety). Leon et al. (2008) found that higher levels of resilience as indicated by protective factors (i.e., club involvement and so forth) were associated with greater changes in trauma symptoms over time among children in a child welfare system. As mentioned above, 'race' may be seen as a protective factor in the risk-resilience relationship but the severity of trauma experienced may modify this relationship. That is, these findings may suggest that an increase in trauma (high trauma group) compromises the function of protective factors ('race') and results in lower resilience scores as the severity of trauma may overpower one's resources and ability to remain well. However, the result of a significant difference did not hold for the low trauma groups (mean difference = 3.449) and the high trauma groups (mean difference = -13.107) between the 'racial' groups. This may be due to a lower variance in the magnitude of trauma in the high and the low trauma groups independently than the variance present when both the high and the low trauma groups are compared with each other. These results may also be due to the small sample size within the 'African' sample in the low trauma group (N = 28) and in the high trauma group for both 'African' (N = 28) and 'Coloured' students (N = 28).

The results discussed above indicate that there are certain consistencies as well as contradictions in the results yielded in the present study. For instance, the results indicate that there is a significant difference on resilience scores between the high and

the low trauma group (mean difference = 15.343; $p < 0.000$). This relationship did not hold for the trauma and the no trauma group comparison (mean difference = 9.007). This finding is significant in that it may indicate that resilience scores change when the magnitude of trauma changes (i.e., high and low trauma groups) rather than being affected merely by the presence or absence of trauma (i.e., trauma and no trauma groups). A similar result was found by Mosavel et al. (2007). They found that the magnitude of risk affected participants' views of the future. That is, the greater the risk the less optimistic participants were about changes in their community and their future, which was a measure of resilience in their study. Future research may therefore need to acknowledge both the presence and magnitude of stressors that constitute adversity.

A significant difference was found on resilience scores between the trauma and the no trauma group in the 'African' sample (mean difference = 9.095; $p < 0.05$), which is consistent with the finding of a significant difference on resilience scores between the high and the low trauma group in the 'African' sample (mean difference = 24.107; $p < 0.000$). However, results were not consistent for the 'Coloured' sample (the trauma and the no trauma group; mean difference = 7.889 and the high and the low trauma group: mean difference = 7.551; $p < 0.05$). This inconsistency may be due 'Coloured' participants reporting high resilience scores in general (as indicated in the significantly higher scores obtained by 'Coloured' students than 'African' students) in spite of violence exposure or trauma symptoms experienced. This may be indicated in the significantly higher resilience scores by 'Coloured' students than 'African' students. However, the reasons for the inconsistency are not exactly known and further research is needed to determine other viable hypotheses to explain this discrepancy. No

significant difference was found on resilience scores in the high trauma groups between 'racial' groups (mean difference = -13.07), which is consistent with the finding of no significant difference on resilience scores in the no trauma groups between 'racial' groups (mean difference = -4.689). However, the finding of a significant difference on resilience scores in the trauma groups between 'racial' groups (mean difference = -5.894; $p < 0.01$) does not correspond with the finding of no significant difference on resilience scores in the low trauma groups between 'racial' groups (mean difference = 3.449). As mentioned before, these results may be due to a lower variance in the magnitude of trauma in the low trauma group than the variance present in the trauma group, which corresponds with the hypothesis that resilience scores change as the magnitude of trauma changes. Therefore, it may be said that the magnitude of trauma amongst those who formed part of the trauma group served as a significant indicator of resilience as opposed to the remaining trauma conditions, where the variance in the magnitude of trauma is not indicated as strongly. Overall, these findings indicate that the relationship between risk and resilience is complex with factors operating and interacting at different levels and further research is needed to provide greater clarity on the more subtle aspects of the complex dynamic between risk and resilience.

8.9 SUMMARY AND CONCLUSION

A major finding in the current study was discovered in the comparison between the trauma and no trauma groups. The results indicate that 'African' students who form part of the no trauma group score higher on resilience than those who form part of the trauma group and within the trauma group 'Coloured' students score higher on resilience than 'African' students. In analyses amongst the high and the low trauma

groups, the results indicate that those who form part of the low trauma group score higher on resilience than those who are among the high trauma group; 'African' students who form part of the low trauma group score higher on resilience than those who form part of the high trauma group; and 'Coloured' students who form part of the low trauma group score higher on resilience than those who form part of the high trauma group. These findings suggest that resilience scores are affected when the magnitude of trauma changes (i.e., high and low trauma groups) as opposed to being affected by the mere presence or absence of trauma.

It was also found that 'Coloured' students report similar levels of violence exposure and trauma symptoms as 'African' students do. The literature supports these findings. 'Coloured' students report higher levels of overall resilience and resilience sub-scales (except the structured style sub-scale) than 'African' students as measured on the RSA. Therefore, it may be said that 'Coloured' students are more resilient than 'African' students. These results also indicate that 'race' may be seen as a protective factor (where 'Coloured' students may have experienced less hardship than 'African' students due to past Apartheid laws) but suggest that protective factors ('race') become less effective as trauma increases (high trauma group) as they are associated with lower scores on resilience. However, these findings differ from those reported in previous studies. Overall, these findings underscore the complex relationship between risk and resilience and further research is needed to gain greater clarity of this relationship.

8.10 LIMITATIONS OF THE STUDY

The Resilience Scale for Adults (RSA) was developed in Norway and has been used in various international studies but its use in South Africa has been limited. The suitability of such a measure for use in the South African context may therefore be questionable.

The generalisability of the present study could be questioned in that this is a convenience rather than a representative, random sample. The sample was predominantly female (67.9%), between the ages of 16 and 20 (71.1%), English speaking (46.2%), 'Coloured' (64.3%) living in historically 'Coloured' areas (39.0%), with a combined household income of more than R10 000 (26.5%). In addition, the study focused on only 'African' and 'Coloured' students and did not include 'Indian' or 'White' students. For these reasons, any claims made in this study are limited to the groups specified.

The cell sizes for some of the analyses were small. While the Mann-Whitney was used in the instance where cell sizes were less than 50, the small cell size and the uneven numbers in the cells may have influenced the results. Further research with larger samples are required in order to determine whether the associations found in the present study hold.

One other limitation to the current study is that no causal relationship can be made between the variables (resilience, 'race' and trauma). The study does not permit specification of the direction of any association between variables. Therefore, results may suggest that an association exists between variables but confounding variables may also account for this association.

8.11 RECOMMENDATIONS FOR FUTURE RESEARCH

In light of the results obtained and the various shortcomings of the study, the following recommendations are made:

Future research could further explore the relationship between resilience, 'race' and trauma as few studies have considered these three factors together. A wider range of demographic variables may also be explored: socio-economic status, area of residence, and so forth, may be relevant factors with regard to resilience and future studies could therefore conduct research with groups varying in demographics and compare results within and between groups.

Similar studies could be conducted in other universities in South Africa and may be compared with those yielded in the current study. It is recommended that future research include a larger sample size to avoid a possible negative impact on certain statistical analyses and possibly present as limitations to the study.

Combining quantitative and qualitative research methods may yield interesting results and possibly discover causal relationships between the relevant variables. With regards to the psychometric properties of the RSA, the current study has yielded alpha coefficients which indicate that the RSA is a reliable measure of resilience. The RSA is therefore recommended as a reliable instrument for use in future studies. However, the current study is but among the first to utilise this specific scale and it is recommended that future research continue to examine the reliability of such a scale for use in the South African context.

REFERENCES

Ahmed, R., Seedat, M., van Niekerk, A., & Bulbulia, S. (2004). Discerning community resilience in disadvantaged communities in the context of violence and injury prevention. *South African Journal of Psychology, 34,* 386-408.

Aisenberg, E. (2001). The effects of exposure to community violence upon Latina mothers and preschool children. *Hispanic Journal of Behavioural Sciences, 23, 378-398.*

Akgun, S. (2004). The effects of situation and learned resourcefulness on coping responses. *Social Behaviour and Personality, 32,* 441-448.

Akgun, S., & Ciarrochi, J. (2003). Learned resourcefulness moderates the relationship between academic stress and academic performance. *Educational Psychology, 23,* 288-294.

Alexander, P. M. (2004). Diversity at a dual-medium university: factors affecting first-year students' attitudes. *South African Journal of Higher Education, 18,* 202-220.

Alvarez-Castillo, F., Okuonzi, S., Lomorro, O., Atuyambe, L., & Silva, K. T. (2006). Why some survive: coping, resilience and social capital in armed conflict. *African Safety Promotion: A Journal of Injury and Violence Prevention, 4,* 78-87.

American Psychiatric Association (2000). *Diagnostic and Statistical Manual of Mental Disorders* (4th ed-Text Revision). Washington DC: American Psychiatric Association.

Antonovsky, A. (1979). Health, stress and coping. San Francisco: Jossey-Bass.

Antonovsky, A. (1987). *Unraveling the mystery of health: How people manage stress and stay well*. San Francisco: Jossey-Bass.

Antonovsky, H., & Sagy, S. (2001). The development of sense of coherence and its impact on responses to stress situations. *The Journal of Social Psychology, 126,* 213-225.

Armsworth, M. W., & Holaday, M. (1993). The effects of psychological trauma on children and adolescents. *Journal of Counseling & Development, 72,* 49-56.

Azar, M. (1999). In the name of Algeria: Frantz Fanon and the Algerian revolution. In A.C. Alessandrini (Ed.). *Frantz Fanon: Critical Perspectives.* London: Routledge.

Banks, J. K., & Gannon, L. R. (1988). The influence of hardiness on the relationship between stressors and psychosomatic symptomatology. *American Journal of Community Psychology, 16,* 25-37.

Barbarin, A. O., Richter, L., de Wet, T. (2001). Exposure to violence, coping resources, and psychological adjustment of South African children. *American Journal of Orthopsychiatry*, *71*, 16-25.

Barends, M. S. (2004). *Overcoming adversity: an investigation of the role of resilience constructs in the relationship between socio-economic and demographic factors and academic coping*. Bellville: University of the Western Cape.

Barker, F. (1999). *The South African Labour Market: Critical Issues for Renaissance 3rd ed.* Pretoria: J. L. van Schaik Publishers.

Ben-Sira, Z. (1985). Potency: a stress buffering link in the coping-stress-disease relationship. *Social Science and Medicine*, *21*, 397-406.

Ben-Zur, H., Duvdevany, I., & Lury, L. (2005). Associations of social support and hardiness with mental health among mothers of adult children with intellectual disability. *Journal of Intellectual Disability, 49,* 54-62.

Bergeman, C. S., Bisconti, T. L., Ong, A. D., & Wallace, K. A. (2006). Psychological resilience, positive emotions, and successful adaptation to stress in later life. *Journal of Personality and Social Psychology, 91,* 730-749.
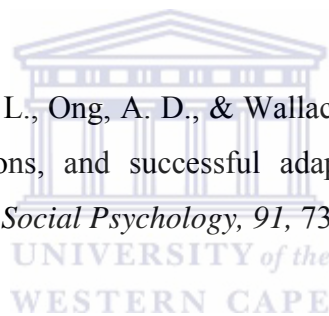
Black, M. M., & Krishnakumar, A. (1998). Children in low-income, urban settings: interventions to promote mental health and well-being. *American Psychologist, 53,* 635-646.

Botha, H. L., Brand, H. J., Cilliers, C. D., Davidow, A., & Smith, D. (2005). Student counselling and development services in higher education institutions in South Africa. *South African Journal of Higher Education, 73,* 73-88.

Brooks, R. B. (1994). Fostering resilience and hope. *American Journal of Orthopsychiatry, 64,* 545-598.

97

Bulhan, H. A. (1985). *Frantz Fanon and the Psychology of Oppression.* New York: Plenum Press.

Burns, R. B. (1988). Developmental tasks in adolescence. *South African Journal of Education, 8,* 33-35.

Capella, E. & Weinstein, R. S. (2001). Turning around reading achievement: predictors of high school students' academic resilience. *Journal of Educational Psychology, 93,* 758-771.

Carlson, E., Egeland, B. & Sroufe, L. A. (1993). Resilience as process. *Development and Psychopathology, 5,* 517-528.
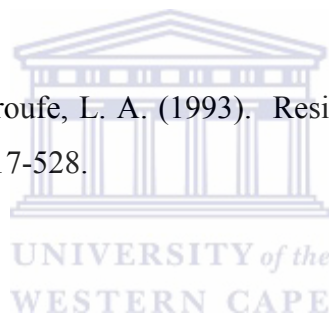
Carrim, N. (2000). Critical anti-racism and problems in self-articulated forms of identities. *Race, Ethnicity and Education, 3,* 26-44.

Chmielewski, P. M., Fernandas, L. O. L., Yee, C. M., & Miller, G. A. (1995). Ethnicity and gender in scales of psychosis proneness and mood disorders. *Journal of Abnormal Psychology, 104,* 464-470.

Clauss-Ehlers, C.C.C. (2003). Promoting ecological health and resilience for minority youth: enhancing health care access through the school health centre. *Psychology in the Schools, 40,* 265-278.

Clauss-Ehlers, C.C.C., & Levi, L. L. (2002). Violence and community, terms in comflict: an ecological approach to resilience. *Journal of Social Distress and the Homeless, 11,* 265-278.

Condly, S. J. (2006). Resilience in children: a review of literature with implications for education. *Urban Education, 41,* 211-236.

Constantine, M. G. (2006). Racism in mental health and education settings: a brief overview. In M. G. Constantine & D. W. Sue (Eds.). *Addressing Racism: Facilitating Cultural Competence in Mental Health and Educational Settings* (pp. 3-13). New Jersey: John Wiley & Sons, Inc.

Crime Information Analysis Centre (CIAC) (2005). Crime in the RSA for April to March 2001/2002 to 2004/2005. [Online]. Available at http://www.saps.gov.za/statistics/reports/crimestats/2005/_pdf/stations/western_cape/provincial_total.pdf

Davids, C. I. (2002). *Race and space at the University of the Western Cape as experienced by third year psychology students.* Bellville: University of the Western Cape.

De Jong, T. (2000). The role of the school psychologist in developing a health-promoting school: some lessons from the South African context. *School Psychology International, 21*, 339-357.

De la Rey, C. (2001). Racism and the history of university education in South Africa. In N. Duncan, A. van Niekerk, C. de la Rey & M. Seedat (Eds.). *Race, Racism, Knowledge Production and Psychology in South Africa.* New York: Nova Science Publishers, Inc.

De Vetta, H. M. (1987). Differences in performance of black and white students on the Brown-Holtzman survey of study habits and attitudes (SSHA). *South African Journal of Education, 7,* 145-149.

Diraz, T., Ortlepp, K., & Greyling, M. (2003). The relationship between inter-role conflict, life satisfaction and sense of coherence in a sample of working mothers. *South African Journal of Psychology, 33,* 191-194.

Dixon, W. A., Heppner, P. P, & Anderson, W. P. (1991). Problem-solving appraisal, stress, hopelessness, and suicide ideation in a college population. *Journal of Counseling Psychology, 38,* 51-56.

Dolby, N. (2002). Making white: constructing race in a South African high school. *Curriculum Inquiry, 32,* 7-25.

Dyer, J. G., & McGuiness, T. M. (1996). Resilience: analysis of the concept. *Archives of Psychiatric Nursing, 5,* 276-282.

Eaton, L. (2002). South African national identity: a research agenda for social psychologists. *South African Journal of Psychology, 32,* 45-53.

Edwards, D., & Besseling, E. (2001). The relationship between depression, anxiety, sense of coherence, social support and religion. *South African Journal of Psychology, 31,* 62-72.

Egeland, B., Carlson, E., & Sroufe, L. A. (1993). Resilience as process. *Development and Psychopathology, 4,* 517-528.

Egolf, B., Herrenkohl, E.C., & Herrenkohl, R. C. (1994). Resilient early school-age children from maltreating homes: outcomes in late adolescence. *American Journal of Orthopsychiatry, 64,* 301-309.

Eriksson, M. & Lindström, B. (1993). Validity of Antonovsky's sense of coherence scale: a systematic review. *Social Science and Medicine, 36,* 725-733.

Fanon, F. (1967). *Black skin, White masks.* New York: Grove Press, Inc.

Fehon, D. C., Grilo, C. M., & Lipschitz, D. S. (2001). Correlates of community violence exposure in hospitalized adolescents. *Comprehensive Psychiatry, 42,* 283-290.

Feinhauer, L., Hilton, H. G., & Callahan, E. D. (2003). Hardiness as a moderator of shame associated with childhood sexual abuse. *The American Journal of Family Therapy, 31,* 65-78.

Finn, J. D., & Rock, D. A. (1997). Academic success among students at risk for school failure. *Journal of Applied Psychology, 82,* 221-234.

Florence, M. A. (1998). *Occupation-related stress, burnout and depression in the teaching profession: coping and social support.* Bellville: University of the Western Cape.

Folkman, S., & Lazarus, R. S. (1988). The relationship between coping and emotion: implications for theory and research. *Social Science and Medicine, 26,* 309-317.

Forehand, R., McVicar, D., & Neighbors, B. (1993). Resilient adolescents and interparental conflict. *American Journal of Orthopsychiatry, 63,* 462-471
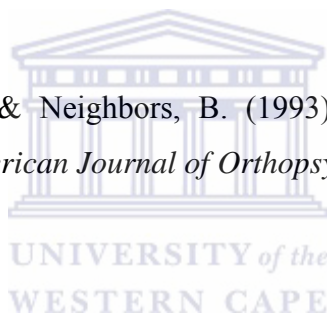
Foy, D. W., & Goguen, C. A. (1998). Community violence-related PTSD in children and adolescents. *PTSD Research Quarterly, 9,* 1-6.

Frederick, B. L., & Tugade, M. M. (2004). Resilient individuals use positive emotions to bounce back from negative emotional experiences. *Journal of Personality and Social Psychology, 86,* 320-333.

Friborg, O., Barlaug, D., Martinussen, M., Rosenvinge, J. H., & Hjemdal., O. (2005). Resilience in relation to personality and intelligence. *International Journal of Methods in Psychiatric Research, 14,* 29-42.

Friborg, O., Hjemdal, O., Rosenvinge, J. H., Martinussen, M., Aslaksen, P. M., & Flaten, A. (2006). Resilience as a moderator of pain. *Journal of Psychosomatic Research, 61,* 213-219.

Garmezy, N. (1991). Resiliency and vulnerability to adverse developmental outcomes associated with poverty. *American Behavioral Scientist, 34,* 416-430.

Gendzier, I. I. (1973). *Frantz Fanon: A Critical Study.* London: Wilhood House Ltd.

Gold, P. B., Engdahl, B. E., Eberly, R. E., Blake, R. J., Page, W. F., & Frueh, B. C. (2000). Trauma exposure, resilience, social support, and PTSD construct validity among former prisoners of war. *Social Psychiatry, 35,* 36-42.

Grant, K. E., Katz, B. N., Thomas, K. J., O'Koon, J. H., Meza, C. M., DiPasquale, A., Rodriguez, V. O., & Bergen, C. (2004). Psychological symptoms affecting low-income urban youth. *Journal of Adolescent Research, 19,* 613-634.

Green, L. & Engelbrecht, P. (Eds.) (2001). *Promoting learner development: preventing and working with barriers to learning.* Pretoria: Van Schaik.

Guterman, N. B., & Cameron, M. (1997). Assessing the impact of community violence on children and youths. *Social Work, 45,* 495-505.

Gutierrez, L. M. (1990). Working with women of colour: an empowerment perspective. *National Association of Social Workers,* 149-153.

Hamber, B. & Lewis, S. (1997). *An overview of the consequences of violence and trauma in South Africa.* Research paper written for the Centre for the study of Violence and Reconciliation, August, 1997.

Hasan, N. & Power, T. G. (2004). Children's appraisal of major life events. *American Journal of Orthopsychiatry, 74,* 26-32

Hemenover, S. H. (2003). The good, the bad, and the healthy: impacts of emotional disclosure of trauma on resilient self-concept and psychological distress. *Personality and Social Psychology Bulletin, 29,* 1236-1244.

Herman, J. (1997). *Trauma and Recovery: The aftermath of violence from domestic abuse to political terror.* New York: Basic Books Pub.
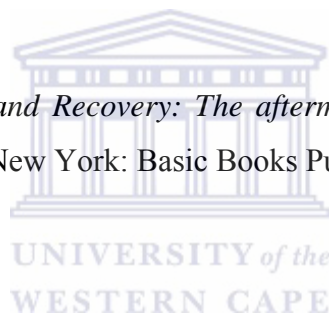
Hirschowitz, R., & Orkin, M. (1997). Trauma and mental health in South Africa. *Social Indicators Research, 41,* 169-182.

Hjemdal, O. (2007). Measuring protective factors: the development of two resilience scales in Norway. *Child and Adolescent Psychiatric Clinics of North America, 16,* 303-321.

Hjemdal, O., Friborg, O., Stiles, T. C., Rosenvinge, J. H., & Martinussen, M. (2006). Resilience predicting psychiatric symptoms: a prospective study of protective factors and their role in adjustment to stressful life events. *Clinical Psychology and Psychotherapy, 13,* 194-201.

Jones, J. M., (2007). Exposure to chronic violence: resilience in African American children. *Journal of Black Psychology, 33,* 125-149.

Julius, M. N. (1999). *The influence of gender and fortitude on the types of problems that students present with at the institute for counselling at the University of the Western Cape.* Bellville: University of the Western Cape.

Kaplan, H. B. (1999). Toward an understanding of resilience: a critical review of definitions and models. In Glantz & Johnson (Ed.), *Resilience and Development: Positive Life Adaptations* (pp. 17-77). New York: Kluwer Academic/Plenum Publishers.

Kennett, D. J., & Keefer, K. (2006). Impact of learned resourcefulness and theories of intelligence on academic achievement of university students: an integrated approach. *Educational Psychology, 26,* 441-457.

Kobassa, S. C. (1979). Stressful life events, personality and health: an inquiry into hardiness. *Journal of Personality and Social Psychology*, *37*, 1-11.

Kopel, H., & Friedman, M. (1997). Posttraumatic symptoms in South African police exposed to violence. *Journal of Traumatic Stress, 10,* 307-317.

Kuther, T. L. (1999). A developmental-contextual perspective on youth covictimization by community violence. *Adolescence, 34,* 699-715.

Kuther, T. L., & Fisher, C. B. (1998). Victimization by community violence in young adolescents from a suburban city. *Journal of Early Adolescence, 18,* 53-76.

Lake, R. P. (2003). *Recovery from Childhood Abuse: A Cultural Context.* Saskatoon: University of Saskatchewan.

Leatt, A. (2006). Income poverty in South Africa. In Monson J, Hall K, Smith C & Shung-King M (eds), *South African Child Gauge.* Children's Institute: University of Cape Town. Retrieved January 23, 2008, from http://www.ci.org.za/depts/ci/pubs/pdf/general/gauge2006/gauge2006 incomepoverty.pdf

Le Grange, L. (2002). Challenges for higher education transformation in South Africa: integrating the local and the global. *South African Journal of Higher Education, 16,* 67-73.

Leon, S. C., Ragsdale, B., Miller, S. A., & Spacarelli. S. (2008). Trauma resilience among youth in substitute care demonstrating sexual behavior problems. *Child Abuse & Neglect, 32,* 67-81.

Levert, T., Lucas, M., & Ortlepp, K. (2000). Burnout in psychiatric nurses: contributions of the work environment and a sense of coherence. *South African Journal of Psychology, 30,* 36-44.

Lightsey, O. R. (1996). What leads to wellness? The role of psychological resources in well-being. *The Counselling Psychologist, 24,* 589-735.

Lockhat, R., & Van Niekerk, A. (2000). South African children: A history of adversity, violence and trauma. *Ethnicity and Health, 5,* 291-302.

Lopez, F. G., Campell, V. L., & Watkins, C. E. (1988). Family structure, psychological separation, and college adjustment: a canonical analysis and cross-validation. *Journal of Counselling Psychology, 35,* 402-409.

Luthar, S. S. & Zigler, E. (1991). Vulnerability and competence: a review of research on resilience in childhood. *American Journal of Orthopsychiatry, 61,* 6-22.

Malefo, V. (2000). Psycho-social predictors and academic performance among African women students at a predominantly white university in South Africa. *South African Journal of Psychology, 30,* 40-45.

Mankayi, D. T. (1996). *An investigation into the relationship between satisfaction with life and sense of coherence amongst the unemployed.* Bellville: University of the Western Cape.

Mathis, M. & Lecci, L. (1999). Hardiness and college adjustment: identifying students in need of services. *Journal of College Student Development, 40,* 305-309.

Mazza, J. J., & Reynolds, W. M. (1999). Exposure to violence in inner city adolescents: relationships of suicidal ideation, depression and PTSD symptomatology. *Journal of Abnormal Child Psychology, 27,* 203-214.

Mkabile, S. (2007). *A comparison of psychiatric outcomes in South African adolescents exposed to single and multiple traumatic stressors.* Unpublished manuscript.

Mkhize, N. (2004). Psychology: an African perspective. In D. Hook (Ed.), *Critical Psychology* (pp. 24-52). Lansdowne: UCT Press.

`Moleli, M. F. (2005). *Protective factors that could foster resilience in first year students.* University of the Western Cape: Bellville.
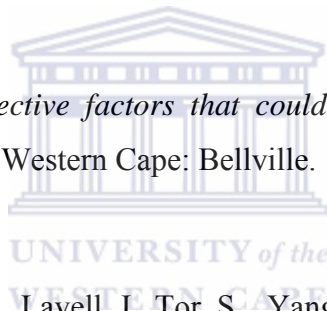
Mollica, R. F., Caspi-Yavin, Y., Lavell, J., Tor, S. , Yang, T., Pham, T., Ryan, A., & de Marneffe, D. (1994). *The Harvard Trauma Questionaire (HTQ): manual for use with Cambodian, Lao, and Vietnamese versions.* Cambridge, MA: Harvard program in refugee trauma, Harvard School of Public Health

Mosavel, M., Simon, C., Ahmed, R., & Van Stade, D. (2007). *Envisioning the future in low income contexts; implications for community resilience.* Unpublished manuscript.

Muyeed, A. Z., O'Donnell, D. A., & Schwab-Stone, M. E. (2002). Multidimensional resilience in urban children exposed to community violence. *Child Development, 73,* 1265-1282.

Nie, N.H., Hull, C.H., Jenkins, J.G., & Steinbrenner, K. (1975). *Statistical Package for the Social Sciences.* New York: McGraw-Hill.

O'Connor, C., & Fernandez, S. D. (2006). Race, class and disproportionality: reevaluating the relationship between poverty and special education placement. *Educational Researcher, 35,* 6-11.

Olivier, J. (1991). *The South African Police: Managers of conflict or party to the conflict.* Research paper written for the Centre of Conflict Analysis at the Human Sciences Research Council, March, 1991.

Ortlepp, K., & Friedman, M. (2001). The relationship between sense of coherence indicators of secondary traumatic stress in non-professional trauma counsellors. *South African Journal of Psychology, 31,* 38-42.

Peres, J. F. P., Moreira-Almeida, A., Nasello, A. G., & Koenig, H. G., (2007). Spirituality and resilience in trauma victims. *Journal of Religion and Health, 46,* 343-350.

Pretorius, T. B. (1998). *Fortitude as stress resistance: development and validation of the Fortitude Questionnaire (FORQ).* Bellville: University of the Western Cape.

Pretorius, T. B. & Diedericks, M. (1994). Problem-solving appraisal, social support and stress-depression relationship. *South African Journal of Psychology, 24,* 86-90.

Pretorius-Heuchert, J. W., & Ahmed, R. (2001). Community psychology: past, present and future. In Seedat, M., Duncan, N. & Lazarus, S. *Community Psychology: Theory, Method and Practice* (pp. 17-35). Cape Town: Oxford University Press.

Priester, M. J., & Clum, G. A. (1993). Perceived problem-solving ability as a predictor of depression, hopelessness, and suicide ideation in a college population. *Journal of Counseling Psychology, 40,* 79-85.

Punamäki, R., Qouta, S., & El-Sarraj, E. (2001). Resiliency factors predicting psychological adjustment after political violence among Palestinian children. *International Journal of Behavioral Development, 25,* 256–267.

Rak, C. F. & Patterson, L. E. (1996). Promoting resilience in at risk children. *Journal of Counselling and Development, 74,* 368-373.

Reynolds, A. J. (1998). Resilience among black urban youth: prevalence, intervention effects, and mechanisms of influence. *American Journal of Orthopschiatry, 68,* 84-100.

Richters, J. E. (1990). Screening Survey of Exposure to Community Violence, Self-Report Version. Rockville, MD: NIMH

Rosenbaum, M. & Jaffe, Y. (1983). Learned helplessness: the role of individual differences in learned resourcefulness. *The British Journal of Social Psychology, 22,* 215-25.

Rutter, M. (1987). Psychosocial resilence and protective mechanisms. *American Journal of Orthopsychiatry*, *57*, 316-331.

Saleeby, D. (1996). The strengths perspective in social work practise: extensions and cautions. *Social Work*, *41*, 296-305.

Schoon, I., Parsons, S., & Sacker, A. (2004). Socioeconomic adversity, educational resilience, and subsequent levels of adult adaptation. *Journal of Adolescent Research, 19,* 383-404.

Seedat, S., Nyamai, C., Njenga, F., Vthilingum, B., & Stein, D. J. (2004). Trauma exposure and post-traumatic stress symptoms in urban African schools: survey in Cape Town and Nairobi. *British Journal of Psychiatry*, *18 4*, 16 9-17 5.
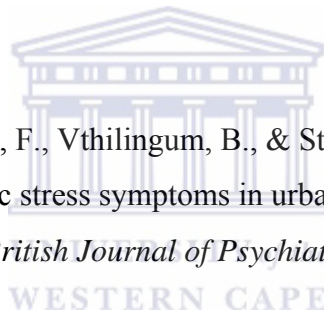
Serap, A. (2004). Effects of situation and learned resourcefulness on coping resources. *Social Behaviour and Personality: an International Journal*, *32*, 441-448.

Sigmund, J. A. (2003). Spirituality and trauma: the role of clergy in the treatment of posttraumatic stress disorder. *Journal of Religion and Health*, *42*, 222-228

Sonn, C. C. & Fisher, A. T. (1998). Sense of community: community resilient responses to oppression and change. *Journal of Community Psychology, 26,* 457-472.

Stavrou, V. (1993). Psychological effects of criminal and political violence on children. *The Child Care Worker, 11,* 3-9.

Steyn, A. G. W. (1999). The elimination of inequalities in the provision of school education in South Africa. *South African Journal of Psychology, 19*, 67-73.

Steyn, J. C. (2000). Quality education and equality in education: a dilemma for democratic South Africa. *South African Journal of Education, 20*, 47-50.

Stinson, D. W. (2006). African American male adolescents schooling (and mathematics): deficiency, rejection, and achievement. *Review of Educational Research, 76,* 477-506.

Strümpfer, D. J. W. (1995). The origins of health and strength: from 'salutogensis' to 'fortigenesis'. *South African Journal of Psychology*, *25*, 81-89.

Strümpfer, D. J. W. (2001). Psychometric properties of an instrument to measure resilience in adults. *South African Journal of Psychology*, *31*, 36-44.

Strümpfer, D. J. W., & Mlonzi, E. N. (2001). Antonovsky's sense of coherence scale and job attitudes: three studies. *South African Journal of Psychology*, *31,* 30-38.

Swart, L., Seedat, M., Stevens, G., & Ricardo, I. (2002). Violence in adolescents' romantic relationships: findings from a survey amongst school-going youth in a South African community. *Journal of Adolescence, 25,* 385-395.

Utsey, S. O., Bolden, M. A., Lanier, Y., & Williams III, O. (2007). Examining the role of culture-specific coping as a predictor of resilient outcomes in African Americans from high-risk urban communities. *Journal of Black Psychology, 33,* 75-93.

Van der Westhiuzen, P. C., Legotlo, M. W., Mosoge, M. J., Nieuwoudt, H. D., Sebego, M. G. & Steyn, H. J. (2002). Perceptions of stakeholders on causes of poor performance in Grade 12 in a province in South Africa. *South African Journal of Psychology, 22,* 113-118.
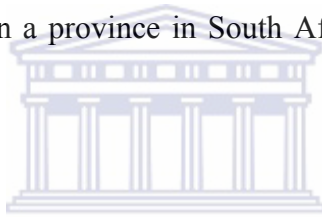
Waller, M. A. (2001). Resilience in ecosystemic context: evolution of the concept. *American Journal of Orthopsychiatry, 71,* 290-297.

Wan, T. T. H. (1982). Major life changes and gerontological health. In *Stressful Life Events, Social-Support Networks, and Gerontological Health* (pp. 1-11). Toronto: Lexington Books.

Ward, C. L., Flisher, A. J., Zissis, C., Muller, M., & Lombard, C. J. (2001). Exposure to violence and its relationship to psychopathology in adolescents. *Injury Prevention: Journal of the International Society for Child and Adolescent Injury Prevention, 7,* 297-301.

Ward, C. L., Flisher, A. J., Zissis, C., Muller, M., & Lombard, C. J. (2004). Measuring adolescents' exposure to violence and related PTSD symptoms: Reliability of an adaptation of the Harvard Trauma Questionnaire. *Journal of Child and Adolescent Mental Health, 16,* 31-37.

Ward, C. L., Martin, E., Theron, C., & Distiller, G. B. (2007). Factors affecting resilience in children exposed to violence. *South African Journal of Psychology, 37,* 165-187.

Windle, M. (1990). A longitudinal study of antisocial behaviours in early adolescence as predictors of late adolescent substance use: gender and ethnic group differences. *Journal of Abnormal Psychology, 99,* 86-91.

Woolfe, R. (1992). Coping with stress. In T. Hobbs Ed., *Experiential Training: Practical Guidelines*. London: Tavistock/Routledge

Young, I. M. (1990). *Justice and the Politics of Difference.* Princeton, New Jersey: Princeton University Press.

Zauszniewski, J. A. (1995). Learned resourcefulness: a conceptual analysis*. Issues in Mental Health Nursing. 16,* 13-3.

RESEARCH QUESTIONNAIRE

LETTER OF CONSENT

Dear student

I, Rashid Ahmed, a staff member from the University of the Western Cape, am conducting a collaborative research project on resiliency with a Norwegian colleague. We aim to compare the experiences of South African students with students from Norway in terms of exposure to distressing life experiences and people's response to them.

The items within these questionnaires assess your personal exposure to life events and your responses to them. There are no right or wrong answers as they relate to your personal experiences. Should any emotional distress arise from completing the questionnaire, psychological counselling can be obtained from the Institute of Counselling, University of the Western Cape at 959-2299.

All information provided in these questionnaires will remain confidential. You are also urged to answer as truthfully and accurately as possible. For us to obtain valid and reliable data, it would be extremely helpful if all questionnaires are timeously completed. In addition to this, please be informed that you have the right to withdraw at any stage of the research process as well as access any information regarding the research process and the results obtained.

I fully understand the research aims, my rights and my role as participant in the study, as well as the issues related to confidentiality, as explained by the researcher and as outlined above.

_____ 　　　　　　　　　_____

   Student's signature　　　　　　　　　　　　　　**Date**

I thank you for your cooperation and wish to wish you all the best for your studies. You are welcome to contact me for any queries as the address given below.

Contact Details:　　**Rashid Ahmed, University of the Western Cape, Department of Psychology, Room 2.301, Tel: 959-2824/959-2283/2453, E-mail: rasahmed@uwc.ac.za**