PROTECTIVE FACTORS THAT COULD FOSTER RESILIENCE IN FIRST YEAR STUDENTS

'MALEHLOHONOLO FLORENCE 'MOLELI

A mini-thesis submitted in partial fulfilment of the requirements for the Magister Educationis Degree in the Faculty of Education, University of the Western Cape

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November 2005

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KEY WORDS:

Protective factors

Extrinsic factors

Intrinsic factors

Resilience

Adaptability

Challenging circumstances

Stress resistance

Social support

Resource utilization

Academic achievement

ABSTRACT

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Magister Educationis mini-thesis, Faculty of Education, University of the Western Cape

Large numbers of students tend to experience failure and dropout in their first year at university. Universities can and should assist first year students to succeed. The fundamental aim of this research is to explore protective factors that could foster resilience amongst first year students. It is hoped that resilience research can give young adults the skills and support to survive academic challenges with the help of the university. This study undertook to determine resilience traits that could contribute to academic success. Students who enrolled at University of the Western Cape for the first time during the year 2003 participated in this study. The successful and unsuccessful 2003 first year class provided the research with information about the factors that contribute towards support and building inner strength. A quantitative survey method was used to gather and interpret the data for this research. Data was collected from students via questionnaires. Data was analyzed using SPSS and Microsoft Excel. The results revealed that (a) there were no significant signs of difference between successful and unsuccessful students regarding overall university support (b) students were not receiving adequate support from the university as compared to other external environments (c) the university has to place more effort into improving meaningful participation and high expectations for students (d) students scored high percentages on internal assets despite low external assets percentages. The results therefore provide information on areas that can be further developed in order to enhance protective factors for all students, and thereby increase resilience and subsequent success.

'Malehlohonolo Florence 'Moleli   November 2005

DECLARATION

I declare that *PROTECTIVE FACTORS THAT COULD FOSTER RESILIENCE IN FIRST YEAR STUDENTS* is my work, that it has not been submitted for any degree or examination in any other university, and that all the sources I have used or quoted have been indicated and acknowledged by complete references.

'Malehlohonolo F. 'Moleli   November 2005

Signed:…………………….

DEDICATION

I dedicate this piece of work to my late maternal grandmother (Nkhono 'Matlelaka E. Mokoma) who assisted me with the original thoughts and her belief in my ability to succeed. She would say *"Mosali a sohletse mokhathala oso fihle"* (A woman must work hard towards her goals in advance). She did not only nurture the fortitude in me to complete my studies but who also for me she epitomizes it. She encouraged me not to blame the workload because I will be a quitter by doing so. I will always cherish your inspiration and motivation.

I as well would like to dedicate my work to Lesotho youth who are preparing for entry into tertiary education. They should be optimistic, resilient, thrive, cope and flourish despite challenges. Finally, I would like to devote my work to National Teacher Training College for giving me the basis for career enhancement and a range of future career choices. I urge the college to provide every youth that falls into their hands with even better opportunity.

ACKNOWLEDGEMENTS

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CHAPTER ONE

1.1 INTRODUCTION

In most developing countries, education is considered to be one of the most important development indicators. Almost every citizen has an interest in accessing education. It is the dream of every developing country, community, parents and students to have good academic attainment to adequately equip the individual to meet the challenges of the modern global world.

Universities are committed to fostering a global perspective (Smuts, 1992) amongst their students and staff. Nonetheless, most universities have experienced student dropout and failure. Several factors like poverty, low parental education, chronic illness, mentally ill parents, war, and death of a loved one, violence, socio-economic problems, and divorce can be cited as reasons for these problems, which appear to slow down intellectual growth amongst young adults. It is important that universities take these factors into account and assist students to be resilient to the risk of failure at higher education level.
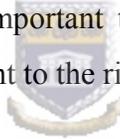
1.2 BACKGROUND OF THE STUDY

The modern world requires people who can multi-task. People and society are under heavy pressure to cope effectively, adapt and forge ahead (Smuts, 1992). That is, the world requires people who have intellectual spirit of the times that intertwine reductionism and favours multivariate, multidimensional conceptualizations of behaviour (Liddle, 1994) therefore, acquisition of knowledge and coping skills is very important. As part of a global community, university students ought to show competence in coping with contemporary challenges and new global demands. In order for them to cope with these demands, they should among other things, prove themselves by performing well at university and by achieving a global perspective.

This study is based on research conducted amongst first year students at the University of the Western Cape (UWC). Many students at UWC take a long time to complete their studies. Some students may have had an inadequate foundation from their primary and

high school education. When such students get admitted to the university, some of them drop out and others fail. Other students have a tendency to change faculties repeatedly. These problems are an indication of the students' lack of competence in dealing with the challenges that they face in the university environment, and the need for them to adopt the requisite coping skills.

To devise a solution to this problem, the university should cultivate resilience among students. A close consideration of the definition of resilience provides an understanding of what kind of protective factors could be suitable for university students. Protective factors that provide a supportive and encouraging environment for students need to be identified and explained in a way that nurtures resilience amongst first year students. Resilient students are thought to be high academic achievers, capable of facing any type of challenge. They do not perceive threats as insurmountable; instead they view themselves as survivors. This thesis explores protective factors that could foster resilience in first year students. As a final point, an action plan for both the university and students is included. The university can succeed in building resilient students, only if students also help themselves in the face of adversity.

UWC experiences a low throughput rate amongst first year students (the students who enrol for the first time at the university as undergraduates). The university is looking forward to increasing the throughput rate, and to get first year students to use resources on campus. In addition, the university wants to provide "a nurturing space for its staff and students to grow in hope and to create and share knowledge to inform agency" (O'Connell, 2001:15). It is with this perspective that this research is vital. This research was commissioned by the Vice–Rector for Student Development in order for her office to understand the factors that contribute to success and to develop programmes that enhance success. Furthermore, my area of study is inclusive education and support services, which focuses on overcoming barriers to learning and development.

The aim of this research is therefore to recognise areas that need to be adjusted, and to restructure support systems for first year students. It is imperative for first year students to be conscious about challenging circumstances, which is a situation whereby

individuals' abilities are tested. The research provides insights into juggling responsibilities and gaining strength during challenging circumstances. Finally, it is envisaged that university personnel will use the research's findings to develop tertiary institutions that support well-being and develop resilience.

1.3 THEORETICAL FRAMEWORK

Young adults need to be resilient in order for them to survive adversity of any kind. The environment in which the young adults operate should interact positively with them. Resilient students are said to have good problem solving skills, strong self-esteem and a sense of future. These are referred to as protective factors. Protective factors aid students to become more resilient to a challenging environment, and are said to be found from within an individual and from an individual's surroundings.

The following theoretical framework explores protective factors and explains resilience. Its structure is based on aspects of resilience and validates these by providing different theoretical perspectives. These aspects will be referred to as resilience traits.

1.3.1 Resilience

Resilience is people's expanded vision as a series of coping mechanisms and responses by the individual and the environment. It is also complex; its implications shape the way people think of problems, coping and interventions (Liddle, 1994). Furthermore, resilience refers to both internal and external adaptations under challenging conditions and human capacity to recover without great harm (Hunter & Chandler, 1999; Klevens & Roca, 1999) from psychological trauma, by good eventual adaptation regardless of developmental threat, acute stressors, or chronic adversities. The human capacity refers to the capacity to re-establish equilibrium and to maintain homeostasis to recover. The above definition includes physical healing or good physical health (Masten, 1994; Gordon & Wang, 1994). Freiberg (1994) explains resilience as the ability to become proactive rather than reactive, and to react flexibly to complex situations (Kaplan, 1999). Resilience assists people to fit in the changing world.

There are also different types of resilience. Some authors talk of educational resilience, which refers to productive constructs, which are resilience, hardiness, adjustment, plasticity and person-environment fit (Kaplan, 1999). A person-environment fit relates to psychological characteristics and interactions between risk and individual, to features of school, families and community (Hunter & Chandler, 1999). According to Peng (1994) and Hunter & Chandler (1999), resilience is to flourish unexpectedly well in one's career and at university, despite being exposed to a stressful environment. Many researchers see resilience as something to be fostered by community, families, universities, and student peer groups (Wang, Haertel & Walberg, 1994; Hunter & Chandler, 1999).

In conclusion resilience is overcoming difficulties successfully without any harm to others or self. It is a process and a characteristic that needs cultivation from the environment.

1.3.2 Protective factors

Young adults acquire protective factors (person or ecological uniqueness that smoothen the progress to better results, in people at risk or exposed to adversity) that influence resilience from different contexts. Protective factors are encompassing in terms of environments and pervasive in students' success. The dominant protective factors in the culture of university society normally pertain entirely to the existence of social networks.

Resilience itself is fostered differently in different contexts or systems around the learner. In the family context what makes individuals resilient is a number of early advantages, good intellectual functioning, good relationships with their parental care, more attention and less separation from the caregivers, less family conflict, exposure to fewer life stressors and better physical health (Masten, 1994).

Within the micro-system, students should attain education, have positive university experiences, strong religious affiliations and therapy in order to recover from severe adversity (Masten, 1994). The availability of a strong basis of value and cultural support helps students to overcome the most devastating conditions, without negative effects lasting into adulthood. Moreover, the academy and learning communities as they reflect

the educational requirements of the future, encourage students to learn from each other, from educators and from other adults in the near and far communities (Freiberg, 1994). Within the macro system, Wang *et al.* (1994) suggests demographic characteristics, state politics and programs, effective policy and practices of the school as important. Resilience also develops gradually over time.

1.3.2.1 Components of protective factors

Protective factors that influence resilience can be either extrinsic or intrinsic factors that promote good results (Wolkow, & Ferguson, 2001). Extrinsic factors (a situation where an individual's thinking and behaviour are changed to suit the new environment) could be good interaction with parents, attendance of school where learning is emphasized and students are encouraged to do their best (Wang *et al.* 1994). Effective schools are those that provide opportunities for efficacy-enhancing achievement, both academic and extra-curricula (Freiberg, 1994; Hillard, 1991). They provide knowledge and teach problem-solving skills and provide settings where students connect with caring and competent adults (Mastern, 1994). Lecturers can praise the good deeds of students; use a variety of strategies to ensure personal and academic competence of their students; minimize vulnerability risks and maximize resources that enhance student development and promote resilience; cater for diversity and experiences in the lecture hall, and students with bad experiences can be allowed to reflect on their lecture hall experiences (Wang at al. 1994).

Intrinsic factors are the inner potential of a person to accept, or develop skills for dealing with new emotional or psychological conditions. They promote resilience in students through individual use of constructs such as locus of control, self esteem, self-efficacy, autonomy, social competence, good problem solving skills, cognition and metacognition processes. Psychological processes, like the coping mechanisms that individuals employ during stressful life events influence resilience (Wang *et al.* 1994).

As mentioned previously, protective factors are composed of extrinsic and intrinsic protective factors and the social importance associated with them. A comprehensive resilience programme will incorporate a wide variety of these aspects. To understand

protective factors, therefore, we must study the environments and the social networks that they encompass.

1.3.3 Resilient students

A resilient individual displays resilience principles in every area that describes a person holistically, in the context of psychological, physical, social, economical and spiritual well-being. Resilient individuals can be identified through their outcomes, which are desirable behaviour and actions (Kaplan, 1999). These outcomes are nurtured by the existing protective factors. According to Wang *et al.* (1994:48) "Resilient children were observed to perceive experiences constructively; they maintain healthy expectations, set goals and have a clear sense of purpose about their future agency in controlling their own fate"

First year students need to be resilient in order to overcome academic difficulties and to cope with academic life. They are the most vulnerable students, as they are not used to university structures and strategies, and are new to the university environment. The advantage of first year students being resilient is that they will be able to function on their own in a challenging environment, and be able to get up and move on if they get knocked down as the state of bouncing back predicts academic achievement (Wasoga, Christman & Kilmer, 2003). Resilience therefore pervades and influences how students respond to adversity.

In summary, protective factors will be explored in accordance with the environments in which first year students operate including the university environment. Based on the information above, this study attempts to explore protective factors influencing resilience and academic success. As discussed earlier, protective factors are regarded as the impetus for students' wellness and success in life. Findings, which are embedded in resilience theory, will provide comprehensive explanations for ideal students' environment.

1.4 RESEARCH AIMS AND METHODOLOGY

Quantitative research methodology was employed and the survey method was used. The survey method gathers and interprets facts without manipulating variables (Balnaves &

Caputi, 2001). It was suitable for this research because this study is concerned about current conditions related to the learning environment, characteristics of students, and students' perceptions about academic support. The quantitative method is quick, cheap and collects large amounts of data through questionnaires from different sources (Ogunniyi, 1992). Further, data can be analysed straightforwardly for immediate action. However, some of the disadvantages include the fact that participants may not disclose personal characteristics; the results cannot be used to predict the future (Gorard, 2001) and it may provide bits and pieces of unnecessary data.

1.4.1 Research aims

The main research aim was to explore protective factors that could foster resilience amongst first year students. The research objectives were as follows:

- To explore support systems that assist first year students to cope with academic and other demands
- To determine how the university can support first year students and ensure their well-being
- To gather information on how to help first year students become successful
- To explore ways to increase the throughput rate amongst first year students
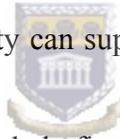
Participating students provided information about their academic experiences; specified which resources they used most; indicated which resources they did not use; showed activities they engaged in at the university; indicated whom they spent their time with; and specified how much they knew about themselves.

1.4.2 Significance of the research

The university is the intended beneficiary of the results of this research. At the end of the study the university should be able to: -

- Increase the support for students on campus and thereby enhance students' resilience

- Become a health promoting institution by meeting the needs of students in a holistic way
- Enhance the throughput rate
- Produce men and women who are ready to make a positive contribution to society

1.4.3 Analysis

First year students from 2003 participated by answering a resilience questionnaire. The questionnaire was in English and students had to indicate their appropriate choices in rankings from A to D. The participants were students who registered as first year students in at UWC in 2003, and at the time of the research, were either doing second year or repeating their first year. The students were selected randomly, and all had an equal chance of being selected. This assisted the researcher to explore what was useful and what was not during the course of their study.

The questionnaire was adapted from California Healthy Kids Survey. Permission was granted from the developer of the instrument to adapt the questionnaire. The statistical Package for the Social Sciences (SPSS) was utilized to analyse the data.

1.5 CHAPTER OUTLINE

Chapter one served as an introduction to the study and provided the background to the research, aims and objectives.

Chapter two will present a review of relevant literature. Resilience and protective factors are discussed thoroughly in a way that reflects how they are related to academic achievement and personal growth. The characteristics of resilient students will be reviewed.

Chapter three will focus on the research design and methodology employed. In order to describe the protective factors existing on campus, quantitative analyses are employed. The chapter also includes a discussion of the research instrument, and the motivation for its use. Full details on sampling, data collection process and procedures, data analysis, ethics and the limitations of the study will be provided.

Chapter four presents the research results. These include the external and internal assets scores, and the support that successful and unsuccessful student experience from their environments. It presents the results in graphs. Finally, it summarises and discusses the main results.

In chapter five the results will be related to the literature review, and be discussed in terms of the research aims.   In addition, recommendations are provided in terms of what the university can do to adapt the environment so that it facilitates resilience amongst students. Lastly, the conclusions and recommendations for further research will be provided.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

Most first year university students are faced with many new experiences and responsibilities on campus and in life in general. The students have to learn to cope with a variety of settings, including the university, community, the workplace and home. They also need to learn to cope with examination anxiety, financial difficulties, personal relationships and social ills like divorce. The above concerns necessitate students to be resilient in order for them to overcome difficulties and achieve success. This chapter focuses on exploring this notion of resilience in detail and relating it to academic success amongst students. This literature review comprises of an extensive search of protective factors. In the process of defining resilience factors risk factors emerge. Risk factors are explained and discussed as prospects for new skills and techniques. Secondly, protective factors are described. Extrinsic and intrinsic protective factors are examined thoroughly. Resilience as a developmental process is discussed with the link to student development. Finally, types of resilience, resilient youth and contradictions in resilience are considered.

2.2 The South African Context

A review of the literature indicates that there is very little South African research on resilience especially as it pertains to external support to strengthen internal assets. South African literature tends to focus on internal constructs such as sense of coherence, salutogenesis, fortitude, hardiness and problem solving appraisal (Strumpfer, 1990). In this chapter, relevant South African literature on resilience constructs is integrated in the text.

2.2.1 The UWC context

Research conducted at UWC tends to focus on student support and throughput, but there is little focus on these areas as they pertain to first year students. Most research conducted has so far focused on students' experiences and perceptions within faculties and departments, especially amongst Psychology students. This section focuses on issues pertaining to: Black education, Parental income, Transition, Language proficiency, Academic success and Orientation. The above issues are said to have ties with students' performance at the university.

Black education: The results from the research conducted at UWC reflected that the quality of black education in South Africa impacts negatively on African students' adjustments to the overall academic demands placed on them (O'Connell, 2004; Barends, 2004). Due to inadequate and uninformed human resources in schools, students are not well informed about university courses (Barnes, 2004). Moreover, in high schools available resources limit students' choices of study courses (Maxakato, 1999).

Parental income: Barriers to high academic achievement as indicated by these studies could be language, culture, parental education and finances. In the South African context, family income determines academic performance, access to resources and basic needs of education, food, transport and shelter. A majority of UWC students are African, with low parental income. The encouraging issue is that they appraise family support, family cohesiveness and family values to a great extent (Barnes, 2004; Barends, 2004).

Transition: Transition from high school to university was found to be a major cause of failure at UWC (Maxakato, 1999). Schools do not prepare students enough for them to handle university demands and the students do not know what to expect at university (Barnes, 2004; Simelane, 1996). There is a very big difference between what happens in schools and what happens at university. Students study skills have to change and they have to get used to lecturing method of teaching. The university aims to bridge the skills and experimental gap between both high school and tertiary education and the work place (O'Connell, 2004). At university, students have to be independent. At high

school they were passive and used to transmission teaching. Therefore, at the university, the question is how to learn and not what to learn (Barnes, 2004).

Language proficiency: UWC requires that students receive instruction and complete academic tasks in English, which for many African language-speaking students is their second or third language (Barends, 2004). As a result, the majority of students do not have the confidence to ask questions or seek clarification of issues (Simelane, 1996). They feel insecure and that asking questions may reflect their ignorance. Spoken and written language is a problem for first year students. However, they are able to take notes in English during lecture discussion and can handle being part of large groups. Another problem is that it is hard for lecturers to interpret student writings when they mark assignments and students cannot hear English words clearly from lecturers (Barnes, 2004; Maxakato, 1999).

Academic success: Students in their first year are able to plan working schedules, but lack time management skills (Barnes, 2004). Their beliefs in their ability to master stressful situations or positive appraisals of their problem-solving efficacy assist them in meeting the academic demands at university (Barends, 2004). They are also able to maintain good interpersonal relations; have potential for personal growth, and are positive about themselves (Barnes, 2004; Simelane, 1996). Older students have more positive self-appraisal than younger students, and they are less involved in social activities at university due to their goal-directedness in pursuing tertiary education (Barends, 2004). Barends' (2004) findings suggest that African students experience higher levels of fortitude than Coloured/Indian students. This may be due to hardships that they endured, and had to overcome under the apartheid system. Furthermore, rural students are more prone to succumb to the negative effects of stressful life events than urban students. This may be related to their alienation from their families and customs (Barnes, 2004; Barends, 2004).

Orientation: Peer facilitators do not give first year students enough information about the university. Likewise, peer facilitators do not deal with issues such as best ways to tackle examinations, tests and assignments; and dealing with increased workload and

so forth, which at times contribute to underachieving at university (Barnes, 2004; Maxakato, 1999).

This research focuses on support across faculties and on environmental change. To be resilient, students need protective factors. They can be guided and assisted to realise their strengths and abilities. Resilience is a key part of the academic culture as it encompasses attitudes and interactions of students with their environment. Human beings, despite age or number of stressors, have remarkable potential to overcome adversity (Benard, 1997). University first year students also have the potential to develop resilience traits suitable for their new environment and conditions.

2.3 RESILIENCE

"Resilience derives from the verb resile, which means that when a thing is compressed, stretched, or bent, it tends to spring back elastically, to recoil and to resume its former size and shape" (Strumpfer, 2003:70)

Resilience is the term used to describe a set of qualities that foster a process of successful adaptation and transformation despite risk. It has been operationalised in so many ways that it is difficult to compare studies and arrive at one definition (Muller & Louw 2004; Ryff & Singer 2003). It involves behaviour, thoughts and actions that can be learned and developed in any individual. Additionally, resilience is related to positive psychology, which focuses on human strengths and weaknesses; aims at helping individuals get more out of life; live and flourish rather than merely exist; and cultivate wellness as well as remedy pathology (Keyes & Haidt, 2003; Peterson & Chang, 2003). Definitions of resilience by different researchers all emphasize the importance of an individual's inner strength, physical strength and support from the environment.

Resilience is defined as the maintenance of development and capacity of individuals to overcome personal vulnerabilities and environmental adversities effectively, or the ability to thrive physically and psychologically despite adverse circumstances (Einsberg, Valiente, Fabes, Smith, Reiser, Shepard, Losoya & Guthrie, 2003; Turner, 2001; Wasonga, Christman & Kilmer, 2003; Marsiske & Balter 1995 cited by Ryff & Singer

2003; Oswald, Johnson & Howard, 2004). They describe resilience as being more than enduring adversity; it entails growing in strength by conquering life's challenges, and it is an innate self-righting mechanism. Turner (2001) went on to say that resilience is a concept that epitomises and can help operationalise strengths and perspectives. Hawley and De Haan (1996) as cited by der Kinderen and Greeff (2003) view resilience as a dynamic quality, a fit between resources and demands, by means of which families focus their strength and coping abilities, to promote competency and address adversity.

Understanding individual resilience needs one to be aware of what Masten (1994) refers to as the adaptation ingredients. These incorporate a developmental path or history, which focuses on a competence or psychological functioning of the individual over time; the nature of the adversity faced by the individual; individual and social assets and risks; individual characteristics that function as vulnerability or protective factors; environmental liabilities or protective factors; and context of adaptation. Adaptation has its own complexities that need to be taken into consideration.

In short, resilience connotes personal growth in every aspect of well-being, optimal human development and positive functioning despite life challenges. The aspects of well-being are emotional, psychological, spiritual and social. The essence of the concept (resilience) is that the vulnerability or protective effect is evident only in combination with risk factors" (Ahmed, Seedat, van Niekerk & Bulbulia, 2004:389)

2.4 RISK FACTORS

Risk factors refer to those elements that are not conducive to the development of a resilient student, and cause stress for students. They are physiological, psychological, socio-cultural and environmental situation or condition that increases the possibility of a violent or injury outcome (Ahmed *et al.* 2004). They include mentally ill parents, war, poverty, death of a loved one, violence, socio-economic problems, divorce etc (WestEd, 2002).

In many cases, first year students go through stress for reasons such as not knowing where to find various essential services and facilities on campus. Stress is an event or

experience that can be expected to cause anxiety with the potential for interfering with the normal functioning of a person. It is also a process of internal and external demands that exceed the resources of a person (Seiffge-Krenke, 1995). However, Ryff and Singer (2003) describe stress as a forum for increasing coping skills, self-esteem, self-confidence, and self-knowledge. Therefore, students should learn to survive and cope with any type of stress. In the process they will be learning new skills and growing in a sense. A common type of stress is psychological stress, which is experienced when there is an imbalance between the demands impinging on a person, and the actual or perceived resources available to meet the challenges. This imbalance at some stage disrupts the quality of functioning in a person (Masten, 1994). This is why students should utilise human resources on campus such as counsellors.

Counsellors or psychologists and lecturers can assist in reducing stress for students. Stress reduction is not only a matter of coping but also an opportunity for self-assessment of the ability to manage dysfunctional, apprehensive cognitions, and the necessary individual belief in the capacity to turn-off the cognitions, which is critical in managing stress (Frydenberg, 1997).

2.4.1 Risk factors as a prospect for new skills and techniques

Risk factors do not always bring students down; they sometime assist in positive growth and set a basis for new skills. In any difficult problem, lies some opportunity for growth. Positive growth can result from a range of problems including abuse, family disruption, delinquency, health problems, and natural disasters (Brendtro & Shahbazian, 2003). The types of growth that follow crises are: perceiving oneself as a survivor rather than victim; increased self-reliance and self-efficacy; heightened awareness of one's vulnerability and mortality; improvement in ties to others; renewed sense of priorities of life; and deeper sense of meaning and spirituality. Ideas of empowerment, healing, community, and membership are central to the strength perspective, as well as the belief that trauma can be a source of challenge and opportunity (Turner, 2001). Ryff and Singer (2003) refer to posttraumatic growth as related to constructs of resilience, sense of coherence, hardiness, stress inoculation, and toughening.

Students from high-risk environments such as violent communities, and families with alcoholism, drug abuse, physical and sexual abuse, and mental illness, are not expected to have desirable outcomes (Werner & Smith, 1992). However, Benard (1997) revealed that 50-70 percent of children from families with mental illness, or from poverty stricken backgrounds, turnout to become confident, competent and caring persons.

The university or students cannot change the fact that highly stressful events happen, but they can try to change how they interpret and respond to these events. Students should be assisted not to take adversity personally or as permanent, or setbacks as pervasive (Carlson, Gurwitch, Molitor, O'Neill, Palomares & Sammons, 2003). They should avoid seeing crises as insurmountable problems. Students have to transform stressful events by looking beyond the present with hope for better circumstances in the future; noting slight positive changes when dealing with difficult situations; developing realistic goals; working towards one's goals; engaging in soothing activities regularly; and looking for opportunities for self-discovery. Some students learn about themselves, and may realise growth in some respect as a result of struggles with loss (Carlson *et al.* 2003).

The other risk factor that can construct desirable results is lack of parental encouragement. The lack of parental encouragement helps students to become self-authors at early stage. Self-authorship is defined as a relatively enduring way of understanding and orientating oneself to provocative situations in a way that recognises the contextual nature of knowledge, balance and understanding with the development of ones own internally defined goals and sense of self (Pizzolato, 2003). Pizzolato (2003) asserts that students who not only lacked college admission privilege, but also parental encouragement often had opportunities to begin the self-authoring process at an even earlier age, than their low-privilege peers who had parental encouragement.

In conclusion, students and the university should not always perceive risk factors as negative experiences. They can try to find what is positive about the problem or what it is that they can learn or be aware of in future.

2.5 PROTECTIVE FACTORS

A combination of protective factors contributes to resilience, and it involves a complex interplay of multiple influences overtime (Ryff & Singer, 2003). Many studies show that the primary factor in resilience development is having caring and supportive relationships within and outside the family; and or close relationship with at least one adult is required (WestEd, 2002; Wissing & Van Eeden, 2002; Berk, 2000). These relationships should create love and trust, provide role models, offer encouragement and reassurance, and help bolster a person's resilience. Resilience is influenced by the environment and may be used to exploit positive features of the environment for positive outcomes (Wasonga, Christman & Kilmer, 2003; Carlson *et al.*, 2003). Every student has the potential to be resilient. Benard (1996), as cited by Wasonga *et al*. (2003) states that resilience is not a genetic trait that only a few children possess; it is biologically inherent in all human beings.

However, despite the biological capacity for resilience, certain environmental influences are required for optimal expression of resilience. These influences need to exist for an individual to develop a range of personal skills and successful coping strategies to overcome adversity (Oswald, Johnson & Howard, 2004). They are referred to as protective factors or protective mechanisms. Protective factors moderate a person's reactions to chronic adversity so that adaptations become successful (Oswald *et al*., 2004; Ryff & Singer 2003). They are placed externally in the social/environmental life space of students, and internally as personal attributes and qualities of the individual (Oswald *et al*., 2004). The environmental contexts, which are major influences in developing resilience in students, are university, home, community, peers and the individual student's characteristics or predisposition towards dealing with difficult life situations (Ryff & Singer, 2003). These contexts are said to have distinctive attributes that can serve to counteract potentially negative outcomes on student life and promote the development qualities of resilience (Oswald *et al*., 2004). Oswald *et al*. (2004) conducted resilience studies on primary school teachers in Australia, and similar protective factors and resilience traits were suggested. The research dealt with factors that influence the development of resilience in children, and what teachers do to foster resilience.

In this regard, resilience protective factors provide solutions to improving quality of life and education of students, and counteract negative attitudes of those who believe that nothing can overcome the backgrounds of students (Wasonga, Christman & Kilmer, 2003). This leads the discussion to an examination of extrinsic and intrinsic protective factors.

2.5.1 Extrinsic protective factors

Extrinsic protective factors are those features of the environment that assist students to become resilient, valuable and worthwhile individuals. Students' environments (university, community, peers and home) provide these features for them to develop resilience traits. Protective factors include stable family of origin, mild forms of trauma, person coping strategies, positive social support, parental education and appraisal of stressors such that individuals feel they have learned something positive from the experience which creates a positive impact on their adjustment (Banyard & Cantor, 2004; Seiffge-Krenke, 1995).

Lecturers and mentors have an influence that often tips the scale from risk to resilience. They provide and model protective factors that buffer risk, and enable positive development by meeting students' basic needs (Benard, 1997). However, they ought to resolve or get over their own personal trauma before they can assist students; need to have personal beliefs that provide positive influence, and be devoted to their jobs. The devotion provides them with meaning and satisfaction (Bell, 2003). That makes students to be amongst competent and resilient individuals who display valuable characteristics. Valuable characteristics are behaviour that determines academic success especially being able to deal with one's problems successfully (Strumpfer, 1995).

Meaningful participation, high expectations, and caring relationships develop an individual's characteristics and define resilience, performance and successful learning (Wasonga *et al*. 2003). Strumpfer (1995) identifies three basic job conditions that relate to performance as substantive complexity, closeness of supervision and routinisation. The second basic condition relates to students in a way that they can show their work to mentors, tutors and lecturers for assistance and for exploring one's thoughts. The third

basic condition relates to students getting used to working independently, becoming innovative and learning to value their creativity or ideas. When these are achieved, students' writing styles and study skills become spontaneous.

Likewise, caring relationships can be achieved by demonstrating kindness, compassion, and respect. Lecturers are not supposed to take students' behaviour personally, but they need to understand that students are trying the best they can, based on their perceptions of the world. It is the lecturers' roles to direct the energy within students to productive channels or desirable activities with a caring attitude. With that they can help meet the survival needs of students from overwhelmed families by referrals to social services agencies (Benard, 1997; Conger, 1977). Social services assist to build caring relationships like teacher-learner, student-student, educator-parent and educator-educator, between all individuals who relate to students (Benard, 1997).

Social support is defined as a range of significant interpersonal relationship that has an impact on an individual's functioning (Edwards & Besseling, 2001). They are also related to development of resilience and good academic outcomes (Wasonga et al., 2003). There is a diverse range of actions that occur in different settings that work well for others and do not work as well for some. The great use of social support (Schlebusch & Cassidy, 1995) by girls is linked with the use of tension reducing strategies. Girls use problem-focused strategies and take effective action to deal with their problems. These strategies help them to compensate and cope with their feelings of powerlessness in a constructive way (Frydenberg, 1997).

Supportive relationships serve as models for active information seeking and utilisation social support. Frydenberg (1997) talks of informal (family) and formal (professional) resources. Using both resources is effective for students who are more at risk. They can draw upon supportive relationships from different people at various levels like age mates, professionals, or working people in the course of dealing with a problem. Students who are satisfied with their support are less likely to be depressed (Frydenberg, 1997). Additionally, healthy relationships are what give interest, colour and vibrancy to people.

The kinds of relationships a student has reflect what kind of a person the student is. Student life is a web of interacting relationships, all making them the people that they are.

External protective factors entail high expectations. Positive high expectations can be nurtured by noticing students' strengths and making them realise where they are strong. This technique assists students, who are negatively labelled or oppressed by their families, schools and communities, to grow from victims to resilient survivors. Here, students' strengths, interests, dreams and goals are used as the beginning of learning. By doing this, lecturers would be tapping students' intrinsic motivation for learning (Nakamura & Csikszentmihalyi, 2003; Benard, 1997; Conger, 1977). Frydenberg's (1997) study confirms that high expectations have an impact on students' success. Girls who depend on family and teachers for emotional support are more likely to respond to expectations held of them. If the expectations of success are high, they will become high achievers. In contrast, if the expectations of success are low they will become low achievers (Frydenberg, 1997; Benard, 1997).

Recreational activities provide flow or optimal experience that is a stimulant towards engagement and helps with private achievement. Private achievement may have little or no competitors and spectators. Flow activities should be enjoyable and meaningful; provide potential for growth; allow emergence of new opportunities for action and stimulate the development of new skills (Strumpfer, 2003). University students can derive flow from whatever they do; for example, interpersonal relationships, music and other activities.

In conclusion, for protective factors to serve the intended purposes successfully, environmental change is necessary. The change has to occur in both the near and far environments. Students are the centres of the different systems that surround them. Both students and the university can merge their needs. The next section looks at the context of environmental change for students.

2.5.1.1 Context that fosters resilience

Academic support cannot be addressed in isolation because students exist in a social world that comprises several contexts. To promote resilience in students, the family should be consistent in parenting and role modelling, be supportive and available, provide a harmonious living environment, have strong beliefs and standards of behaviour, celebrate and value important life stages such as birthdays (Oswald *et al*., 2004). According to Willeto (1999), family influences such as parental education, students' identification with their mothers and family adherence to traditional cultural practices, contribute to commitment and achievement of students (Jackson, 2003). Students fall under the influence of their parents before coming into contact with their peers and they are likely to adhere to their parents' values and standards or conform to the expectations of their peers (Mwamwenda, 1995). Once more, the humanistic psychology movement by Maslow and Rogers emphasises that a positive home environment and positive mental health enhance creative behaviour. Creativity of any kind can only flourish where people are truly free to express their views (Cassandro & Simonton, 2003; Smuts, 1992; Mwamwenda, 1995).

Exposure of high school learners to university experiences during vacation motivates students. If they visit universities or work places with parents or relatives who attend college, students reported that the exposure motivated them (Jackson, 2003).

Communities also play an important role in fostering resilience in students. Well-developed communities with knowledge, services and expertise in various areas, and opportunities for communal interaction in which students participate promote resilience (Wasonga *et al.* 2003). Oswald *et al.* (2004) suggest responsibilities for communities as to strengthen social, health and other community services.

Another vital environment is the 'peer environment'. Students are strongly influenced by what their age mates do. Peers cater for the support, care and attachments needs of their age mates (Oswald *et al.* 2004; Conger, 1977). The advantages of peers are that students feel proud to reflect characteristics of a group that embraces their values and provides a sense of belonging. Peers are of a great importance as students become free from parental

control. From these groups students develop social skills that are essential for other relations such as with the family, with ones community, and with people in the work place (Benard, 1997; Mwamwenda, 1995).

The provision of protective factors is not demanding; a little recognition of students by adults in the university would make a difference. The university needs to make students aware of the resources and services available on campus. Social networks are the most important extrinsic protective factors, and most external factors derive from them.

2.5.1.2 The university as a protective factor

The kind of university that can foster resilience is that which integrates different sectors and different environments; and involves people from the broader community (such as religious leaders, parents, business owners and managers, professionals, politicians and educationists) in university activities. Social contexts entail constant involvement in various interpersonal relationships and continual interaction between parties of these relationships (Smuts, 1992).

Universities can promote resilience by providing caring, attentive and stable environments, which are success-oriented in their disposition, acknowledge achievement, and include sporting, musical and artistic activities in addition to the academic. The university should show genuine interest in the welfare of students, and have lecturers and senior students who are positive role models for first year students. They should create opportunities for students to develop internal assets for resilience (Oswald *et al.*, 2004). According to Benard (1997) motivation is for lecturers to focus on students' strengths. Lecturing through students' strengths instead of their deficiencies enlists their intrinsic motivation and positive momentum. It also put them in a hopeful frame of mind to learn and work on problems. Moreover, positive interaction with faculty members, creation of support groups, better preparation of study skills and career development leads to academic persistence and success. Native American students reported that they felt well cared for and they developed confidence in asking questions about the university. They had positive experience of being greeted and contacted warmly by faculty and staff (Jackson, 2003).

The university adults have to do little things for students so that they feel recognised and have a sense of belonging. Things like greetings make students feel that someone is showing interest in them. Supportive lecturers give themselves time for students and they are available for consultation at all times.

2.5.1.3 Adaptations suitable for building resilience

Adaptation involves a transitional process, which may extend over time. It includes reshaping or reframing schemas in response to modification (der Kinderen & Greeff, 2003). According to Piaget's theory, adaptation is the process of building a schema through direct interaction with the environment. It consists of two complementary activities, which are assimilation and accommodation (Berk, 2000). The severity of the experience and the subsequent adaptation vary according to a number of factors reflecting situational and personal characteristics (Frydenberg, 1997). Adaptation refers to a good way of how one accepts and learns to survive in a very challenging situation. Therefore, resilience is judged on the basis of normative patterns of development in a normative environmental context. Adapting resiliently is learning to survive in a way that does not harm oneself or others. Adaptation is a process and it happens overtime. It shows how individuals can be resilient (Masten, 1994).

In psychopathology, adaptation is judged according to psychosocial milestones called developmental tasks. Developmental tasks for young adults include adjustment to pubertal change, romantic relationships, and coherent identity. Attaining these expectations despite significant odds or adversities is the basis for evaluation of resilience. Adaptation development is marked by multiple interacting influences and transformation. Masten (1994) describes resilience as taking a similar path as individual behaviour over time. Thus, he sees resilience as a pattern created over time and characterised by good eventual adaptation despite developmental risk, acute stressors or chronic adversity.

During transition to university, students need to be assisted and supported by broad campus programmes. Such programmes should foster a sense of community and interpersonal connections among first year students and between all students (Banyard &

Cantor, 2004). Other members of the campus community such as faculty members, mentors, and residence staff can help bolster protective factors that are associated with positive adaptation for all students.

Programmes develop components for students who have problems in forming social networks and facilitate internal and external adaptations (Banyard & Cantor, 2004). Internal and external adaptation serves as a frame of reference for the evaluation of adaptation. Students get strengths and techniques to adjust quickly, from past stories, experiences, one's inner strength, and support from programmes, home, peers and community (Ryff & Singer, 2003; Masten, 1994). Strumpfer (1990:266) quoted Pearlin and Schooler's (1978:3) as saying that "many of the difficult problems with which people cope are not unusual problems impinging on an exceptional people in rare situations, but are persistent hardships experienced by those engaged in mainstream activities within major institutions".

Adapting to the university needs students to develop some characteristics such as assertiveness and independence as they assist in adjustment to the university. Students from dysfunctional families should distance themselves from problematic situations, to achieve a sense of independence (Turner, 2001; Schlebusch & Cassidy, 1995; Conger, 1977). Native Americans reported that they experienced an existential shift towards being more independent and out-going, willing to ask for help and speaking comfortably in social situations (Jackson, 2003). Current studies also show that internal locus of control, higher level of social support, and making meaning of traumatic events were linked to more positive adjustment (Banyard & Cantor, 2004).

Goal directed behaviour is energised by resilience to cope and rebound as well as accompanying emotions and cognitions (Strumpfer, 2001). This behaviour contributes to successful adjustments. In research conducted by Bell (2003), counsellors knew their efforts and they were not expecting immediate results, but in the distant future. They maintained a sense of efficacy and hopefulness despite the lack of immediate positive results. Additionally, Einsberg *et al.* (2003) state that effortful control and reactive control are believed to relate to many aspects of adjustment and social functioning. High

resilience involves resourceful adaptation to changing circumstances and flexible use of problem solving strategies. Resilience mediates the relation of effortful control. Effortful control assists students' need to settle their emotions in order to adapt successfully to new environments (Einsberg *et al.*, 2003).

Students bring many problems to the university that need resolutions before the stressors distract or interfere with their academic work. The inclination to seek help actively from one's social support networks and social location has been associated with healthy adjustment. In some circumstances, social support is represented by items indicative of a tendency to share the problem with others and enlist their support (Frydenberg, 1997). From their findings, Einsberg *et al.* (2003) concluded that attempts to modify early adolescents' social competence by teaching them self-regulation strategies will be more productive for students more prone to negative emotions.

Psychological adaptation works both internally and externally. It has two main mechanisms, which are mental functioning and external behaviour. Good mental functioning refers to psychological well-being, internal equilibrium and ego strength. Good external behaviour signifies competence and social adjustments (Wissing & Van Eeden, 2002; Masten, 1994). The skills and resources that students bring to bear on trying to cope with the stressors are vital determinants of the course of their psychological adjustment during adulthood. Social support exerts a direct effect on psychological adjustment so that the more effective the social support students have, the better their mental and physical health will be (Edwards & Besseling, 2001)

The steps that can help individuals to adapt and develop resilience to unexpected events and stressful situations are as follows: Making connections (keeping in touch with family, friends and others); Helping oneself by helping others (assisting others by volunteering at a community organisation or in families); Maintaining a daily routine (engaging in activities that provide one with stability and comfort); Taking care of oneself (making time to eat, exercise and rest); Giving oneself a news break (watching TV and reading newspapers to know what is happening around); Having a plan (preparing oneself for eventualities); Nurturing a positive view of oneself (draw skills from old experiences to

meet current challenges); Keeping things in perspective (considering stressful situations in a broader context); and Maintaining a hopeful outlook (identifying and appreciating good health, comfortable home and strong friendship) (Carlson *et al.* 2003).

2.5.1.4 Coping

Coping is trying to maintain equilibrium in life, ensuring stability, overcoming stress and managing and reducing demands of stressful events with the help of self-efficacy (der Kinderen & Greeff, 2003; Strumpfer, 2003; Faure & Loxton, 2003). It is the cognitive and behavioural efforts to manage specific external or internal demands, and the conflicts between them that are appraised as taxing or exceeding the resources of a person (Frydenberg, 1997 cited Lazarus 1991). Successful coping may be perceived as a kind of psychological growth (Wethington, 2003). Coping includes activities undertaken to master, tolerate, reduce or minimise environmental or intra-psychic demands perceived to represent threats. The combination of intelligences, abilities, non-intellectual factors, nurturing environment, and utilisation and realisation of available chances, determines how an individual copes. Coping is also a process rather than a static entity (Frydenberg, 1997). It is made up of responses, thoughts, feelings, and actions that individuals use to deal with problematic situations that are encountered in everyday life and in the particular circumstances (Frydenberg, 1997).

Types of coping include anticipatory coping, proactive coping and adaptive coping (Strumpfer, 2003; Seiffge-Krenke, 1995). They are emphasised in terms of relationships between the person and the environment. Lazarus' theory as cited in Seiffge-Krenke (1995) states that the way a person judges an event that he/she comes across, determines how one will cope. Adaptive coping or functional coping, matches an individual's appraisal of stress with the use of active support seeking and internal reflection of possible solutions (Seiffge-Krenke 1995). Marotta (2003) cites the example of tortured refugees who were assisted by clinicians to cope with their difficulties. Peers and friends provide help and assistance during hardships. They provide a rich and possibly unique source of information about the self during stressful periods (Seiffge-Krenke, 1995).

Coping skills help students construct accurate pictures of themselves, and ways to overcome their weaknesses. The ways they cope depend on the resources available to them, and on the constraints that inhibit the use of those resources in the context of the specific event (Strumpfer & Mlonzi, 2001; Seiffge-Krenke, 1995). It also depends on the stress moderators, which are social support, religious practise and sense of coherence. Religion serves to reduce the erosion of self-esteem and sense of mastery or control that often result from stressful life events (Wissing & Van Eeden, 2002; Edwards & Besseling, 2001).

Coping strategies lead to adaptation in spite of challenges, because students seek support when they encounter difficulties. They refine their help seeking behaviours and build a network of peers and mentors, who can provide guidance and resources for coping effectively (Pizzolato, 2004). Developing strategies for coping needs professional assistance. Therapeutic interventions promote the process of becoming strong and resilient. This is because mutuality in the therapy creates possibilities of creating other intimate relationships (Papaikonomou & Nieuwoudt, 2004; Turner, 2001). Bell (2003) highlighted that counsellors who had adequate personal support and environmental resources, handled most situations effectively. They recovered from upsetting situations without long-lasting effect, had less stress, and were observed to have creative and resilient ways of looking at and dealing with difficult situations at home and at work (Bell, 2003).

Another coping strategy is maintaining an objective motivation. The availability of social resources like family support expands a survivor's social networks (Marotta, 2003; Strumpfer, 2003). Main modes or styles of coping that students use are active information seeking and the use of advice; emphasised appraisal of situations; appreciation of the need to reach compromise; fatalistic approach leading to withdrawal; internalising defence mechanisms and rationalisation; and externalising mechanisms like projection or turning against others (Frydenberg, 1997; Seiffge-Krenke, 1995). Students also refer to problem solving skills, instead of framing the stressful event in a way that minimises stress and makes it seem manageable (Bell, 2003; Jackson, 2004; Faure & Loxton, 2003). Girls or women rely on social networks or seek help in extra familiar settings, while boys

make use of physical recreation and ignore the problem (Frydenberg, 1997; Strumpfer, 1995). In another study, parents of children with cancer participated in groups by sharing their stories. They spoke the same language, had similar interests and made fun out of the stress. The groups enhanced the members' sense of empowerment, which may itself have positive mental health consequences (Papaikonomou & Nieuwoudt, 2004).

Paradoxical cultural pressure promotes family and community support. According to a study by Jakcson (2003) students who said that their family and community supported their academic efforts and were proud of their success in college, felt pressure and obliged to perform well at the college. Their family experiences provided them with positive models of coping. They also had to accept the responsibility of studying and choosing courses (Faure & Loxton, 2003).

A favourable environmental can also assist in coping. Such environments are found in restorative places. According to environmental psychology, restorative places are places to which people often go for relaxation after threatening or negative events. From these places they experience beauty, control and freedom of expression; and they escape from social pressures (Strumpfer, 2003 cited Hartig, Book, Garvil, Olsson and Garling, 1996)

2.5.2 Intrinsic protective factors

Intrinsic protective factors are the insights that an individual holds and possesses. The environment that satisfies the needs of students, nurtures them automatically. The important needs of students include the need to belong, good physical and psychological health, finance and the opportunity to take part in decision-making. Intrinsic protective factors include autonomy, locus of control and appraisal of stressors such that individuals feel they have learned something positive from experiences that generate optimistic impacts on their adjustment (Banyard & Cantor, 2004; Hunter & Chandler, 1999; Seiffge-Krenke, 1995). The key factors of resilience are relationships and strength perspectives, which also depend on what the environments provide for students. "…Relationship implies a sense of knowing one-self and others through a process of mutual relational interaction and continuity…" (Turner, 2001: 2).

To start with, human beings have a natural motivation to form attachments, achieve, develop autonomy, and support each other in altruism (Benard 1997). According to Masten (1994) children are born with genetic liabilities or assets that facilitate psychological development even though environmental conditions including the prenatal environment will influence the development of the individual, and the expression of this liabilities and assets. Brendtro & Shahbazian (2003) argue that to meet these DNA-based needs, requires an environment that cultivates belonging (a greater closeness and trust of others), mastery (an increase in ability to solve problems), independence (a greater sense of self-efficacy), and generosity (an increased concern for others), which have been called the "Circle of Courage". For that reason, first year students have the potential to perform well and cope with academic and environmental demands despite distressful situations in their homes.

Good attainment of efficacy is motivation and encouragement to become a high academic achiever. Perceptions of confidence and competence are key aspects of motivation for academic achievement (Jackson, 2004). Bandura (1993) proposes that a sense of competence may be a function of self-efficacy, which influences the amount of stress, depression and anxiety students feel during challenging situations, and influences motivation, performance and selection of activities and environments (Bell, 2003; Wissing & Van Eeden, 2002). Self-efficacy is the term developed and reported by Albert Bandura in the 70s to refer to ways in which individuals perceive their capabilities rather than recording actual behaviours. It is about knowing one-self's beliefs and dealing effectively with fussy situational demands (Frydenberg, 1997). Psychological studies such as resilience studies focus on the psychosocial environment for the development of individuals, and perceived threats rather than physical threats. Young adults should be provided with opportunities that will facilitate their physical and psychological health and well-being. With this they will expand their coping repertoires and be able to deal with life circumstances (Frydenberg, 1997).

An individual's well-being is determined by cognitive resources that relate to positive self-concept and positive outlook, as well as physical resources that relate to more health promoting behaviours. Positive emotions undo continuing negative emotions; activate

upward spiral towards improved emotional well-being; and fuel and build resilience (Wissing & Van Eeden, 2002; Strumpfer, 2003). According to Einsberg *et al.* (2003) effortful control and ego control differentially predict resilience and social competence both concurrently and overtime. Ego development is a compensatory factor directly related to competence; locus of control; and social skills that emerge as interactive moderating factors (Ryff & Singer 2003). Block & Block (1980) define ego control as the threshold or operating characteristics of an individual with regard to the expression or containment of impulses, feelings, and desires (Einsberg *et. al*. 2003:3). Effortful control is viewed as involving the will and as voluntary. It includes abilities to voluntarily shift and focus attention, and to inhibit or activate behaviour as needed for adapting to circumstances even if one does not feel like doing so (Einsberg *et. al*. 2003:2).

The intellectual level of an individual is related to academic success (Berk, 2000; Conger, 1977). If it is nurtured it flourishes. Intelligence can be recognised through talents, and the opportunities provided by the student environments to improve particular talents. Frydenberg (1997) discovered that intelligent students realise their talents and achieve according to their potential; they seek professional help; and they seek spiritual support and social action (Edwards & Besseling, 2001). Intelligence is also related to with interests associated with particular subsets of activities, such as hobbies or intellectual pursuits. Activities for students should be meaningful and interesting. The desire for meaning is a basic human motivation. Sources of meaning in most people's lives are relationships, life goals, religious participation and ways in which meaning is structured through goal hierarchy (Muller & Louw, 2004; Nakamura & Csikszentmihalyi, 2003). Students need to feel and realise that they are studying towards their goals.

Purpose in life and sense of coherence are indicators of meaningfulness and they predict positive functioning (Emmons, 2003). Students require opportunities to express their feelings and imagination, such as making choices, solving problems, and working with and helping others, which improves meaningful participation. Benard (1997), Rutter *et al.* (1979), Rutter (1984) and Kohn (1993) argue that lecturers should treat students as responsible individuals, encourage them to participate in various aspects university life and to acquire a sense of coherence. Sense of coherence is a life-appraising variable

(Strumpfer, 2003; Perkel, 1990). It refers to a coping resource that is presumed to mitigate life stress. It affects the overall quality of one's cognitive and emotional appraisal of the stimuli that impact on an individual. A strong sense of coherence contains three components namely, comprehensibility, manageability, and meaningfulness (Strumpfer, 2003; Emmons, 2003; Edwards & Besseling, 2001).

Students should have goals and know why they are at the university. Students' progress towards the goals indicates the continuation of the invested goal-relevant means. "Goals are essential components of a persons' experience of his or her life as meaningful. They contribute to the process by which people construe their lives as meaningful and worthwhile" (Emmons, 2003:107). Goals are pursued by observing and modelling successful others like senior students, instructions by experienced others and experts, reading manuals about the effectiveness of means or direct experience. Means and ends vary by domains or context, such as the university (Baltes & Freud, 2003). Knowing goal-relevant means entails knowing university culture, which provides internal and external causal factors that lead to a given goal.

Resilience and thriving require that students prioritise activities in their lives in terms of their values and what constitutes meaningfulness to them (Strumpfer, 2003). Students need to read frequently with concentration and understanding during the semester or the year, for final exams not for assignments and tests only (Baltes & Freud, 2003). Goals and aspirations have a similar function as the high expectations. They are the signals that orient a person to what is valuable, meaningful and purposeful.

To sum up, intrinsic protective factors are always described through the extrinsic factors because they appear as outcomes or reflections of what a student has been through. They depend on what the environment has for students and are more of individual characteristics.

2.6 Resilience as a developmental process

Being resilient does not happen in a day, it is a process that requires time and effort to develop because skills and knowledge about dealing with adversity are acquired

overtime. The development of resilience is the process that connotes healthy human development. Healthy human development is a dynamic process in which personality and environmental influences interact in a reciprocal, transactional relationship. Human growth and development unfolds naturally in the presence of certain environmental attributes that relate to resilience. Developing resilience involves behaviours, thoughts, and actions. These relate to Frederickson's (2001) broaden and build theory that deals with positive emotions. Positive emotions broaden the momentary array of thoughts and actions that come to mind. The scopes of attention, cognition, and action are broadened so that physical, intellectual and social resources are built (Strumpfer, 2003).

Development itself denotes moving from a lower point to a higher or more advanced one. When referring to resilience, there are some experiences that lead to a student being resilient. For example, staying with educated parents or growing up in the knowledgeable community. Home and community environments shape students' thinking and the way students approach life experiences. With this perspective resilience is seen as a character trait. The character eventually develops and is shaped by all sorts of things from various environments (Turner, 2001).

2.6.1 Student development

Resilience and the process of student development are interdependent. Resilience refers to surviving adversity and functioning normally once more. Student development is defined as the process of promoting the social, emotional, physical, moral, cognitive and spiritual development of students through meeting their needs (WestEd, 2002; Wissing & Van Eeden, 2002). Both resilience and students development are facilitated by the interaction of students with the environment. Universities can promote healthy behaviour as well as successful learning in students, by creating climates and teaching practices that honour and meet students' developmental needs.

Most students come to the university unprepared, and are bombarded with new concepts that they have to learn within what seems to be a short period of time. Students are forced to shift quickly from the high school style of learning to the tertiary style. During these transitions the student experience some development and it happens to different degrees

depending on the uniqueness of each student. Turner (2001) quoted Werner and Smith, who concluded that at each stage in an individual's development there is a shift in the balance between stressful events that heighten vulnerability and protective factors that enhance resilience.

Adults in the university should understand and can assist students through the transition process by accommodating and providing them with opportunities to show their abilities and competences. Senior students or lecturers should be able to admit their mistakes and not to be defensive, and analyse the relationships and foster a feeling of connection in students (Turner, 2001). Studies across multiple disciplines have identified a clear standard of principles to guide education and prevent the risk of failure among students. Resilience research identifies these principles as caring relationships, high expectations and meaningful participation. For the resilience process to be successful, all the assets should be there in a student's world (WestEd, 2002).

The Youth Development Conceptual Model (WestEd, 2002) suggests things to be taken into consideration as far as students' wellness is concerned. For students to have improved health, social, and academic outcomes all of these must be satisfied across the life span (Strumpfer, 2003; Benard, 1997). The model shows that the external assets to be the first concern, and students' need to be second concern. The provision of external assets and students' needs will lead to developed internal assets, which will in turn lead to improved health, social and academic outcomes (WestEd, 2002). Developed internal assets can be judged by observing the resilience skills that students display. Resilience skills are the ability to form relationships (social competence), to solve problems (meta-cognition), to develop a sense of identity (autonomy), and to plan and hope (a sense of purpose and future). This links to Ryan and Deci's (2000, 2001) model of self-determination, which distinguishes innate, essential and psychological needs. Benard (1997) explains the above attitudes and competences to be the outcomes of a resilient youth and not causes of resilience. Again, they all need time and effort to be well developed in each student.

2.7 Types of resilience

The way different authors present their findings tell us that there are different forms of resilience. Resilience is multidimensional by nature because it does not guarantee resilience in all realms (Ryff & Singer, 2003). Therefore, students can be resilient on different environments or situations. For instance students can be educationally, emotionally or behaviourally resilient. From the studies conducted on UWC students, some students mentioned that experiencing trauma before the exams does not have a negative impact on their performance, while some students stated that they could not function normally until they are over the depressing emotions (Barnes, 2004).

Block and Block (1980) cited by Einsberg *et al.* (2003) stated that ego or personality resilience is the dynamic capacity of an individual to modify his or her modal level of ego control in either direction, as a function of the demanding characteristics of the environmental context. Family resilience refers to the family capacity to develop strengths with the intention of optimistically meeting challenge. It also focuses on how families use their strengths and coping abilities in times of crisis to promote competency and address adversity (der Kinderen & Greeff, 2003; cited Silliman 1994 and Hawley & De Haan, 1996). According to Richardson *et al.* (1990) spouse, family, friends, co-workers, and persons in other relationships and roles form part of environmental resilience (Strumpfer, 2003). They act as protective factors depending on the type of interaction they have with students; whether it promotes resilience or not.

One more type of resilience is community resilience. Community resilience includes features of a community, which in general promote the safety of its residents; which serve to protect residents against injury and violence and allows residents to recover after exposure (Ahmed, Seedat, van Niekerk & Bulbulia, 2004). Taking note of what confirms community resilience, it makes it easy to understand and determine the advisable community for students. In this case, the students' community is the university. The university needs to be resilient for the students through its structures, networks and collective relationships, as they are the measures of community cohesion.

In conclusion, students need environmental resilience and their own personal resilience in order to survive daily concerns, academic demands and stay resilient.

2.8 Resilient students

Resilient students have a more complete mix of social skills; they are able to express and control their emotions and behaviour in different situations – including the lecture halls, the playground and the university in general. They require supportive contexts and relationships to achieve well-being (De Berry, Fzili, Farhad, Nasiry, Hashemi, & Hakimi, 2003). Resilient individuals have the capacity to bounce back from stressful experiences quickly and effectively. They use positive emotions to rebound from, and find positive meaning in, stress encounters (Tugade & Frederickson, 2004; Turner, 2001). They have abilities and adaptive characteristics that enable them to improve their health, social, and academic outcomes (Wasonga *et al.* 2003). Resilient students also have a strong sense of coherence, which makes them more likely to show readiness and willingness to exploit available resources at their disposal (Strumpfer, 1990; Strumpfer, 1995).

Understanding also reflects resilience features. Understanding students are more likely to be resilient because they understand why things happen the way they do. Adults are more resilient than young people because the younger ones lack experiences and information about effective ways of being resilient (Frydenberg, 1997)

Ego resilient students are young adults who are well adjusted and interpersonally effective. Their personality profiles are described as assertive. They have stable relationships with peers, possess well developed problem solving skills (Smuts, 1992), consider realistic future plans, have a positive sense of being, are able to achieve and deal effectively with tasks, experience success in one or more areas of their life, are able to communicate effectively, have strong attachment with at least one adult, and accept responsibility for themselves and their behaviour (Oswald *et al.* 2004; Ryff & Singer 2003; Conger, 1977).

What makes a person resilient is a mixture of intrinsic and extrinsic protective factors. A resilient student possesses the following qualities: A sense of humour; a sense of

direction and mission; intellectual capacity (good verbal and communication skills); adaptive distancing; self-efficacy; and possession of a talent or skill (Turner, 2001).

Being resilient does not mean the absence of challenges or problems. Resilience can be an important part of a student's emergency preparedness. It is a psychological tool that helps students deal with anxiety, fear and stressful events. Developing resilience is a personal journey. Students react uniquely to traumatic and stressful life events. They use varying strategies to build their own resilience. An approach that works for one-self may not work for someone else. Turning to someone for guidance, helps individuals strengthen resilience and persevere in times of distress (Carlson *et al.* 2003). Trauma survivors demonstrate greater levels of secure attachment to both family and friends; and perceive social support to be present and beneficial (Banyard & Cantor, 2004).

2.9 Contradictions in resilience

There are inconsistencies and controversies within the resilience concept. This section is provided to add more understanding of complexities in resilience. Resilient young adults are found in both environments of risk and trauma, and environments rich in providing assets (Hunter & Chandler, 1999).

The resilience insight states that students adapt to the present positive relationships, and those positive relationships give them a chance to meaningful participation, which all counter risk factors despite student's background. Turner (2001) acknowledged that psychologists and feminists agree that people can emerge from childhood environments of risk and trauma with a sense of well-being and resilience, and that negative emotions are fundamental to healthy relationships since they influence how such feelings are handled (Strumpfer, 2003; WestEd, 2002). In this sense, negative emotions serve as the basis for developing problem solving skills. Students without forms of support such as love or a sense of belonging can also develop resilience traits.

The innate power that any person is born with gives students survival strength. Every student who has survived a trauma or neglectful or abusive childhood has some strength that got her or him through the experience despite the environmental support. Turner

(2001) stated that this strength or capacity for mental health is innate and directly accessible.

Besides, being in a traumatic situation does not imply that one's development is inhibited. Traumatic situations result in some kind of growth. After the first test or assignment or after knowing each other, students move from low achieving groups to high performing groups of friends and vice versa. Growth after suffering results in outcomes such as new perceptions of one self, gains in appreciation and recognition of one's vulnerability, and changes in philosophy of life (Ryff & Singer, 2003 cited in Tedeschi & Calhoun, 1995). Brendtro and Shahbazian (2003) documented various benefits of challenging life events reported by people who had experienced trauma and loss. Such people became strong for themselves and developed their own strategies of empowerment or channels to go through hardships, depending on the seriousness and type of the difficulty.

Lack of parental encouragement influences self-authorship among university students because they devise and follow their own formula for getting into the university. The processes of navigating the university decision catalyse self-authorship (Pizzolato, 2003). However, parental encouragement can play a negative role in students' ability to develop self-authorship, by delaying the process. On the other hand, lessening privilege must be provided for privileged students. The development of self-authorship needS provocative experiences and students' willingness to cognitively engage in the self-authoring process, along with appropriate scaffolding from others as opposed to merely providing them with high levels of privilege (Pizzolato, 2003).

Therapy is sometimes necessary to bridge the gap between the high school level and the university level, and to raise awareness of the university culture among students. The dilemma with providing therapy for students is that it is difficult for therapists or the environments to determine how much control is needed for each individual to adapt effectively, and be able to function after the control is removed. In adaptation to new environment, if a student is more under controlled than is adaptively effective or more over controlled than is adaptively required a student is not resilient (Einsberg *et al.* 2003).

There is confusion on how to measure the amount of support or control students need in order to adapt effectively to the university environment and not become dependent (Pretorious & Diedricks, 1994). Hence, there is some evidence that the intensity of negative emotionality decreases with age although it might increase modestly in some interactions in early adolescence (Ryff & Singer, 2003). New students' performance has been found to improve as the year goes by because they get used to the university culture (Barnes, 2004).

In summary, it appears that it depends on an individual to find ways of becoming resilient. Wissing & Van Eeden (2002) stated that multidimensional healthy lifestyle indicates that a person is actively involved in facilitating his or her own physical well-being, psychological development, spiritual awareness and maintenance of interpersonal relationships. Protective factors can all be provided but if students are not ready to face challenges they will keep on falling during times of stress. In contrast, resilience also depends on the support from the surroundings. If personality or ones inner strength fail to make a person resilient, then the environment can still assist that person to become resilient. Another point is, coming from or being in a privileged environment does not imply being resilient. Inconsistencies in insights on resilience make it necessary that in trying to make students resilient, the university must not adopt inflexible strategies that may present stumbling blocks to resilience development.

2.10 CONCLUSION

Since the focus of the research is to build students' strengths so that they can achieve academically, the learning environment should provide all the assets associated with cognitive development. What motivate students are improved cognitive and emotional outcomes as well as the students' identification with certain content areas of their studies (Muller & Louw, 2004). Protective factors could have equally beneficial effects across students irrespective of their risk status (Ahmed *et al.* 2004). That is, students can bring along all sorts of problems or stress but if the university becomes rich in protective factors they will survive and function competently.

Resilience appears to be at the background of every action a student takes. It acts as a moderator, motivation, direction, and activates the mind. Resilient students are able to apply relevant techniques and skills to problems, and are intrinsically motivated to conquer difficulties without suffering lasting harm. Protective factors that predict high performance at the university overlap a lot. For example, intellectual ability is an intrinsic protective factor, it increases the chances of rewarding experiences at the university, and it also offsets the impact of a stressful home life. Most protective factors derive from social settings. Social problem-solving skills improve student gains in academic achievement and social functioning; provide students with a sense of mastery and self-worth in the face of stressful life events; and reduce adjustments difficulties among students from low income and troubled families. All the kinds of support mentioned also apply to coping skills and strategies, seeking social support, providing guidance and resources for coping effectively (Pizzolato, 2004).

Chapter three will explain how the research explored protective factors that foster resilience in students. It presents the aims and objectives, significance of the research, the research methodology, instrument, procedure, analysis, ethical considerations and limitations of the study.
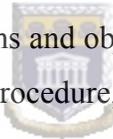
CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter serves to explain in detail the research methodology used. The methods and procedures utilised in obtaining the results to meet the research aims are provided. Additionally, the methodology provides detailed information about how the study was conducted. Included are the procedures used to conduct the study, the description of the participants, and how the variables are operationally defined and the measures used. Finally, the ethical statement for performing the research and protecting the subjects of the study is clearly stated.

3.2 OBJECTIVES AND SIGNIFICANCE OF THE RESEARCH

3.2.1 Research aims and purpose

The major aim of the research was to determine the protective factors that could foster resilience amongst first year students, for them to be academically successful. First year students need to be resilient in order to cope and conquer difficulties and achieve academically. The research purpose was to explore protective factors and resilience traits amongst first year students. The four environments (university, home, community and peers) were analysed to determine the required protective factors by the students. The following were the objectives that assisted in accomplishing the central aim:

- To explore support systems that assist first year students to cope with academic and other demands
- To determine how the university can support first year students and ensure their well-being
- To gather information on how to help first year students become successful
- To explore ways to increase the throughput rate amongst first year students

3.2.2 Significance of the research

The university is the intended beneficiary of the results of this research. At the end of the study the university should be able to:

- Increase the support for students on campus and thereby enhance students' resilience.
- Become a health promoting institution by meeting the needs of students in a holistic way.
- Enhance the throughput rate.
- Produce men and women who are ready to make a positive contribution to society.

3.3 RESEARCH METHODOLOGY

3.3.1 Quantitative research methodology

Quantitative research methodology was employed. The quantitative research methodology was used because it gathers and interprets facts without manipulating variables (Balnaves & Caputi, 2001). It uses questionnaires to collect data. Questionnaires for quantitative research in social science are usually designed with the intension of being operational and defining concepts. It is the instruments that reflect strength of attitudes, perceptions, views, and opinions (Black, 1999). It is suitable for this research because it is concerned about current conditions of learning facilities, characteristics of students, and students' perception about academic support.

The advantages of quantitative research method includes making use of standardised measures that incorporate diverse various opinions and experiences into programmed response categories (Patton, 1987). Quantitative research method is quick, cheap and collects large amounts of data through questionnaires, from different sources (Ogunniyi, 1992). Consequently, it summarises large quantities of data by a few numbers in a way that highlights the most important features of the data, therefore facilitating comparison and statistical aggregation of the data. This gives a generalizable set of findings (Antonius, 2003; Patton, 1987). It helps to understand the patterns of individual or

collective behaviour and the constraints that affect it. Quantitative methods include practical concerns such as finding solutions to the problems arising from the collection of real data and interpreting numerical results as they relate to concrete situation (Antonius, 2003).

Disadvantages of quantitative research method are that the participants may not disclose personal characteristics; the results cannot be used to predict future (Gorard, 2001); it may provide bits and pieces of unnecessary data (Ryff & Singer 2003; Ryff & Singer, 2003; Balnaves & Caputi, 2001). This means being successful at the university does not mean the availability of protective factors; unsuccessful students may have the protective factors but still struggle with their academic work.

3.3.2 Issues of reliability and validity

Validity is concerned with the extent of matching resemblance between operational definition and the concept is supposed to measure. It can be affected by bias (Babbie, & Mouton, 2001; Black, 1999). There are different types of validation, and in this study construct validation is applicable. Construct validation emphasises the meaning of the responses to one's measuring instrument. It is based upon an accumulation of research evidence and not on minor appearance (Babbie, & Mouton, 2001; Norwood, 2000; Singleton, Straits, & Straits, 1993; Labovitz & Hagedorn, 1976).

Factors that may affect the responses are: students may answer questions because they were asked, not because they thought about them or they were aware of what is happening around them. For example statement like "there is an adult at the university who wants me to be a success" Students might not be aware of that but they might think about the possible answer to the statement (Babbie & Mouton, 2001).

Reliability refers to measuring the questions with consistency, stability and dependability. That is whether a particular technique or instrument will produce same results when used repeatedly (Babbie & Mouton, 2001; Black, 1999; Singleton *et al.* 1993; Rose & Sullivan, 1996; Ogunniyi, 1984). Reliability can be guaranteed by using

established measures such as California Healthy Kids Survey (CHKS) which has proven its reliability in previous research (Babbie & Mouton, 2001).

The Resilience and Youth Development Module (RYDM) was used and it is a component of CKHS. RYDM provides reliable and valid assets measure because it has met the demanding criteria specified by an international United States resilience research panel. The RYDM is derived from an explicit research based theoretical foundation; provides the comprehensive and balanced coverage of both external and internal assets; has assured developmental and cultural appropriateness for Californian students through extensive pre-test focus groups and field testing; and has demonstrated the psychometric reliability and construct validity for each of its individual asset measures and asset clusters (WestEd, 2002). For UWC the RYDM was adapted and modified according to the context and student population.

3.4 RESEARCH DESIGN

The research design refers to putting down the mental picture according to which information is assembled, organised, and integrated to results in a particular end product. It provides overall guidance through the process regardless of instrument type, validity, reliability or objectivity (Black, 1999).

3.4.1 Procedure

Formal procedures were followed to obtain the list of 2003 first year students' details from Information Communication Services at University of the Western Cape. The invitation letters were posted to the students who registered as first year students in 2003. The researcher posted 2000 letters to both students who stay on campus and to those who stay off campus. The invitation letters invited students to the library auditorium. The library auditorium was booked telephonically. The participants started gathering in the library auditorium on the 22nd October 2004 at 12:00pm. They were given 20 to 30 minutes to fill in questionnaire but most of them took 15 minutes. Before the respondents completed the questionnaires, an introductory discussion was held highlighting the purpose of the study and how the results of the study would be used. Detailed instructions

on how to complete the questionnaires were also provided. The respondents were also encouraged to ask for assistance, should they experience difficulties when completing the questionnaires. The instructions were explained to every individual who participated (Norwood, 2000). Those who had questions had the opportunity to ask questions and there was the assistance for those who could be affected emotionally. Two people administered the questionnaires. Those were the researcher and the supervisor.

3.4.2 Data collection techniques

Data collection was done through the survey method and the utilisation of questionnaires. The accumulated data comprise of different areas that complement academic success. To start with, survey and questionnaire techniques were used to investigate the external assets, resources and internal assets that are prevalent among the university students.

The survey method involves the fact of viewing or inspecting something in detail to the act of doing so rigorously, comprehensively and finally to the written results. Surveys are carried out as an indispensable first step in measuring attitudes, the dimension of a social problem ascertaining its causes and then deciding upon remedial action (Black, 1999). The 2003 first year class was chosen through probability sampling procedures and answers were numerically coded and analysed with the aid of statistical software. Acquired information was related to various other characteristics of students. The university will decide upon the results produced by this research. Moreover, survey method involves the application of questionnaire to large group of people (Babbie & Mouton, 2001; Singleton, Straits & Straits, 1993).

The questionnaire is an instrument comprising of a series of questions that are filled in by the respondent (Labovitz & Hagedorn, 1976). Questionnaires fall under attitude scales, as they are concerned with determining the attitudes of subjects to certain things. They score subjects responses in terms of specified categories, which are then used to infer underlying attitudes (Ogunniyi, 1984).

RYDM questionnaire was used because it is concerned about human behaviour. A lot of research has been done about human behaviour in United States and the theory was

developed from the research studies. Similar characteristics can be observed from different cross-cultural studies because humans share an evolutionary heritage of capabilities and because cultures have developed similar expectations for human development as well as values (Masten, 1994). However, human individuals vary in their characteristics, cultures, and environment.

3.4.3 Background to the research instrument

The CHKS was developed under contract from the California Department of Education (CDE) by WestEd organisation, in collaboration with Duerr Evaluation Resources, under the leadership of Norm Constantine, with assistance from numerous staff at WestEd organisation and with valuable advice from a resilience assessment expert panel. The CHKS assesses the strengths, competences, and positive social and healthy attitudes and behaviours exhibited by youth. As it is a large survey, the optional component is the RYDM. The RYDM is devoted completely to assessing the internal and external assets associated with positive youth development and resilience (WestEd, 2002). It reports scores for assets scale or clusters derived from multiple items (Uys, 2003). The full RYDM contains 59 questions that measure 17 external and 6 internal assets in the university, home, community, peer group and individual as well as school connectedness scale. This research does not include school connectedness scale. The research itself has consistently and strongly linked to resilience and positive students' development. In this research RYDM was adapted with 15 more items, required students to indicate how important was the resources from the environments in their lives, during crisis and during recreation.

3.4.4 The research instrument

According to Singleton *et al.* (1993) the research instrument should include a short summary of the importance of the research. Invitation letters indicated the purpose and the importance of the research and who the researcher was, as part of the introductory and necessity of the research. The questionnaire used was in English and students had to rank their views from A-D. The questionnaire had 90 variables of which first 6 were demographic questions. The variables from 7 to 84 were the questionnaire statements.

The items elicited information regarding protective factors predicting academic success and details about the students' environments. From CHKS there are two main parts of the questionnaire that provide information on external assets and internal assets. The researcher adapted the questionnaire so that it related to the study to be pursued. The supervisor assessed the adaptations done. They were assessed for relevancy of the study and whether they pertain to the students needs.

External assets are divided into three main categories which are: caring relationships (supportive connections to others having a person who is there and who listens non-judgementally); high expectations (the consistent communication of message that the student can and will succeed, a belief in youth's innate resilience, and the provision of guidance that is youth centred and strengths focused); and meaningful participation (the involvement of students in relevant, engaging and interesting activities and having the opportunities for responsibility and contribution) (WestEd, 2002). The researcher added the fourth category which is resources utilisation, (the identification and active usage of available resources around students).

Internal assets are divided into six categories, which are known as resilience traits. Resilience traits are cooperation and communication (social competence), empathy (understanding and caring about another's feelings), problem solving (ability to plan, to be resourceful, to think critically and reflectively, and to creatively examine multiple perspective before making a decision or taking action), self awareness (knowing and understanding one's self (one's moods, thinking, feelings, strengths, and challenges)), self-efficacy (believe in one's ability to do something), goals and aspirations (having dreams, visions, and plans that focus the future) (WestEd, 2002).

Moreover, the RYDM research was not the first study on youth development. Different social science disciplines, in their long-term research on youth development and resilience, discovered that, healthy development and successful learning have a strong relationship between healthy behaviours and academic success (WestEd, 2002). For the students to perform well at the university they ought to practice healthy behaviours.

3.4.5 Sample

In survey studies information is collected from part of a group in order to make generalisations about the population (Singleton *et al.* 1993). Sample is a group of subjects drawn from the large population to represent the population and it is supposed to have the same characteristics of the population at large. Subjects' selection depends on several crucial questions, for example what is the unit of analysis. It could be students or HIV/AIDS patients (Singleton *et al.* 1993; Labovitz & Hagedorn, 1976). Students sample was selected by probability sampling. Probability sampling removes the possibility that bias on the part of researcher will enter into cases selection and it is scientific control. Again, the researcher knows to which population the sample may be generalised as well as the limits of generalisability (Uys & Puttergill, 2003; Balnaves & Caputi, 2001; Singleton *et al.* 1993).

The probability sampling includes random sampling, which is where a set of scores is picked without prejudice or bias and purely by chance (Norwood, 2000; Black, 1999; Ogunniyi, 1984). The population members may not all come. "The rule of the thumb is that, between one fifth and one twentieth should be an adequate sample of a population in which the characteristics are randomly distributed" (Rose & Sullivan, 1996; Ogunniyi, 1984). In this research the population number is plus or minus 2000 and only 162 students participated and the researcher could not identify who came and who did not (Black, 1999).

3.4.6 Participants

Students who registered as first year students in 2003 were selected for this research. The 2003 first year students were chosen because they completed their first year not too long ago and data was collected October 2004. The rationale was that they could remember many things that happened. The research aimed at receiving information from 200 randomly selected, successful and unsuccessful students. The method used to draw a portion of students, gave each group of students the same probability of being selected (Creswell, 2003, Singleton *et al.* 1993 & Black, 1999). From the research the sample does not have randomly distributed characteristics, the successful students were much

more than the unsuccessful students (successful students were 131, unsuccessful students were 31). Within each group also, the characteristics were not randomly distributed in terms of faculties, gender, age, and current year (Stern, 1996). The researcher needed to explore what was useful during the course of the year of their study. Moreover, the university support is not explained in terms of the support from each faculty but in terms of the university support in general.

Below is the pie chart that shows the overview of the number of unsuccessful students and successful students who participated in the study. It is produced from one independent variable, which is current year.

Figure 3.1: An overview of first year students and second year students who took part in the research
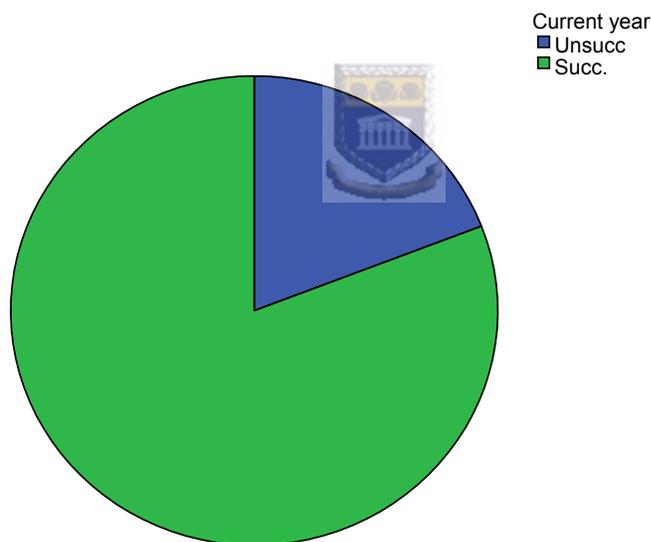
Nineteen percent of the unsuccessful students took part in the research and the successful students who participated comprised 81%. This is plus or minus 10% of the whole population of the 2003 first year students' class.

3.5 DATA ANALYSIS

Data analysis concerns the description and explanations of variance and the combination of the two, also the analysis is concerned about finding a way of categorising a variable (Rose & Sullivan, 1996). Descriptive analysis makes use of simpler forms of analysis like cross tabulations. Descriptive statistics are concerned with interpretation and summarization of frequency distribution and percentage distribution of a variable. Such distribution involves analysing one variable or two variables or three or more variables in conjunction that is associating one variable with the other (Babbie & Mouton, 2001; Norwood, 2000). The kind of statistics that can be used for summarization and interpretation will depend on the level at which the variables are measured which was nominal (Rose & Sullivan, 1996). Furthermore, descriptive statistics assess the strength of the relationship between variables (Rose & Sullivan, 1996). In this research the relationship between four environments and resources was assessed to draw conclusions on what predicts academic achievement and success. In each stage in theorising and analysing process of analysis, the loss of some information is involved, this happens for the researcher's ability to understand social process (Norwood, 2000; Singleton *et al.* 1993; Rose & Sullivan, 1996). The loss of some information reduces the analyses to two or more constants and thereby explains the variability concerned. The 84 variables were reduced to 19 external assets, 3 resources and 6 internal assets.

The variance is described simply by measurements. The level of measurements determines the kinds of analysis that may be performed (Rose & Sullivan, 1996). In this case the responses were assigned numerals. The purpose of using numbers is: Numeric measurements tell the researcher that one thing is different from the other and responses are assigned numerals in order to make distinction clear and make easy to calculate percentages (Rose & Sullivan, 1996). The study was aimed at developing a profile of the first year learners at University of the Western Cape. Data obtained was descriptive. Data were presented and described via explorative and descriptive statistics (Babbie & Mouton, 2001).

Exploratory approach is normally an examination of a new interest or when the concept is relatively new. Again, exploratory approach attempts to obtain approximate answers (Babbie & Mouton, 2001). It is done to give a researcher deep understanding to test feasibility of understanding a more extensive study to develop a new research question. It also can be conducted by means of survey of people who have had practical experience of the problem to be studied (Babbie & Mouton, 2001). It was the first time the research was conducted on what the university can do to foster resilience in students, for them to become high academic achievers. The primary data were collected for this purpose. Unsuccessful students' percentages and successful students' percentages provide a picture of students' opinion about what makes them cope with academic difficulties. The purpose of the research was to explore, describe and explain environments, resources and personality traits.

Data processing technique: Data processing refers to the preparation of collected data. Data need to be checked in 5 steps to make it servable for analysis, which are, coding, editing, data entry, data cleaning and data modification (Babbie & Mouton, 2001, Singleton *et al.* 1993).

The Statistical Package for the Social Sciences (SPSS) version 12.0.1 for windows was utilized to analyse the data. The gathered information had to be summarized in tabular or graphical forms, to provide basis for further research and to formulate a clear picture of the present status (Ogunniyi, 1992). SPSS provides an interactive facility for the analysis of social science data. The SPSS file contains raw data and identifies to the computer on which lines and in which columns of the data the different variables are coded (Rose & Sullivan, 1996). SPSS is also used to give labels to different variables categories, and to specify missing value codes. Moreover, SPSS calculate its statistics using the category codes rather than the actual data (Rose & Sullivan, 1996). To clean and modify the data frequencies were run. All the discovered mistakes were corrected. The contingency table was done to identify the statistically significant questionnaire statements. Cross tabulation or contingency table joins frequencies for two variables classified into categories (Norwood, 2000; Rose & Sullivan, 1996). It involved chi-square test. Chi-square test assists to determine the statistically significant statements. Cross tabulations

were run with the focus on current year as independent variable. Additionally chi-square compares groups by looking at frequencies (Rose & Sullivan, 1996). Table 1 shows the Chi-square test reflecting statistically significant statements. The environments for these statements can be checked from the questionnaire in appendix B

Figure 3.2 Chi-square test table showing statistically significant statements

Statements	Chi-square
who notices when I am not there (item 8)	.028
I do things that make a difference (item15)	.038
who cares about me (item18)	.018
who talks with me about my problems (item29)	.038

In social science there is a need to use inferential statistics to make claims about the population parameters based on a sample. The combination of simple description measures of association and inferential stats was used when describing the relationship between variables. Inferential statistics allow judgements to be made about the likely reliability of our sample estimates of means, proportions, etc Rose & Sullivan, 1996). The research would rely on the sample because students who contributed their views represent the students who registered as first year students in 2003. In addition, inferential statistics determine if the relationship is statistically significant given the sample size (Rose & Sullivan, 1996).

3.5.1 Process of analysis

The structure and the design of the questionnaire assisted in coding data into numerical format. The coding process was performed during data analysis (Rose & Sullivan, 1996). Data analysis looks at anticipated relationships among a set of variables, which will determine kind of statistical analysis that are possible and what alternative relationship may be analysed. The percentages were calculated to determine the relationships between variables.

From the study, the results are reported in three sections: the external assets in the university, home, community, peers, the resources utilisation and the internal assets

Students had a choice in indicating for each item in the questionnaire how much it applied to them, as follows

4: -very much true,   -strongly agree,   -extremely important
3: -pretty much true,   -agree,   -important
2: -a little true,   -disagree,   -slightly not important
1: -not at all true,   -strongly disagree,   -extremely not important

The values 4,3,2,1, attached to each response option were averaged and then the following score categories were derived.

High   -percent of students with average item response above 3;
Moderate -percentage of students with averaged item response of at least 2 but less than or equal to 3
Low   -percentage of students with average item response below 2

A chart showing the summaries of percentages of students who responded in the high category and other several charts showing all three categories were produced.

3.6 ETHICAL CONSIDERATIONS

Ethical choices involve a substitution or compromise between the interests and rights between different parties (Babbie & Mouton 2001).

Purpose of the research: Participants were told and knew why they were chosen and why the research is being conducted. Participants were further instructed that they could not expect special rewards (Babbie & Mouton, 2001; Singleton *et al.* 1993).

Confidentiality and anonymity: In this research confidentiality and anonymity were respected. The information given was kept safe and was not used unfairly to compromise the research. The subjects were convinced that the results will have no

personal consequences against them (Singleton *et al.* 1993; Babbie & Mouton 2001; Black, 1999). Every individual who has access to the information is obliged to maintain confidentiality.

Voluntary participation: Participation was voluntary no one was forced to participate. There was no payment for completing the survey. (Babbie & Mouton 2001; Singleton *et al.* 1993).

Withdrawal: Students were free to withdraw anytime they feel like without any penalty. If they chose to withdraw that would not have any impact on their studies (Singleton *et al.* 1993).

Students' well-being: They were allowed to give their comments or concerns or further questions about the study. And those who would be affected by some of the statements were told to meet with the supervisor, as she is a Psychologist by profession.

Confidentiality of research records: This research study has been reviewed and approved by the Senate Higher Degree Committee. The report will be in the form of a dissertation. Again the results of the study will be used for research purposes only in the context of this study and they will have no personal consequences for the subjects or the researcher.   The copy of this research will be made available to the university at the completion of the project (Black, 1999; Singleton *et al.* 1993).

3.7 CONSTRAINTS AND LIMITATIONS OF THE RESEARCH METHOD

The researcher was aware that the following can cause invalid results: misinterpretation of questions due to vocabulary; local use of words or limited vocabulary of respondents; the state of mind of the participants during the session; uncommon that is intentionally misleading responses and if subjects are not convinced of the value of responding and the vitality of the research, especially students who came late because they did not get full instructions or motivation (Black, 1999)

The research focused on class of 2003 and students who dropped out were not there to give their opinions. Students might be getting support from their faculties and it might

not be the same support from different faculties. Moreover, some students were still in first year not because they failed but because they moved from one faculty to the other, others had the sponsors that accommodate first year students only so they had to stay in their first year to get a particular sponsor. These kinds of sponsors may be scheduled in a way that they take a certain number of students every four years or three years.

There was no equal number of students from each faculty. Letters were written to all students of all faculties, although EMS faculty and Community and Health Sciences faculty students were dominating. That had the impact on the results because different faculties have different support for students.

The data was collected two weeks before the final exams and students might have seen the research as time consuming. They might have answered the questions because they were asked and not be thoughtful about the questions especially questions which demanded thinking, like resources used during crisis. Choosing mostly in the middle could be due to poorly worded questions that do not stimulate students to take a stand.

The questionnaire used was adapted from California Healthy Kids Survey, which was made for American youth. While it was tested on South African youth (Johnson, 2005), it was not utilised for first year university students before.

3.8 CONCLUSIONS

Quantitative research involves a lot of preparation to come up with the valid and reliable results. In this chapter, quantitative study methodology, ethical statement, data collection, and analysis in particular was researched thoroughly, through the processes examined above. The sampling method, data collection techniques and their importance, and relationship between variables were discussed. The CHKS, through RYDM, assess youth competences and strengths in a more manageable way. The findings of the research will be dealt with in chapter four.

CHAPTER FOUR

RESEARCH FINDINGS

4.1 INTRODUCTION

This chapter reflects the findings of the research. The data that were analysed comes from a survey based on the California Healthy Kids Survey (CHKS): Resilience Youth Development Module (RYDM). The research was conducted in October 2004 at the University of the Western Cape. The findings of the survey are presented in percentages, tables and graphs, which represent the summary of external and internal assets. Lastly, the summary of findings is provided.

The results will be discussed with the following research questions in mind, as presented in chapter one and three.

- What makes first year students cope with academic and other demands?
- What can the university do to support first year students and to ensure their well-being?
- How can the university help first year students become successful?
- How can the university increase pass rates or throughput rates among first year students?

Rose and Sullivan (1996) indicated that generalisations regarding the whole population of the sample could be done as long as its size reaches the standards of the representative sample. The details about the sample representing the whole population concerned were explained in the previous chapter. As a result generalisations regarding the 2003 first year class were done to the whole population of 2003 unsuccessful and successful students.

4.2 PRESENTATION OF FINDINGS

The results that are reported are presented in a way that follows resilience logic. This logic states that rich external assets create rich internal assets. The results are presented in sections, the first section deals with background of external assets (Caring relationships, High expectations, Meaningful participation, Resources); the second section presents external assets per environment (University, home, community, peers); the third section presents resource utilisation results. The utilisation of resources does not specify the environment. For example if it says technical resources during crisis, students were supposed to indicate whether the resources were helpful or not regardless of the environment providing the support. Section four provides internal assets; and lastly, section five presents the results per internal asset that students retain.

The discussions accompanying the results are designed to foster understanding of their relevance, provide a framework for action, and determine what is required for first year students to adapt and cope on campus, and to work out strategies that can promote resilience among students.

4.3 INTERPRETATION OF FINDINGS

The resilience approach focuses on environmental change in providing protective developmental support and opportunities that in, turn, will engage students' innate resilience and develop their capabilities for positive developmental outcomes. The existence of external assets nurtures the development of internal assets. Students who scored high on internal assets elucidate the presence of caring relationships, high expectations, and meaningful participation in their lives from four environments (university, community, peers, home).

The three assets (caring relationships, high expectations and meaningful participation) work interchangeably with each other and they produce similar qualities for students. Caring relationships is the critical factor protecting healthy and successful university students. It meets the needs for safety, love, belonging, and meaning. Consequently it develops cooperation and communication and empathy. High expectations foster caring

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relationships. It meets the need for respect, challenge, meaning, and as a result develops or nurtures autonomy, identity and self-control. Meaningful participation provides some control and ownership over ones' life. It meets the need for belonging, mastery, challenge, power, and meaning. Students experiencing a lot of meaningful participation develop cooperation and communication, problem solving, self-efficacy, goal and aspiration skills.

The results revealed that support from the university could be improved, because the percentages indicating support at the university ranged from 19% to 30% for successful students, and 21% to 29% for unsuccessful students. Again the difference between unsuccessful students' responses and successful students' responses was not statistically significant. It indicates that the experiences in terms of support provision for the two groups were not necessarily different.

4.4 EXTERNAL ASSETS

4.4.1 Overall external assets results

Figure 4.1: Overall percentage of students scoring High in Each External Asset across all four environments (University, Home, Community, Peers).
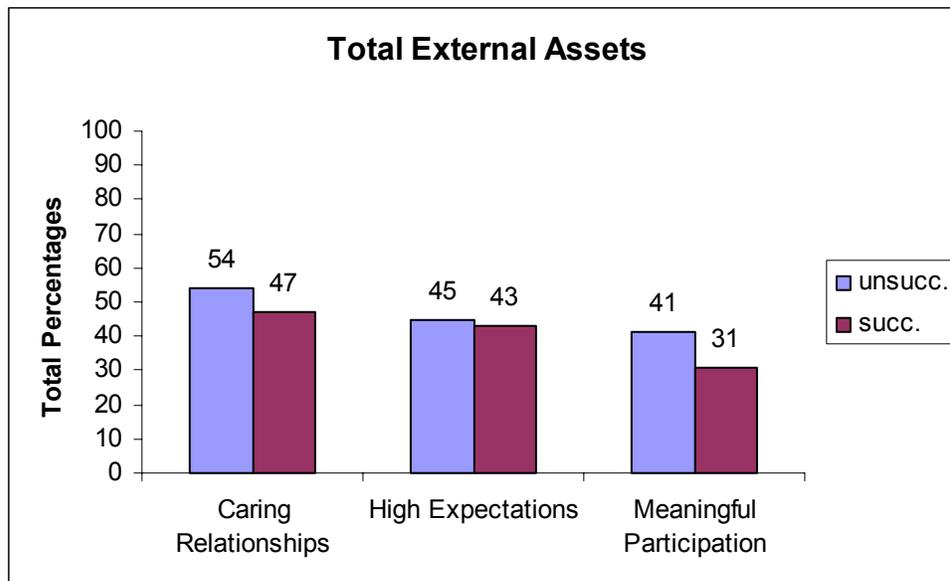
Caring Relationships are supportive connections to others in the student's life who model and support healthy development and well-being. Different human development studies have identified caring relationships as a critical factor for successful child and youth development in the face of much environmental stress, challenge and risk (WestEd, 2002). These relationships convey that someone is there for students and to shows that someone is actively listening and talking with them. Pines (1993) in Strumpfer (2003) talks of creative use of social support, which include active listening without giving advice or judging. Resilience research has stated that these transformative caring relationships can be from a family, extended family, educator, neighbour, minister or a friend. Once more caring relationships remain fairly consistent despite the environment being examined (WestEd, 2002). The UWC Students were asked their perception about caring relationships from the university, home, community and peer environment. Figure 4.1 shows the results. If these relationships are rich students will not hesitate to face challenges and take risks, and if it is poor they may not be strong enough to cope with academic stress. The total score on Caring Relationship for unsuccessful students is 54% and for successful students is 47%. Caring relationships could therefore be improved for both groups.

High Expectations are consistent communication of direct and indirect positive messages that a student receives. They emerge from caring relationships. They are about students' success and the belief from home, university, community, and peer, environments that they will be a success. They reflect the adults and friends' belief in the students' innate resilience and ability to learn. WestEd (2002) indicated that previous research declares high expectations to be the corner stone of students who have conquered the odds. High expectations conveys firm guidance in terms of providing clear boundaries and structures, is vital for creating a sense of safety and predictability, and exploration necessary for developing autonomy, identity and self-control (Emmons, 2003). The high expectations asset is a strengths-focused asset and it identifies one's unique strengths and gifts. It matures them, and uses them to work on needs. Students will each get different messages suitable for one's intelligence or talent. An environment rich in high expectations enables students to notice their capabilities (WestEd, 2002). RYDM asks students their

perceptions of the messages they receive from adults at the university, home, community and friends. Figure 4.1 illustrates the results of the total High Expectations students experienced. The unsuccessful students score 45% and successful students score 43%. This provides evidence that caring relationships, as a predictor of High Expectations was not sufficient from all the environments.

The environments' natural outcome is to provide opportunities for students to participate meaningfully within the setting. This conveys the environments high expectations about students (WestEd, 2002). Meaningful Participation refers to engaging students in relevant and interesting activities with opportunities for responsibility and contribution. Meaningful participation, meets the fundamental human need to have some control and ownership over one's life (WestEd, 2002). It enhances positive development outcomes, like reducing health risk behaviours and increasing academic factors. It can also be assured by giving students valued responsibilities, like including them in planning and decision making and giving them a chance to contribute in helping others, in their communities. RYDM asks students if opportunities for Meaningful Participation existed from the university, home and community. Figure 4.1 illustrates the results of students' perception about Meaningful Participation in their lives. The total score for unsuccessful students is 41% and for successful students is 31%.

In summary, across all three domains it seems that meaningful participation needs most work, followed by high expectations and then caring relationships. UWC needs to look at opportunities for students' participation. These three assets develop consistently in students: one influences the other. Caring relationships should take its course, which will lead to high expectations. High expectations open the doors for meaningful participation because students will be trusted to perform some serious duties in their respective environments. While the to and fro movement takes place between assets, adults, friends, lecturers, or mentors should be there to provide developmental support and opportunities for students. This may create within students the spirit of trying activities of higher level from their understanding. Once more students will build schemas to add on their knowledge and skills.

4.4.2 External assets results per environment

(a) University environment

Both unsuccessful students and successful students' results indicate that they did not receive optimal support from the university. This is illustrated by the 25% on High category, which both groups scored for caring relationships. Only 21% of unsuccessful students and 30% of successful receive high expectation messages. Twenty-nine percent of unsuccessful students and 19% of successful students scored high on meaningful participation. The difference between high expectations and meaningful participation percentages is more or less the same for both groups of students. Successful students received more positive messages and unsuccessful students participated more meaningfully than successful students. There is room for improvement as far as the three assets are concerned.

Figure 4.2 University environment: Percentages of Students Scoring High in Each External Asset
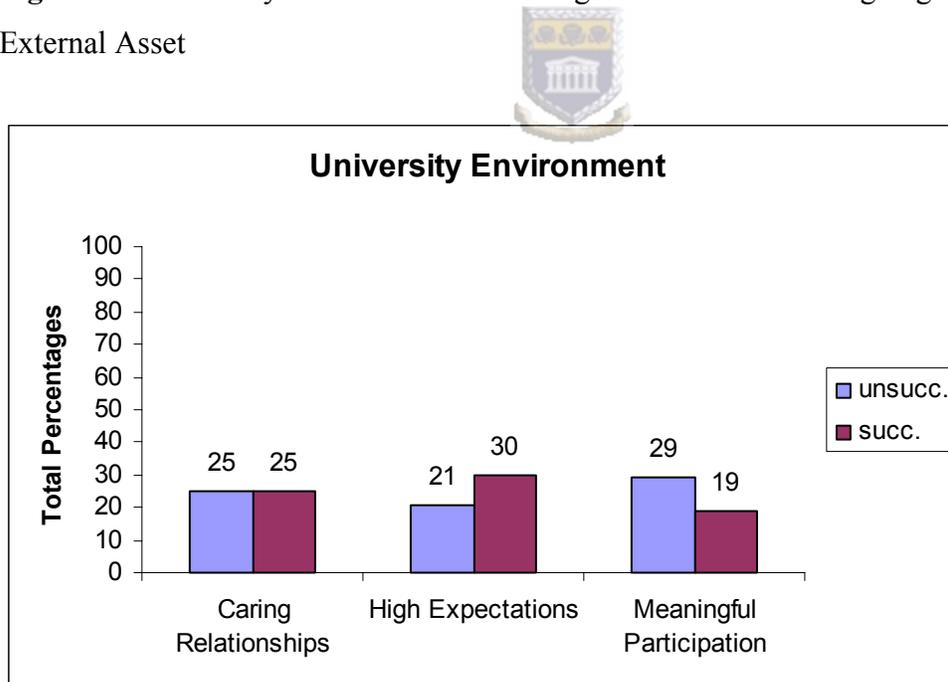
(i) Caring Relationships: Low percentages on Caring Relationships mean that few students have supportive connections from people at the university, who can model and support healthy development and well-being. It seems that very few experienced

individuals at the university who have an interest in the individual students or are actively listening and talking with them. Most students did not really feel close to or safe at or a part of the university.

(ii) High Expectations is the consistent communication of direct and indirect messages that a student can and will succeed sensibly. It is also the support and guidance students receive to make this happen. Twenty-one percent of unsuccessful students and 30% of successful students demonstrated that they received enough messages about their success from the university. There were very few adults who they believed really cared about them or who always wanted them do their best or who believed that they would be a success or who expected them to follow the rules. There is need for the university to improve the support and guidance to make students feel that the university has high expectations of them.

(iii) Meaningful Participation refers to the involvement of the students in relevant engaging and interesting activities with opportunities for responsibility and contribution. With 29% of unsuccessful students and 19% of successful students, who scored high for this asset, it seems that students' voices are rarely heard and students' opinions are seldom valued. Students were hardly involved in interesting activities or in sports, clubs, or other extra curricula activities at the university. They rarely did things that make a difference or helped other people. They were less involved in deciding things like lecture room activities or rules.

(b) Community environment

Community refers to people living with students in a particular local area and whereby students function to the best of their ability to grow. People in the community share common interests, ideas and feelings over collaborative networks.

Figure 4.3 Community Environment: Percentages of Students Scoring High in each External Asset
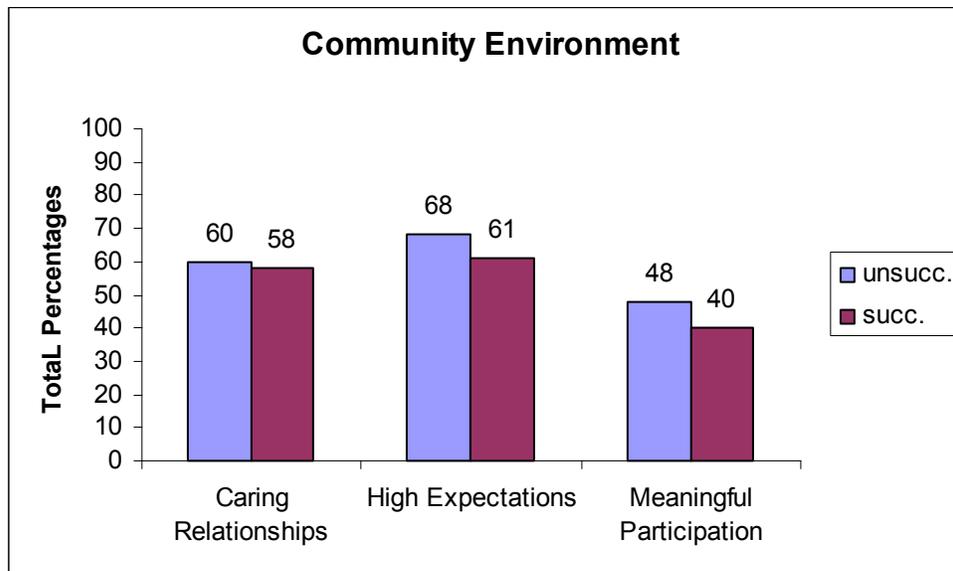
(i) **Caring Relationship**: Sixty percent of the unsuccessful students and 58% of successful students scored High on Caring Relationships in the community. Both groups' communities were relatively caring because they both scored above 50%. There is therefore adequate support but it can be improved. The percentages demonstrated that in the students' communities there is an adult who cares about them and who tells them when they do a good job. Again the adults in their communities notice when they are upset about something.

(ii) **High Expectations**: Sixty-eight percent of unsuccessful students and 61% of the successful students indicated that it is very much true that adults in the community believe they would be a success and they always want students to do their best. Again they indicate that they trust the adults in their communities. The adults nurture the identity and self-control in students. This might be because they want students to represent their community. The percentages reflect that students feel recognised in the community.

(iii) Meaningful Participation: Students' communities seem not to provide enough or give students enough activities to participate. Unsuccessful students' score is 48% and successful students' score is 40% on Meaningful Participation in the community. It seems that students were not that much involved in community clubs, sports, team, church or other group activities like music, art, literature etc. They were seldom given many chances to help other people in the community and they seem not to have much of a voice in the community. Students experience less power, challenge and mastery, which may lead to students having underdeveloped cooperation and communication, problem solving, self-efficacy, and goals and aspiration.

(c) Peer environment

Peer influence is regarded as the most powerful developmental force (WestEd, 2002). In most cases peer pressure is interpreted to be negative. However, resilience research has identified its positive influence. Peers can role model positive behaviour for others. According to WestEd (2002) if students experience desirable peer relations from the two external assets (community and home), their need for love and belonging, respect, accomplishment, identity, power, and meaning in positive ways will be met. There is no distinct peer environment whereby students can participate meaningfully. What students do is either at home, university or in the community (WestEd, 2002). The following chart represents the percentages of students who think they received caring relationship and high expectation messages from their peer environment.

Figure 4.4 Peer Environment: Percentages of Students Scoring High in Each External Asset.
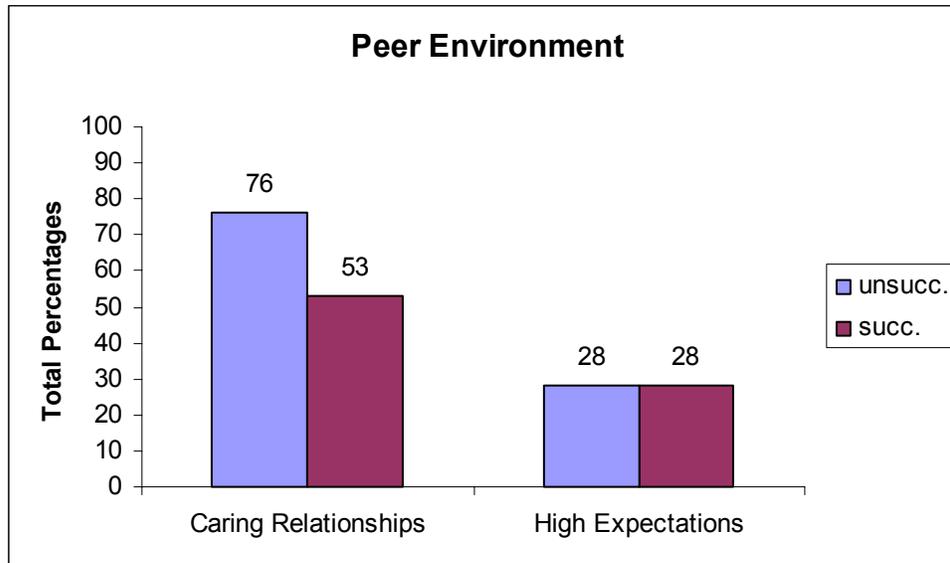
(i) **Caring Relationships**: Seventy-six percent of unsuccessful students and 53% of successful students indicated that it was very much true that they experienced and had Caring Relationships from their peers. With unsuccessful students the high score could be the result of spending much time with friends rather than studying. Successful students' peers seemed to care less about their peers and talk less with them about their problems; they may be using most of their time to study. Fifty-three percent of successful students seemed to have peers who care about them during hard time. The existing situation needs improvement. Students need to have high expectations about each other.

(ii) **High Expectations** is one external asset, which is lacking from peers. Students' peers seem to not expect them to do the right thing. This is illustrated by the 28% scored by the unsuccessful students and successful students. The above percentages of students were the only ones whose peers tried to do what was right and did well in their academic work. Students' peers did not seem to have High Expectations for them. They need opportunities to form positive healthy peer relationships both during lecture hours and after lecture programmes.

(d) Home environment

Home is the one place where students need to feel connected and have positive family experiences. Home environment is the most powerful protective factor in the lives of young people (WestEd, 2002). Moreover, the reason for parents to take their children to schools or universities is because they are attracted to and have interest to places that support and provide opportunities for students to grow holistically, and meet their basic need for belonging, respect, self-efficacy, and meaning to live (WestEd, 2002). Figure 4.6 presents the percentages of students who scored High on caring relationships, high expectations and meaningful participation.

Figure 4.5 Home Environment: Percentages of Students Scoring High in Each External Asset.
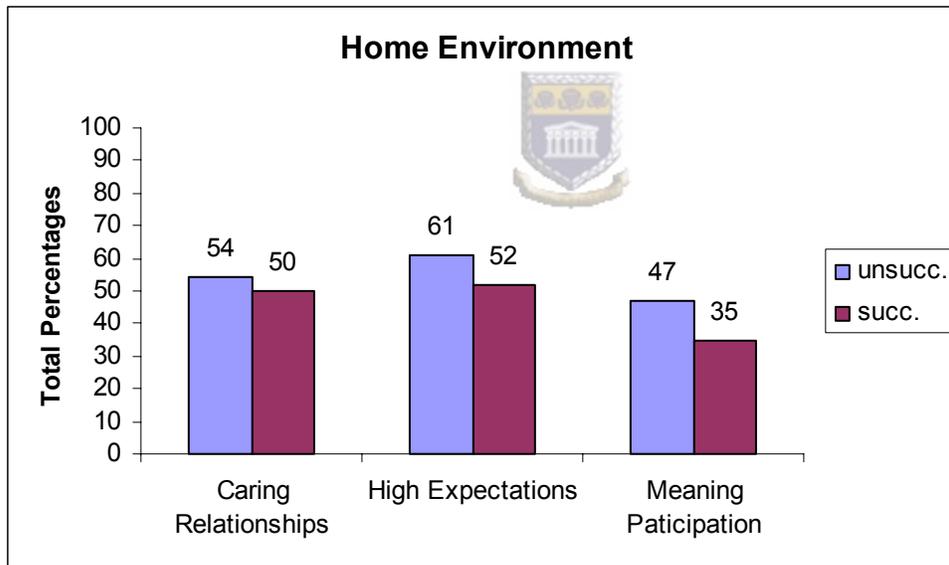
(i) Caring Relationships: Fifty-four percent of unsuccessful students and 50% of successful students indicated Caring Relationships at home to be existent. They have adults to talk with about their problems, adults who are interested in their academic work and adults who listen to them when they have something to say. According to WestEd (2002) that enhances empathy in students; they might also care about others on campus. As only about half of the students scored high, there is a room for improvement. The

university can create early intervention support services for students and for improvement on this asset.

(ii) High Expectations: Sixty-one percent of unsuccessful students and 52% of successful students have adults who expect them to follow the rules and adults who want them to do their best and who believed they could be a success. Home environment appears, as it is supportive for both groups of students because they both scored above 50%. Unsuccessful students seem to have received more positive messages than the successful students. However, it seems the adults in both unsuccessful students' and successful students' home believe in students. This particular asset needs to be improved so that students become autonomous and more independent.

(iii) Meaningful Participation: Forty-seven percent of unsuccessful students and 35% of successful students experience meaningful participation at home. The natural outgrowth of experiencing High Expectations for students is that they feel they are acknowledged as valued participants in the family. Students seem to have less chance to contribute in decision-making, power and responsibility. That may mean that most students are not learning the critical predictor of healthy outcomes like self-management and control. The above asset needs to be improved by the students' families and the university.

4.4.3 Overall resource utilisation

Figure 4.6 Overall Percentages of Students Scoring High in Resources
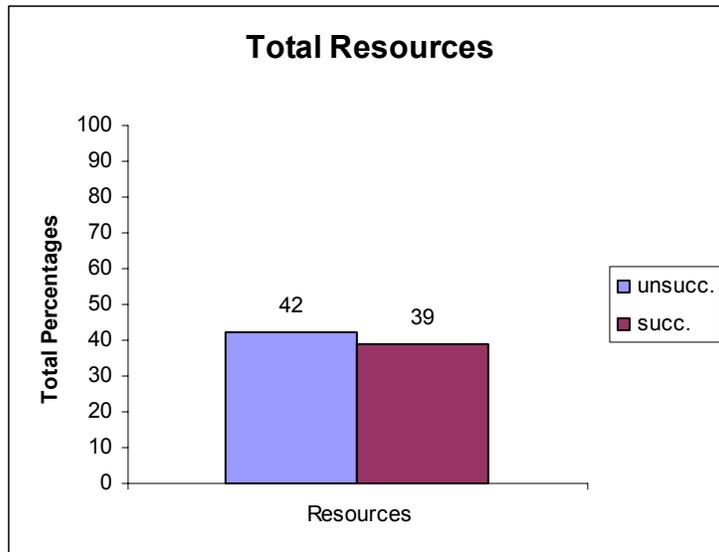
Resources refer to the aids available for students on campus, especially human resources. The resources make adaptation easier and faster because students get a chance to interact with senior students through mentoring during orientation period. Resources are divided in three categories, which are human resource during crisis, technical resource during crisis and technical resource during recreation. Frydenberg (2003) indicated that students who seek formal (professional help) and informal help (family or friends help) are said to cope well with their daily concerns. Some students use their academic work as recreation activity and get to know their work better (Strumpfer, 2003). During the interaction with senior students, they can listen to each other and to adults' experiences, and learn or develop unique strategies for dealing with stressful situations, especially examination stress. Students can develop their own frame of reference. For this environment, students were asked their perception about the human and technical resources on campus that they use during crisis and technical support during recreation, respectively. Figure 4.2 shows the results: unsuccessful students score 42%and successful students score 39%. In general the percentages imply that students did not use available resources much during crisis or for recreation.

4.4.4 Resources during crisis and recreation

Resources refer to the assets available and anticipated for operations. They include people, equipment, facilities, and other things used to plan, implement and evaluate the invented programme. Figure 4.7 presents the percentages of students who scored high on each type of resource.

Figure 4.7 Percentages of Students Scoring High on Each Type of Resource
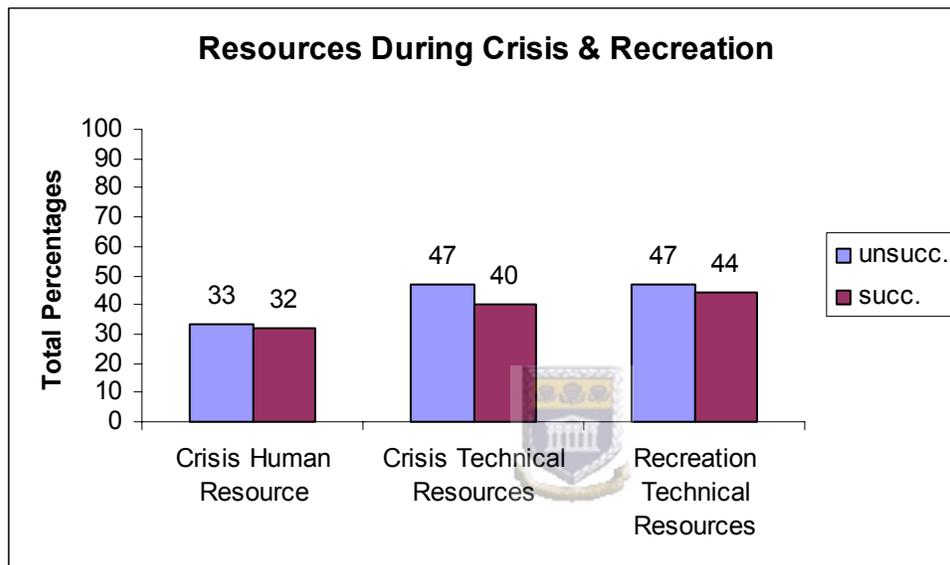
(a) Support during crisis: Pines (1993) motivates for creative use of social support, which includes formal and informal support (Strumpfer, 2003). There are periods when students are under stress, this section provides information about the strategies students use to overcome stress and function optimally again. Stressful students lack concentration, which can affect their academic performance. The support that students get during a crisis helps them to get back on track. The resources are classified into two categories, which are human resources and technical resources.

(i) Human resources during a crisis: refers to the people students consult during stressful situations that they face. During crises students need support to survive the adversity or trauma. The support should encourage students to become independent during stressful periods. Thirty-three percent of unsuccessful students and 32% of

successful students indicated that they consulted human resources during crisis. That is, less than half of students scored High. It appears that human resource during crisis is rarely important to most students from both groups. This area needs to be improved. Few students consult their lecturers, university psychologists, counsellors, librarians, and administrators etc.

(ii) Technical resources during a crisis refer to the technical equipment and clubs or units that students turn to during crisis. Forty-seven percent of unsuccessful students plus 40% of successful students scored high on technical support during crisis. The support they received was inadequate, and it needs improvement. It seems less than half of students use technical support during crisis. It seems as if it is not important or accessible for most students.

(b) Support during recreation: This refers to leisure activities that inspire and which students engage in during their own spare time (Wrzesnicwski, Rozin & Bennett, 2003). Physical well-being is important because it keeps students active and enhances learning. For students to perform well academically, they need to exercise to keep their minds and bodies energetic. The lack of exercise may lead to lethargy and weak muscles. Availability of different sporting activities at the university gives students a diverse choice and provides opportunities to experience different games.

(i) Technical support during recreation: leisure activities have intrinsic value and students engage with them for enjoyment (Wrzesniewski, Rozin, & Bennet, 2003). Less than half of students indicated that they accessed support during their leisure time. The 47% of unsuccessful students and 44% of successful students, who indicate that it is pretty and very much true that they do sports during recreation, reveal this. However, most students give the impression that they did not use Internet, watch television, go to the library or join church societies/sports clubs during recreation. That possibly led to students having less social competence.

4.5 INTERNAL ASSETS

"The internal assets of the RYDM are not intended to measure whether a student is resilient or not. Rather, they should be seen as outcomes of the youth development process and as indicators of whether the necessary environmental support and opportunities are in place" (WestEd, 2002:31). Students who display these outcomes are said to be resilient. The outcomes portray the capability that students possess inside as the result of the support the students receive. The expectation was that students would score high on internal assets, if their environments were providing adequate external assets.

Students learn by observing adults' behaviour and adults approach to difficulties or how they treat each other. For this reason adults need to model the internal assets for students by showing signs of the desired behaviour and attitudes, intentionally discuss and reflect back the desired behaviours and attitude (WestEd, 2002). For the university to have long-term positive behaviour change outcomes, it has to pay attention to the external assets. That is it has to deal with environmental change first. The following chart shows the percentages of students scoring low, medium, and high in each internal asset.
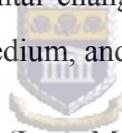
Figure 4.8 Total Internal Assets Scores (Low, Medium, and High)
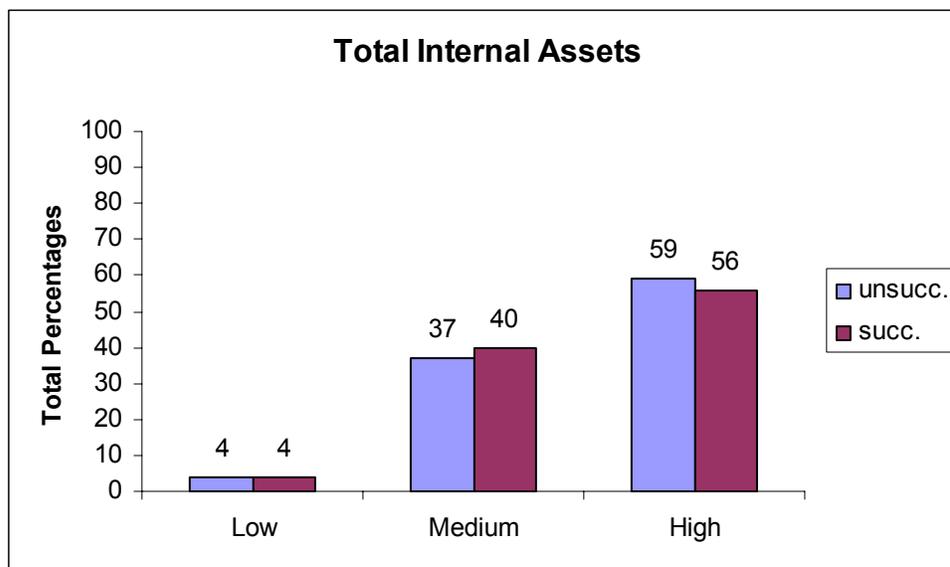
Internal assets are said to be the outcomes that an individual displays and they form a part of personality. They should be observed as outcomes of the students' developmental process and as indicators of whether the necessary environment support and opportunities are in place. Resilience youth developmental process is identified by means of three items. Item one is about the individual qualities and characteristics e.g. Skills, attitudes, beliefs, and values, that emerge when a student is being nurtured in an environment rich in caring relationships, high expectations, opportunities for meaningful participation, and utilising existing resources effectively. Item two deals with the personal strengths, which are associated with healthy and successful adult outcomes. Lastly, item three deals with positive outcomes of the student development, and focuses on environmental change providing the protective developmental support, and opportunities that meet the student's developmental needs and thus engage students' innate resilience. Innate resilience incorporates the capability for cooperation and communication, self-efficacy, empathy, problem-solving, self awareness, and goals and aspirations (WestEd, 2002)

Below is the list of internal assets measured. High scores on these items foretell high academic achievement and the existence of external protective factors. They are the individual characteristics and strengths referred to as emotional intelligence or social emotional literacy (WestEd, 2002; Wissing & Van Eeden, 2002). (The description of the items can be checked against the questionnaire in appendix A). The following chart presents the percentages of students who scored high on each internal asset.

Figure 4.9 Percentages of Students Scoring High on Each Internal Asset
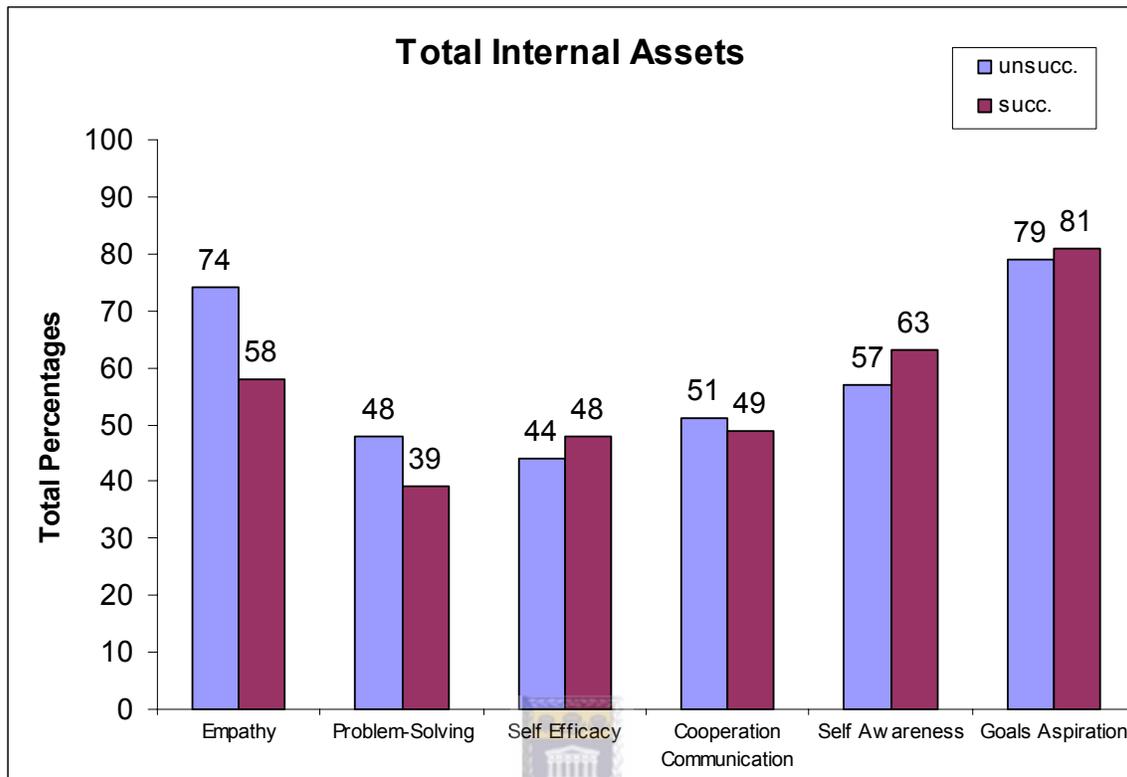
(a) Empathy includes understanding and caring about others experiences and feelings. It is essential for healthy development and the root of morality and mutual respect. In addition, empathy demands a quality of ethical calmness (Strumpfer, 2003). It can be judged through an individual attribute in resilience and ones emotional intelligence. Seventy-four percent of unsuccessful students are empathetic; it appears as though they try to understand what other people go through. Fifty-eight percent of successful students scored high on this item. Unsuccessful students are more into caring for others' feelings. Successful students seem to be less empathetic; it seems they seldom try to understand what others are going through. They need to improve their level of understanding others and their experiences. That may enhance others level of academic performance because they will not need to go through difficult times alone.

(b) Problem solving is being able to plan, to be resourceful, to think critically and reflectively and to creatively examine different approaches to a problem before tackling a

specific problem (Cassandro & Simonton, 2003). Forty-eight percent of unsuccessful students know where to go for help and they indicate that they try to work out problems by talking or writing about them. Only 39% of successful students scored high on this item. Both groups of students scored below 50% on this asset. They also scored below 50% from each environment in Meaningful Participation, as it is the asset trusted to provide opportunities for students, to improve and build on their internal resources and skills. The percentages scored by students from each environment range from 19% to 47% from the High category. It seems to indicate that students are not involved in decision-making or given a chance to creatively inspect multiple perspectives before taking action, on their own.

(c) Self-efficacy refers to believing in ones own competence and feeling one has the power to make a difference. It relates to several positive behaviour like task mastery, sense of doing something well, self-agency and being assertive. It also assists in developing ones identity and a sense of self. Self-efficacy entails believing in oneself. Forty-four percent of unsuccessful students can work out their problems and do many things well. Forty-eight percent of successful students can do most things if they try and can workout their problems. Less than half of students scored high. The university needs to provide more opportunities where by students can improve their skills for task mastery, have a sense of achieving and self-agency.

(d) Cooperation and communication refers to possessing flexibility in relationships, the ability to work effectively with others, to exchange information and ideas effectively and to express feelings and needs to others. Fifty-one percent of unsuccessful students and 49% of successful students scored high. Both groups seem to have moderate social competence, which can impact on their development especially the development of Caring Relationships, which is the powerful protective factor.

(e) Self awareness refers to knowing and understanding one-self that is in terms of developing an understanding of how one's thinking influences one's behaviour, feeling and moods. It is also an understanding of one's strengths and challenges. Students need to be aware of what is happening around them instead of being lost in a new situation or

experience. Self-awareness has more to do with adaptation to campus life and culture. It is the basis for other assets like self-control and insight. Fifty-seven percent of unsuccessful students know and understand themselves because they indicated very much true to the fact that they understand their moods and feelings. Sixty-three percent of successful students scored high on this item. That may mean that students are aware that their perception influences their behaviour and feelings. Again they seem to understand their strengths and challenges because they know why they do what they do. Both groups seem to understand that there is purpose in their lives.

(f) Goals and aspirations refer to being able to use ones dreams visions and plans to focus ones future. Goals and aspirations reflect the intrinsic motivation that guides human development, they reflect the search for meaning at the heart of every human life (Emmons, 2003; Nakamura & Csikszentmihalyi, 2003; WestEd, 2002). They also assist individuals to stay by positive development outcomes and protect individuals against negative developmental outcomes, like unplanned pregnancy, dropout/failing, suicide and involvement with alcohol and other drug abuse. Seventy-nine percent of unsuccessful students and 81% of successful students report that it is very much true that they have plans and goals for the future and they are hoping to graduate from the university. The high percentages seem to indicate that the two groups of students had a sense of future, high expectations and hopes for themselves.

4.6 SUMMARY OF FINDINGS

The separation of unsuccessful students and successful students was done with the hope of determining the specific needs of unsuccessful students and to determine the specific support that the successful students received. That was done to determine what could make all first year students proceed to the next year with support.

4.6.1 External assets summary

At fist glance the researcher would think that there was no optimal support for students from any of the four environments (university, community, peers, home). From the results, it appears that the university as the main focus environment is the one that rated

lowest for support. Peer environment is excluded in meaningful participation because what students do it is either in the university, community or home (WestEd, 2002). All the three environments (university, home, community) seem to be deficient in providing meaningful participation for students. Ultimately, the reason for students scoring low in meaningful participation in the entire environments may be being an African child. Mwamwenda (1995) research in African child rearing stated, "The majority of Africans… still require their children to be obedient, conforming and cooperative" (Mwamwenda, 1995:375). African parents are used to obedience and passitivity of children and do not expect to engage in lively argumentative discussions with their children. The students may reflect the same characters to the university and may not challenge or engage in progressive arguments with their lecturers.

Based on the information that good connections between the assets build up strong internal assets, it seems both students have experienced some disconnections of one asset to the other. It also seems that many students did not have a balanced support from friends, family, community or the university. Other reason can be that students may have connected with either one of the above-mentioned people more than others instead of associating with all of them. It seems few students were engaged in relevant and interesting activities. In addition, the low score could be the results of different environment nurturing and modelling of different behaviours, which may cause confusion to individual students. That is the university, home, community, and peers may support dissimilar and contradictory behaviours. For example: binge drinking may be supported by peers and other community members but not by the university and home environment. It depends on the students' choice of who to please or associate with at that particular period.

Resources: the total score for unsuccessful students on resources is 42% and for successful students it is 39%. This may be that unsuccessful students utilise resources more than successful students because they experience more troubles than successful students. They may need more assistance in selecting courses, because not all of them are still in first year because they failed; others had to move from one faculty to the other, or from one course to the other. Furthermore, the problem may be adapting to the university

culture and seeking assistance, either formal or informal help. It seems that not many students interact with the university community members such as senior students, House Committee, Central House Committee, Student Representative Council, and university staff or knowledgeable members of other environments. Additionally, it appears that more than 50 % of students do not spend their leisure time for academic commitments. For example they do not read or do experiments during leisure time. The results indicate a need for students to be involved in recreation activities to improve their physical well-being.

4.6.2 Internal assets summary

About the internal assets, unsuccessful students scored 59% and successful students scored 56% on total internal assets. Three internal assets (problem solving, self-efficacy, and cooperation and communication) are low for both groups. They scored less than 50%. Unsuccessful students are better on cooperation and communication, with 51%. The university needs to stress these three internal assets, as they are the most lacking among the students. Students seem to have stronger internal assets because their score is more than 50% on internal assets. It seems more than 50% of students have adults who model internal assets (desired behaviour, values, beliefs and attitudes) for them. The percentage conveys that caring relationships, high expectations, meaningful participation and resource utilisation nurturing is insufficient. It appears that only 59% of unsuccessful students and 56% of successful students experienced environmental change that provided protective developmental support and opportunities that met their developmental needs and occupied their innate resilience.

Students spend most of their time on campus with their friends and unsuccessful students and successful students' peers appear not to have high expectations for them. Unsuccessful students scored higher on caring relationships by peers than successful students. Successful students have lower percentage. Successful students are more on their own. This may be that when they engage in academic work, they do not exchange information or ideas effectively or, they do not enjoy working together with other students of their own age.

In summary the students' environments are not providing enough external assets for students to develop strong internal assets. The university can harvest fruitful results by focusing on providing an environment rich in external assets especially meaningful participation. This will be imperative for a long-term positive behaviour and attitudes change and high level of academic performance.

4.7 CONCLUSION

In contemporary University of the Western Cape first year students' society, the university is one major social institution for them, other than the family with which practically all persons are deeply involved during their critical development. Critical development incorporates the years of childhood through adolescence. From the external assets most students did not have satisfying levels of support from the university. Other environments performed better but they still could be improved. The focus of this research was mainly on the university environment. In the following chapter, discussion and recommendations will be about what the university can do and what activities and programmes can be enhanced in order to nurture Caring Relationship, High Expectations, Meaningful Participation, and Resource Utilisation.

CHAPTER FIVE

CONCLUSIONS AND RECOMENDATIONS

5.1 INTRODUCTION

This chapter presents a discussion of the results as presented in chapter four and they are discussed in light of the research questions and objectives of the study. These findings are in line with reviewed literature. A summary and conclusion are presented with recommendations on what the university can do for first year students to succeed, as well as the recommendations for future research.

The major aim of the research was to determine the protective factors that could foster resilience amongst first year students. The students' environments (university, community, peers and home) were assessed to investigate the required protective factors. The following objectives assisted in accomplishing the central aim:

- To explore support systems that assist first year students to cope with academic and other demands
- To determine how the university can support first year students and ensure their well-being
- To gather information on how to help first year students become successful
- To explore ways to increase the throughput rate amongst first year students

The findings and recommendations are presented according to the above aims and objectives. They also form this chapter's main sections as the discussions are intended to respond to the stipulated objectives. The focus will be on the university environment as it is the students' major social institution rather than the community, peers and home environment.

When discussing and relating the results to the university problem both groups of unsuccessful and successful students will be referred to as students. This is because they belong to the same group of 2003 first year class.

5.2 DISCUSSION OF THE RESULTS

The same protective factors that were found to have a positive impact on academic achievement and development amongst youth in previous research conducted by Oswald *et al.* (2004) were recognised amongst UWC students.

In another study, WestEd (2002) reported that students who did not perform well at school, scored low on external assets. The opposite is true when it comes to UWC 2003 first year class. However, the results as presented in chapter four indicated almost similar percentages of external assets for both unsuccessful students and successful students, and the difference of (7 %) might not be significant. Resilience logic stipulates that, high external support predicts high achievement, while low external support leads to low and poor performance at the university. This did not hold true for this sample of students, amongst whom the relationship between external assets and high or low achievement was not necessarily predictable.

University support is inadequate, especially on meaningful participation, high expectations and resources, which impact on the following internal assets: Problem solving, self-efficacy, and cooperation and communication. Results indicated that only a few students were using available resources during crisis or recreation. Human resource during crisis is less utilised than technical resources. This indicates that students do not make use of social networks existing within their environment. In addition, caring relationships seem to be adequate, although they need some improvement. The development of empathy, self-awareness and goals and aspiration seem to be sufficient, although enrichment is still required. It was observed that students managed to develop adequate internal assets for academic survival despite inadequate external assets.

The high internal assets percentages despite low percentages of external assets confirm the discussion in chapter two on the unpredictability and inconsistency of resilience. They could also reflect the results of a lifetime of support that resulted in students coming to university, but which may not be reflected once they are at university. What keeps students strong is how they handle negative feelings or experiences (Strumpfer, 2003). On external assets, the successful students (40%) scored slightly lower average

percentages than unsuccessful students (47%). With regard to internal assets successful students scored high on goals and aspirations, self-awareness and Self-efficacy, while unsuccessful students scored high on empathy, problem solving and cooperation and communication. Goals and aspirations could have influenced successful students' success. The following discussions are aimed at answering the major research questions.

5.2.1 Support systems that assist first year students to cope with academic and other demands

As mentioned in chapter two, students require accommodative environments for healthy physical and psychological development (WestEd, 2002). The physical and psychological development can be nurtured by providing external assets to develop internal assets. One external asset leads to the other. The results revealed that there is a break-down between external assets, which makes the process incomplete for UWC students. Students are experiencing caring relationships more than meaningful participation and high expectations. Sharing daily concerns with adults at residences, lecturers, Student Representative Council members, Central House Committee members, senior students, team members, and older colleagues can help students to form strong and caring relationships.

With regard to providing a healthy learning environment, the university needs to invest more effort into meaningful participation and high expectations. Learning is an active, constructive social process which can be fostered by action oriented and problem-based learning, students-centred learning or by exploratory learning (Muller & Louw, 2004). Learning and adapting to the university culture can be helpful to passive students because, having been over-controlled inhibits their social development and self-authorship (Einsberg *et al.* 2003). Mwamwenda (1995) indicated that an African child is expected to be obedient and passive. In their first year, many African students may still be having African attitudes towards adults, which lowers their ego control, and makes it hard for them to be decisive. They expect to be given instructions all the time while they should undertake new activities by themselves.

UWC needs to respond to individual needs of students by developing programmes of coping designed in consultation with particular groups of students. It needs to develop coping skills in directions that are perceived as relevant by the recipients (Einsberg et al 2003; Frydenberg, 1997; Block & Block, 1980). Such directions need to be associated with positive adaptation through positive mentoring relationships. The relationships should address the appropriate desires for university culture. Mentoring programmes can also assist students to make right choices. There are a lot of activities that take place on campus, and students need to prioritise and make choices very carefully in order to know their reasons for the choices.

Counselling professionals in the university need to equip themselves with information on different coping styles of students to vary their skills and techniques accordingly during counselling session. They should create a setting where students can discuss their coping options so that outcomes can be considered. This will give students more techniques to expand on their coping repertoires. This can be done through peer-related discussion programmes (Frydenberg, 1997). For example, students will be able to form their own frames of reference provided they are able to learn valuable lessons from the past and from other people's stories (Frydenberg, 1997).

Students experiencing difficulties can be assisted to transform stressful events by looking beyond the present and noting the subtle ways that can make them feel better (Carlson *et al.* 2003). Enhancement of coping can be achieved through a series of self-help techniques, counselling, clinical insights, and the teaching of coping skills. All these approaches to development can use three components of the coping process- optimism, humour, and metaphor (Frydenberg, 1997).

Academic work demands intelligence. Intelligence is associated with interests and interests are associated with particular subsets of activities such as hobbies or intellectual pursuits. Emphasising different intelligences assists in identifying and helping students to discover their own strengths. When students discover their strengths they will build competences in other intelligences. Intelligence can be stimulated with different approaches to teaching. WestEd (2002) stated that there are many ways of learning.

Consequently, according to Multiple Intelligence theory, each person possesses at least eight intelligences in varying degrees, and is capable of developing each intelligent to an adequate level. In order to address the psychosocial needs for both average and above average groups of students, the university can provide opportunities for students to display their various talents. At UWC few students are involved in extra-curricular activities on campus. Students need to participate in sports for non-competitive aims that will give them a sense of achievement (Frydenberg 1997).

As mentioned in chapter two, resilient students possess characteristics such as independence and assertiveness. This promotes meaningful participation and problem solving strategies (Banyard & Cantor, 2004; Jackson, 2003; Turner, 2001). Negative experiences such as student voices not being heard, or low 'high expectations' from peers as the results indicate, can also bring positive growth in students. Ryff and Singer (2003) highlighted that growth after suffering can allow an individual to have new perceptions of self; identification and appreciation of one's vulnerability; and change in life philosophy. This was noted amongst both unsuccessful and successful students with stronger internal assets. Counselling can help students build on their self-efficacy, and assist them to be able to control anxiety and exercise control over potential threats.

Resilience as a characteristic can assist students to cope with academic demands. Resilient students do not see themselves as victims but as survivors. They are aware of their thoughts and how they influence their behaviour. However, they should be aware of their words, because their words can become their thoughts; their thoughts can become their actions; their actions can become their behaviour; their behaviour can become their characters; and their characters can define their destiny. For those experiencing difficulties with this, thought recognition can be taught to them at any time and anywhere, as long as it is done in the context of a caring, respectful and reciprocal relationship (WestEd, 2002). With this they will develop personality resilience, which is the dynamic capacity of an individual to modify his or her own modal level of ego control in all directions, as a function of the demands and characteristics of the environmental context. Students who participated in this study scored high on goals and aspirations, which imply that they are optimistic. Optimistic individuals believe that their

goals will be achieved, even in the face of difficulties. Optimism enters into self-regulation and leads to continued effort to attain goals (Peterson & Chang, 2003).

5.2.2 Supporting first year students and ensuring their well-being

Students' well-being includes developing a person holistically. Students can be allowed to grow in every aspect of life. WestEd (2003:1) states "if our goal is turning around low-performing schools, part of the solution must be addressing young people's well-being and reducing health risks that are barriers to leaning". The university can be turned into a living space where students get involved with real issues and engage in activities that relate to their studies. This is where their confidence in serving society can be tested. Well-being also includes students finding exactly where they belong in society that is choosing their career or profession. Nakamura and Csikszentmihalyi (2003) stated that the sources of meaning in most people's lives are relationships, life goals, religious participation, and ways in which meaning is structured through goal hierarchy. Students should examine their goals because not all goals are good; some goals do not provide a sense of meaning (Emmons 2003).

To ensure students wellbeing, the university needs to give students opportunities to participate in ways that facilitate physical and psychological health (Frydenberg 1997). Getting students more involved in sports, orientating them and giving them information about all the resources on campus and how to access them is important. In addition, the university community needs to provide support to vulnerable students by improving on social networks. It needs to reach out to students by bringing them together with experts from the university and from the broader community. The first semester of their academic year could be right timing. A resilient community promotes the safety of its residents and protects them from injury, violence and risks. The university can do likewise.

The fact that successful students scored higher percentages than unsuccessful students on self-efficacy, self-awareness and goals and aspirations, confirms that believing in one's ability to do something, understanding one's self (one's thinking, moods, feelings, strengths and challenges) and having plans that focus the future are qualities necessary

for academic success. What keeps students strong is how they handle negative feelings or experiences (Strumpfer, 2003). Negative emotions are fundamental to healthy relationships since they influence how such emotions should be dealt with (Turner, 2001). The university can teach students who are more prone to negative emotions, self-regulating habits of coping.

5.2.3 Helping first year students become successful

The focus here is on gathering information on how to help first year students become successful. Students have different problems such as social and economic, which they bring with them to the university. During the orientation period, first year students can be trained to have confidence in utilising technical and human resources available on campus, and be encouraged to have good relations with faculty members. Utilising resources includes positive interaction with faculty members such as greetings, good conduct and warm relations (Jackson, 2003). Relationships with positive adults who are not necessarily parents or relatives, especially on campus are essential for creating and enhancing resilience (Turner, 2001).

Resilience as a construct is multidimensional by nature. Students may be more resilient at home than at the university. This is reflected in the results, whereby students scored higher percentages on external assets at home and in the community than on external assets at campus. Their resilience can be improved by giving them a chance to interact with knowledgeable individuals at the university (Ryff & Singer, 2003; Richardson *et al.* 1980). In other studies, evidence has shown that students who use social support in the learning context do better academically than those who do not (Wissing & Van Eeden, 2002; Frydenberg, 1997).

Whatever the students choose to associate with should be according to their interests, including their lectures and their studies. Prenzel (1992) identified the following characteristics of interest relationships:

a) Relevant skills and the internal representation of the object is complex
b) Positive emotions attach to the object and to interaction with it

c) Person-object interaction is intrinsically motivated

d) The object is valued (Nakamura & Csikszentmihalyi, 2003:87).

The relevance of studies is enhanced by improving students' study and career development skills as they lead to academic persistence (Jackson, 2003).

Low percentage of student action on utilising available resources implies that a large percentage could be suppressing anxieties. Persisting high-risk students may be equipped to effectively balance self-enhancement and accurate self-evaluation by recognising their goals, current abilities, how they are situated in their context, and what type of support may be available, and to develop strategies to act on the integration of this combination of needs and knowledge (Pizzolato, 2004).

Students from overwhelmed families (Benard, 1997) can work with lecturers. For their part, lecturers need to be aware that students try their best to pass based on the way they perceive the world. The role of the lecturer is to channel students' energies to relevant and desirable activities. For example, students having financial problems can be informed of different sources of financial aid available to students. Once more, lecturers should be optimistic about students, which will enlist students' intrinsic motivation and positive momentum, and the students are likely not to disappoint the lecturers (Benard, 1997).

To improve meaningful participation and high expectations, students can be given a chance to participate in all aspects of the university functioning, to improve their sense of coherence and meaning of life (Emmons, 2003). In addition, students' relationships should be interesting and more informative as high expectations lead to success. Frydenberg (1997) argues that supportive relationships can serve as models for active information seeking and for turning to formal or informal social support. The above strategy conveys that drawing upon supportive relationships from different people at different levels helps to deal with a problem.

Flow activities help students to have interpersonal relationships. The relationships should be enjoyable, meaningful, provide potential growth, allow emergence of new opportunities for action, and stimulate development of new skills (Strumpfer, 2003). The

fact that students score low percentages on resource utilisation indicates that few students seek help when needed, or resort to physical activities during crisis or recreation.

5.2.4 Increasing the throughput rate amongst first year students

This section of the discussion focuses on the outcome of the processes discussed previously. With regard to throughput, the university can put more effort on qualities that enhance better academic performance and success. Students should be aware of the university's expectations and conventions. University cultural knowledge can aid students to know the means to pursue academic goals. Goals orient students to what is valuable, meaningful and purposeful. If students take the initiative to show their interests, and at the same time the university shows interest in the students, the 'high expectations' asset will be boosted.

Activities for students should be meaningful. The desire for meaning is viewed as a basic human motivation. A sense that life has meaning is associated with well-being and is seen as a necessity for long term happiness. Students should find their studies relevant and meaningful to life experiences. As students are drawn onward by enjoyable interaction with an object (studies), the desire to complete courses and meaning of the relationship will gradually deepen (Nakamura & Csikszentmihalyi, 2003).
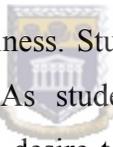
5.3 RECOMMENDATIONS

The best way to strengthen resilience is to focus on the qualities of the environment (WestEd, 2003). Students learn what is lived around them. Evidence is accumulating that transforming universities and creating resilient safety nets for all students depend not only on family involvement but also on community members. That is, protective factors have the most considerable impact on students' ability to conquer adversity. Caring relationships, high expectations and meaningful participation can assist in the best way to engage and strengthen students' resilience. The recommendations attempt to address the assets and resources that are lacking, and should be seen as guidelines for interaction instead of prescriptions.

5.3.1 University

(i) **Caring relationships:** The university needs to make use of the health realisation approach. The "Health realisation approach" is a psychological approach to prevention, early intervention and treatment that is focused on teaching individuals self-awareness. It shows people of all ages including students how their thoughts create their reality, or affect their feeling and behaviour.

In course work that addresses family issues, students can be encouraged to examine their own family messages about responding to stress and crisis. Students may think about positive and negative role models for coping with stress (Bell, 2003). Lecturers need to find students' zone of proximal development by giving students a task that is not too easy or too difficult (Frydenberg, 1997). The students need to be engaged in and challenged by the work so that they become active participants rather that inconspicuous members of the university community.

The university can provide students with the opportunity to create friendship networks and positive peer relationships regardless of culture, gender, class, and ability differences. Further, it can create several focus groups of students from a broad spectrum of students in the school to examine and discuss findings and to explore their ideas on how to improve adult-student relationships. The university should consider students' recommendations and act on them.

Lastly, the university should be available and accessible to students by having an open-door policy, where students feel comfortable dropping in if they need help or just want to talk. Tutoring and peer facilitator programmes existing in university residences can be used for this purpose for residents.

(ii) **High expectations:** During the orientation period, students can be shown a film on the life of a successful first year student during the academic year. The film can address more about what the university wishes to advocate. For example, it can show student involvement in outreach programmes, library and Internet usage, and counselling and lecturer consultation.

When high-risk students enter higher education it is important for the university to have programmes that facilitate thriving transition into the university culture. Further, they can share success stories; address curriculum that is thematic, experiential, challenging, comprehensive and inclusive in multiple perspectives; and foster self-reflection.

The university should help the students recognise what gives them strength for rising above various challenges, and provide support for students in the form of support groups, peer-helping and student assistance programmes. These programmes should identify the skills which students bring with them and help them to understand and begin to merge the ways of knowing and being to the university's expectations. By engaging in such practices, the university will be providing opportunities for high-risk students to retain beliefs in their own global competence in spite of their lack of particular skills or knowledge (O'Connell, 2004; Pizzolato, 2003).

Before mentoring programmes start; lecturers, tutors and students can run focus groups and do relevant planning. They can facilitate the discussions and identify issues to be addressed. This will assist in determining the students' levels of understanding and the university's level of functioning.
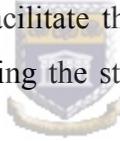
Families, peers, community members and lecturers should give encouraging messages to students to keep them along the lines of working hard and towards the academic goals. When a student feels compelled to dropout because of personal difficulties, the university can help address his/her problems by referring the student to relevant services. They can model the language of success to all students. In addition career development programmes can invite outside experts to present about their work for all faculties.

The university should challenge the myths held about certain groups of students especially those who are poor, disadvantaged and those for whom English is not the first language.

(iii) Meaningful participation: Concerning sports, the university can do follow-ups on students and find out if they are involved in sporting activities on campus. This can be done through the matrons, house committee members and block representatives.

Although my focus was on the university environment, students' well-being and development incorporates the contribution of many sectors. Community service learning and mentoring are two proven approaches for promotion of healthy development and learning in students, as well as fostering positive community attitudes towards students. That is, the university should form respectful strengths-based and reciprocal relationships with community-based organisations, social service agencies, law enforcement, as well as business and community volunteers. Students ought to be given the opportunity to serve in their communities and form relationships with adults in different sectors of the community (WestEd, 2002). The university can partner with community groups. That will develop interests in activities not only offered in the university, but also opportunities for involvement in community life.

During programme sessions with mentors, students should discuss questions that encourage self-reflection, critical thinking and dialogue particularly on salient and personal issues. Lecturers can use cooperative learning and participatory evaluation strategies.

5.3.2 Students

Students need to always ask themselves why they are at university because having academic goals contributes to coping. Students' behaviours, actions and thoughts should be goal-directed. They should prioritise between short-term goals and long-term goals. This includes the identification and adoption of goals and the regulation of actions with respect to such goals (Peterson & Chang, 2003).

Students should create close (peers) and broad (lecturers) social networks for successful adjustment. Those who seem not good at forming social networks can be assisted to become comfortable in public speaking. Positive adjustment is linked to the locus of control, higher level of social support and taking problems as challenges. External and internal adaptations will emerge and be strong. Persisting students may therefore need to construct and rely on strong internally defined goals of graduating, high perception of academic competence, and sense of self.

When faced with trauma, students should know whom to turn to for a good dose of humour. Another technique that students can apply is to visit restorative places (Strumpfer, 2003). After mastering traumatic events, students can encourage themselves with positive statements. They should be able to say, 'I am a more capable person because of what I went through; I am a more assertive person and this has taught me that I can handle any thing; and my priorities in life are different' (Brendtro, & Shahbazian, 2003).

5.4 LIMITATIONS OF THE STUDY

It should be borne in mind that the demographics of students are not entered into the analysis or findings of this study.

The research employed one research method, which is the quantitative research method to collect data and to analyse it. Qualitative research method, which permits the evaluator to study selected issues or events in depth and details, is not used.

The study was conducted using a convenience sample with 162 participants from approximately 2000 students enrolled for first year in 2003. Only 31 unsuccessful students participated in the study while successful students were 131. The implication of this is that the generalisability of the results outside of this population at UWC may not be reliable. The results may not be generalised to the broader university population without qualification. My research should be considered a preliminary investigation into what the university can do to foster resilience in order to enhance throughput.

My research is a descriptive and exploratory study. Extraneous variables such as extrinsic and intrinsic factors can affect the accuracy of responses to the questionnaire, which may affect the results and conclusions. Intrinsic factors are students' characteristics that can function as extraneous variables. Extrinsic factors are characteristics of the research situation and study procedures than can function as extraneous variables (Norwood, 2000).

5.5 RECOMMENDATIONS FOR FUTURE RESEARCH

It is important to realise that good adjustments among those in high-risk groups may not necessarily mean competence among those in typical low risk groups (WestEd, 2002). Since resilience is not an obvious character; one cannot make conclusions about whether students are resilient or not from one set of research results. Follow-up research is required after the implementation of an initiate programme. A longitudinal study is needed to find out whether students are resilient or not**.** This study focused on students' resilience in a particular group. Further research can be done on the support existing for students in each faculty. Successful students seem to have high goals and aspirations. Additional work needs to be done to establish on how high goals and aspirations influence success.

WestEd (2002) stated that an institution's staff has a natural tendency to care for students, when they feel cared for themselves. In the context of UWC, the question can be asked, whether lecturers or adults in the university receive enough support and care from the institution. Is such support and care enough for them to pass on to students?

With regard to generalisability, it is recommended that in future studies, deliberate attempts be made to collect samples that are more representative of all the faculties and years of study. A similar research, using randomised sampling techniques, aimed at exploring protective factors and generalising the findings to the greater population of South African university students is recommended.

5.6 CONLUSIONS

Protective factors, resilience and everything that relates to them seem to be long-term processes, which are all aimed at generally preparing individuals for a lifetime. Resilience does not come from rare and special qualities but from the everyday magic of the ordinary normative human resources, in the minds and bodies of students, in their families and relationships, and in their communities (WestEd, 2003).

Individuals must hold on to who they are, to the purpose of their life and to what they want to see happening to themselves. Holding on to who they are refers to life and work

philosophies, which reminds individuals why they live. They also give direction to the activities one gets involved with. Similarly, life process cannot be acquired within a short period of time. Students need cultivation for them to stay firm, healthy and normal. The whole idea of this kind of study is to see students living and flourishing, and not only existing. The skills and techniques that are acquired should become part of an individual's life and daily practices.

By conducting the resilience research, sharing the results and acting on them, education will gradually transform the university environment. As a result, building linkages and partnerships between universities, young adults, families and community groups is how a fabric of resilience or a safety net can be woven for all students (WestEd, 2002). In order to understand students' resilience one should thoroughly examine what makes them survive adversity. From this study, emotional and academic support and goal-directed behaviour were found to be what make students cope. The study of resilience among students needs observations of protective factors that exist. While in general terms most youth are resourceful in managing their concerns, there are numerous protective factors which young adults can adopt or consult to enhance their resilience.

The use of work related strategies as part of maximising students' performance while at the same time maintaining a balanced lifestyle are important issues to consider in a programme of psychosocial development (Frydenberg, 1997). There are certain values that are expected by each environment. For example, at the university, first year students are expected to improve their study techniques, use spare time profitably, and do sports. If they practice the prescribed life style frequently they can progress in their academic work. Frydenberg (1997) also argues that talents need to fit with the cultural and societal values of the time and place, in order to be recognised and appreciated. Development of particular interests or talents is determined by the opportunities available to the students on campus. Peer influence is perceived as a powerful developmental force and is seen as negative pressure on students and as encouraging health-risk behaviours, but the goal of resilience is to direct peer pressure towards positive and desirable outcomes. This is identified through supportive friendships and positive peer role models.

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APPENDIX A

Quick read summary for the combined unsuccessful and successful students' data

Percent of students scoring High, Moderate, and Low in assets	Unsuccessful			Successful		
	L	**M**	**H**	**L**	**M**	**H**
TOTAL EXTERNAL ASSETS	13	41	47	15	45	40
Caring Relationship	5	42	54	9	44	47
High Expectations	15	41	45	14	44	43
Meaningful Participation	18	41	41	21	48	31
UNIVERSITY ENVIRONMENT	22	53	25	17	58	25
Caring Relationship University	9	67	25	7	68	25
High Expectations University	24	55	21	15	55	30
Meaningful Participation University	33	38	29	29	52	19
COMMUNITY ENVIRONMENT	6	35	59	14	34	53
Caring Relationship Community	0	40	60	13	29	58
High Expectations Community	4	28	68	9	30	61
Meaningful Participation Community	14	38	48	19	42	40
PEER ENVIRONMENT	13	36	52	16	44	41
Caring Relationship Peers	5	19	76	8	39	53
High Expectation Peers	20	52	28	24	48	28
HOME ENVIRONMENT	8	38	54	10	28	46
Caring Relationship Home	7	40	54	9	41	50
High Expectations Home	10	29	61	7	41	52
Meaningful Participation Home	7	46	47	14	51	35
RESOURCES	11	47	42	12	49	39
Human Resources during crisis	18	49	33	17	51	32
Technical Support during crisis	9	45	47	11	49	40
Technical Support during recreation	7	47	47	9	47	44
TOTAL INTERNAL ASSETS	4	37	59	4	40	56
Empathy	0	26	74	4	38	58
Problem Solving	5	46	48	6	55	39
Self-Efficacy	10	46	44	3	50	48
Cooperation & Communication	3	46	51	3	49	49
Self-Awareness	3	40	57	6	32	63
Goals & Aspirations	4	17	79	4	16	81

APPENDIX B

CROSS TABULATION SHOWING STATISTICALLY SIGNIFICANT STATEMENTS

Who notices when I am not there * (8)

Crosstab

Count

		currentyear		Total
		1styear	successful	
Who notices when I am not there	Not at all true	15	31	46
	A little true	6	36	42
	Pretty much true	8	36	44
	Very much true	2	28	30
Total		31	131	162

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.075(a)	3	.028
Likelihood Ratio	9.216	3	.027
Linear-by-Linear Association	6.746	1	.009
N of Valid Cases	162		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.74.

I do things that make a difference * (15)

Crosstab

Count

		Current year		Total
		1styear	successful	
I do things that make a difference	Not at all true	7	29	36
	A little true	5	42	47
	Pretty much true	8	41	49
	Very much true	11	19	30
Total		31	131	162

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.404(a)	3	.038
Likelihood Ratio	7.806	3	.050
Linear-by-Linear Association	3.043	1	.081
N of Valid Cases	162		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.74.

Who really cares about me * (18)

Crosstab

Count

		currentyear		Total
		1styear	successful	
Who really cares about me	Not at all true	0	16	16
	A little true	2	18	20
	Pretty much true	9	15	24
	Very much true	20	82	102
Total		31	131	162

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.110(a)	3	.018
Likelihood Ratio	12.451	3	.006
Linear-by-Linear Association	2.677	1	.102
N of Valid Cases	162		

a 3 cells (37.5%) have expected count less than 5. The minimum expected count is 3.06.

Who talks with me about my problems (29)

Crosstab

Count

		Current year		Total
		1styear	Successful	
Who talks with me about my problems	Not at all true	2	10	12
	A little true	1	17	18
	Pretty much true	4	39	43
	Very much true	24	65	89
Total		31	131	162

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.406(a)	3	.038
Likelihood Ratio	9.259	3	.026
Linear-by-Linear Association	4.549	1	.033
N of Valid Cases	162		

a 2 cells (25.0%) have expected count less than 5. The minimum expected count is 2.30.

APPENDIX C

**UNIVERSITY OF THE WESTERN CAPE DEPARTMENT OF EDUCATION
RESILIENCE QUESTIONNAIRE**

1. Sex: Female   Male

2. Age: <18   18-24   25-29   30+

3. Languages: Xhosa   English   Afrikaans   Other

4. High school attended:……………………………………….

5. Faculty:………………………………………………………..

6. Year of first enrolment at UWC:………………………………

7. Current academic year status: 1st   2nd

Your contribution is highly appreciated

UNIVERSITY OF THE WESTERN CAPE 2003 FIRST YEAR SUDENTS UTILISATION OF RESOURCES AND SURVEY QUESTIONNAIRE (Adapted from the California Healthy Kids Survey)

Please mark on your answer sheets how you feel about the following statements.
(A-Strongly disagree, B-Disagree, C-Agree, D-Strongly agree)

How strongly do you agree or disagree with the following statements about your university?

1. I feel close to people at the university	A	B	C	D
2. I am happy to be at this university.	A	B	C	D
3. I feel I am part of this university	A	B	C	D
4. The lecturers at this university treat students fairly	A	B	C	D
5. I feel safe in my university	A	B	C	D

Mark how TRUE you feel the next statements are about your university and things you might do there.

(A-Not at all true, B-A little true, C-Pretty much true, D-Very much true)

At my university, there is a lecturer or some other adult…

6. Who really cares about me	A	B	C	D
7. Who tells me when I do a good job	A	B	C	D
8. Who notices when I am not there	A	B	C	D
9. Who always wants me to do my best	A	B	C	D
10. Who listens to me when I have something to say	A	B	C	D
11. Who believes that I will be a success?	A	B	C	D
12. Who expect me to follow the rules	A	B	C	D

At the university…

13. I do interesting activities.	A	B	C	D
14 I help decide things like lecture room activities or rules	A	B	C	D
15. I do things that make a difference	A	B	C	D
16. I do things that help other people	A	B	C	D
17. I am involved in sports, clubs, or other extra curricula Activities. (Such as band cheerleading, student council etc.)	A	B	C	D

The next statements are about what might occur outside your university or home, such as in your neighbourhood, community, or with an adult other than your parents or guardian.

Outside of my home and university, there is an adult…

18. Who really cares about me	A	B	C	D
19. Who tell me when I do a good job?	A	B	C	D

20. Who notices when I am upset about something	A	B	C	D
21. Who believes that I will be a success?	A	B	C	D
22. Who always wants me to do my best	A	B	C	D
23. Whom I trust.	A	B	C	D

Outside my home and university, I do these things…

24. I am part of clubs, sports teams, church/ temple or other group activities	A	B	C	D
25. I am involved in music, art, literature, sports or a hobby	A	B	C	D
26. I help other people	A	B	C	D

How true are these statements about your friends?

27. I have a friend about my own age …	A	B	C	D
28. Who really cares about me.	A	B	C	D
29. Who talks with me about my problems	A	B	C	D
30. Who helps me when I am having a hard time.	A	B	C	D

My friends…

31. Get into a lot of trouble	A	B	C	D
32. Try to do what is right	A	B	C	D
33. Do well in university.	A	B	C	D

How true are these statements about your home or the adults with whom you live?

In my home / residence, there is a parent or some other adult…

34. Who expect me to follow the rules	A	B	C	D
35. Who is interested in my schoolwork?	A	B	C	D
36. Who believes that I will be a success?	A	B	C	D
37. Who talks with me about my problems	A	B	C	D
38. Who always want me to do my best	A	B	C	D
39. Who listens to me when I have something to say	A	B	C	D

At home / residence…

40. I do fun things or go fun places with my parents or other adults	A	B	C	D
41. I do things that make a difference.	A	B	C	D
42. I help make decision with my family, colleagues or club members	A	B	C	D

How true do you feel these statements are about you personally?

43. I feel bad when someone gets their feelings hurt.	A	B	C	D
44. I try to understand what other people go through	A	B	C	D
45. When I need help, I find someone to talk with	A	B	C	D
46. I know where to go for help with a problem	A	B	C	D
47. I try to work out problems by talking or writing about them.	A	B	C	D
48. I can work out my problems	A	B	C	D
49. I can do most things if I try.	A	B	C	D
50. I can with someone who has different opinions than mine	A	B	C	D
51. There are many things that I do well	A	B	C	D
52. I enjoy working together with other students of my age.	A	B	C	D
53. I stand up for myself without putting others down.	A	B	C	D
54. There is a purpose to my life	A	B	C	D
55. I understand my moods and feelings	A	B	C	D
56. I understand why I do what I do	A	B	C	D
57. I have goals and plans for the future.	A	B	C	D
58. I plan to graduate from university	A	B	C	D
59. I plan to go to work or some other university after graduation.	A	B	C	D

Which of the following resources DID you or WOULD you use during a personal problem or crisis situation? Please mark the extend of the importance of the indicated resource(s)

(A-Extremely not important, B-Slightly not important, C-Important, D-Extremely important)

To what extent would I use the following help or support resources during a crisis?

60. Family (nuclear family)	A	B	C	D
61. Extended family	A	B	C	D
62. Older brother/ sister	A	B	C	D
63. Centre for student counselling	A	B	C	D
64. Mentors (residence)	A	B	C	D
65. Residential head	A	B	C	D
66. Lectures	A	B	C	D
67. Student representative council	A	B	C	D
68. Student Health centre	A	B	C	D
69. AIDS Unit	A	B	C	D
70. Faculties resource labs	A	B	C	D
71.Sports centre	A	B	C	D
72. Friends	A	B	C	D

Professional help

73. Psychologist	A	B	C	D
74. Medical doctor	A	B	C	D

Other resources used

75. Internet	A	B	C	D
76. Books (reading materials, Library)	A	B	C	D
77. Availability of money	A	B	C	D
78. Sports participation	A	B	C	D
79. Sports spectator (appreciation)	A	B	C	D

Which of the following DID or WOULD you use for recreation?

80. Church societies	A	B	C	D
81. Clubs (social, sports)	A	B	C	D
82. Library	A	B	C	D
83. T.V.	A	B	C	D
84. Internet	A	B	C	D

APPENDIX D

UNIVERSITY OF THE WESTERN CAPE

FACULTY OF EDUCATION

TITLE OF THESIS: PROTECTIVE FACTORS THAT COULD FOSTER RESILIENCE IN FIRST YEAR STUDENTS

Questionnaire Consent form

I understand that this research will attempt to explore: What can be done to facilitate success amongst first year students.
I understand that the information from the questionnaire will be used for the purpose outlined in the invitation letter.
I understand that the information gathered from this study will be presented in the form of a mini thesis by the researcher.
I will participate by sharing my experiences through answering the questionnaire.
I understand that if I decide to participate in answering the questionnaire, my consent to take part or to stop my participation at any time without penalty or negative consequences.
I understand that if I have any questions about any item on a questionnaire as a participant, I can seek clarity.
I agree to participate in this research on the conditions above.

Name:………………………………………………………

Institution:…………………………………………………

Signature:………………………………………………….

Date:……………………………………………………….

APPENDIX E

University of the Western Cape

Private Bag X17 Bellville 7535 South Africa
Tel. 021-9592246
Fax: 021-9592647 / 3358

Faculty of Education

Date: 11 October 2004

Dear Student

AN INVITATION

I wish to extend an invitation for you to participate in a study, involving completing questionnaires, which will take place in the library auditorium from 12:00 to 1:00pm on Friday, 22nd October 2004.The aim of my research is to find out what can be done to foster resilience amongst first year students. The information acquired will assist the university to provide support to first year students in future.

The agenda for the session will include distribution of questionnaires, explanation of how to complete the questionnaire, answering of questionnaires, submission of questionnaires, and lunch will be served. The answering of the questionnaire will only take about twenty minutes.

Your participation in this process would be much appreciated.

Best regards
F. 'Moleli (MEd student)

B Johnson
Faculty of Education