AN INVESTIGATION INTO
SOUTHERN AFRICAN UNIVERSITY STUDENTS’
USE OF PROACTIVE COPING STYLE

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In accordance with Rule G4.6.3, I hereby declare that this dissertation for my degree is my own work and that it has not previously been submitted for assessment to another University or for another qualification.

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ABSTRACT

Proactive coping involves individuals developing resources to facilitate their promotion toward personal growth. The aim of this study was to determine whether differences occurred in the use of a proactive coping style between students from various Southern African countries and universities, in order to form cross-cultural comparisons for this construct.

The Proactive Coping Inventory (PCI) was electronically distributed to collect the empirical data, with purposeful non-probability sampling being employed. The sample consisted of 622 students from three universities, one each in Botswana, Namibia and South Africa. Eleven hypotheses were set for investigation.

Exploratory factor analysis resulted in the emergence of two distinct factors in the PCI, implying two separate subscales. A statistically significant relationship was found between proactive coping and both instrumental and emotional support seeking. A small, practically significant gender difference was discovered for emotional support seeking, and moderate differences were found between age and proactive coping. Southern African university students exhibit higher levels of proactive coping than preventative coping, strategic planning or emotional support seeking. Furthermore, they make use of proactive coping to a greater extent than individuals outside of the Southern Africa region. In terms of national and institutional culture, no statistically significant differences occurred for proactive coping between any of the countries or universities under study.

These findings imply that regardless of a Southern African student’s home country or university, he or she is likely to cope proactively. A possible explanation is because Africans generally value social support systems and collectivism, which assist individuals in coping proactively. These results also suggest that all three universities under study are effectively encouraging students to cope in a proactive manner, whether formally or informally, which is in line with the values of these institutions. It is recommended that Southern
African universities focus more intentionally on becoming positive socialising systems through integrating the development of human strengths, thus enhancing the value that students and society gain from tertiary education. These findings add to the current body of knowledge relating to proactive coping, which is lacking in a Southern African context.

**KEY WORDS:** Proactive coping; national culture; institutional culture; Southern African university students
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CHAPTER ONE

INTRODUCTION

1.1 Introduction
This dissertation will investigate the use of a proactive coping style by Southern African university students. The aim of the study is to determine if proactive coping differences occur between students from various Southern African countries and universities, in order to form cross-cultural comparisons for this construct. In doing so, the researcher will attempt not only to describe differences in proactive coping across nations and institutions, but also explain any differences and similarities that occur which might assist in predicting levels of proactive coping across cultures. These represent three goals of cross-cultural research (Shiraev & Levy, 2004).

The purpose of this first chapter is to provide an overview of the background to the research, the problem statements as well as the research objectives of the dissertation. Important terms will be defined and a brief explanation of the research process will be provided. The central theoretical statement and expected limitations will be mentioned, followed by an outline of the remaining chapters of the dissertation.

1.2 Background to the research
According to Analoui (2007), an organisation’s most important asset is its human resources. If an organisation wishes to gain a competitive advantage it should consider its human resources as being a unique, integral part of its business strategy, because this forms the core element responsible for the realisation of this competitive advantage. For this reason, it is necessary for research to be conducted regarding what helps to develop successful, effective employees. One relatively new construct that has been researched in terms of its benefits for employees is proactive coping, which involves individuals developing general resources to facilitate promoting themselves
toward personal growth (Schwarzer & Knoll, 2009). Because proactive coping has a forward time perspective, it overcomes the limitations of traditional coping models where emphasis is placed on the reactive nature of coping. It involves acquiring resources and skills that are not designed to deal with one particular stressor, but that rather equip an individual to prepare in general for stressful events (Aspinwall & Taylor, 1997). The focus of proactive coping is thus on an individual building up his or her resistance to defend against future crises, striving for more resources and developing his or her capabilities (Schwarzer & Knoll, 2009).

It is necessary to investigate such new means of coping due to the fact that so many individuals are continuously searching for increased knowledge of stress and how best to cope with it (Schlebusch, 2000). Stress and its effects can be measured at an organisational level (McGrath, 1977) and thus, as stated by Reuter and Schwarzer (2009), all forms of coping are of importance for organisations because coping is related to social relations and organisational success. Specifically, being able to cope with stress is one of the top skills that effective managers possess (Reuter & Schwarzer, 2009).

How could proactive coping potentially assist employees? Using a Canadian sample of employees, Greenglass (2005, in Greenglass, 2006) found that proactive coping was significantly associated with lower levels of burnout. Further results indicated that organisational support led to high levels of proactive coping behaviours, which in turn led to increased positive affect (indicating a state of elation, full concentration, enthusiasm, strength, alertness and engagement) [Greenglass, 2006]. According to this author, this subsequently led to lower levels of absenteeism due to the fact that as an individual’s level of positive affect increases, he or she will have less of a tendency to want to escape from work. Additionally, proactive coping directly reduces negative outcomes such as depression, emotional exhaustion, cynicism and anger (Greenglass, 2002). The fact that proactive coping is a positive strategy also means that professional efficacy, self-growth and life satisfaction increase when this form of coping is employed. An organisation that employs human resources who are able to cope proactively will benefit in
terms of the increased wellness of their employees. For this reason, organisations should wish to hire employees who cope proactively.

Universities are a common recruiting source from which organisations obtain graduates and interns (Phillips & Gully, 2012). According to Taylor (2010, p. 188), educational institutions represent a significant labour market due to the number of graduates they produce, as well as the fact that new graduates have the potential to make a genuine difference to an organisation’s “future fortunes”. For this reason, it is necessary to investigate whether students currently studying at universities are in fact coping proactively. If they are, they would be ready to enter the world of work equipped with the necessary proactive coping skills to succeed in the workplace and contribute to the realisation of their respective organisations’ goals and objectives.

Research on the benefits that proactive coping holds for university students indicates a number of important findings. Proactive coping is a cognitive buffer that students can use to lessen the negative impact of work-school conflict, and when subjective well-being is threatened by potential stressful situations, proactive copers can utilise their resources to overcome these challenges (Adebayo, Sunmola & Udegbe, 2008). Furthermore, there is a negative association between proactive coping and the severity of post-traumatic stress disorder symptoms in university students (Vernon, Dillon & Steiner, 2009). Proactive coping plays a valuable role in adjusting to university due to the fact that proactive copers put more forethought into their future time at university (Gan, Hu & Zhang, 2010). Moreover, higher levels of proactive coping have been associated with “facilitating test anxiety” (Raffety, Smith & Ptacek, 1997), that is, test anxiety that is useful and has a positive effect for students. According to Hu and Gan (2011), proactive coping also positively correlates with successful job hunting through both preparation activities and the actual behaviour of searching for jobs after completion of university.

Research has also been conducted on the benefits that proactive coping has in general for individuals. Schwarzer and Taubert (2002) explain that individuals that exhibit such behaviours perceive demanding or risky
situations as a personal challenge, as opposed to a threat. The emphasis on ‘proactive’ suggests that these individuals create opportunities for growth and action and strive to improve the quality of their own lives. They also view the opportunity to perform at a higher level and create better living conditions for themselves as a chance to find purpose in their lives. An individual who exhibits proactive coping behaviours will experience vital energy, perceived self-efficacy and productive arousal instead of strain when faced with challenges and will have lower levels of worry than those who merely exhibit a preventive coping style (Reuter & Schwarzer, 2009). Coping from a proactive viewpoint entails managing one’s goals as opposed to managing risks (Schwarzer & Taubert, 2002) and this requires an individual to possess ‘action self-efficacy’, an optimistic belief that one is able to initiate courses of action that are not simple or effortless (Reuter & Schwarzer, 2009, p. 506).

From the above, it is clear that the use of a proactive coping style will benefit students who are currently studying toward qualifications at universities as well as employees in the broader organisational context once these students finish their studies and enter the working world. It is therefore important to investigate whether students do make use of this coping style. It is also necessary to determine the possible effect of institutional culture on proactive coping levels, as the researcher found no previous studies in this regard.

In addition to the aforementioned, however, apart from Adebayo et al.’s (2008) study that took place in Nigeria, limited research related to proactive coping exists in an African context. Although Bandura (2002) notes that perceived coping efficacy affects both burnout and stress in occupations in similar ways across various cultures, and even though studies have been conducted regarding proactive coping in many countries around the world (including Australia, the Netherlands, Slovak Republic, China, Germany, the United States, Canada and Poland), research into proactive coping is lacking in Southern Africa. The researcher found limited studies relating to proactive coping in South Africa (SA). In Strümpfer’s (2003) article, proactive coping was defined in a different way to the definition used in this study. In Nxumalo’s (2010) dissertation, the effect of proactive coping on child sexual abuse was
investigated, but from a case study perspective involving only one participant. In Meiring’s (2010) dissertation, proactive coping was quantitatively explored from the perspective of parents with children with autism.

Over and above this lack of research, the instrument most commonly used to measure proactive coping (to be discussed in Section 5.3) was developed in the West and initial empirical tests were conducted using only Western societies (Wu, Chen & Yao, 2008). This illustrates the lack of research on proactive coping in Africa and emphasises the importance of this study in broadening the research on stress and coping in Southern Africa. By conducting this study using a multicultural approach, evidence will be provided regarding the coping styles of individuals in various national and institutional contexts. This will enhance the field of cross-cultural psychology, which critically and comparatively studies cultural effects on human psychology (Shiraev & Levy, 2004).

1.3 Problem statements

From the above overview, it is necessary to highlight a number of problems that emerge from current research.

1.3.1 Problem statement 1

Organisations require individuals who are self-determined, goal-driven and committed to improving the quality of their own lives. Students who lack such a proactive coping style will enter organisations at a disadvantage, as they will be more at risk to experience burnout and absenteeism and will be more likely to suffer negative health consequences such as depression, emotional exhaustion and anger. Such employees will be ill-equipped to regulate their own behaviour.

1.3.2 Problem statement 2

To the researcher’s knowledge, no research has yet been carried out on how proactive coping levels amongst students differ across varied universities. Due to the fact that university students represent a large and valuable labour market, it is necessary to discover whether they are coping proactively, as this
would benefit not only themselves but their future employers. Whether institutional culture has an effect on students’ use of proactive coping has not been established, and it is therefore necessary to investigate proactive coping from an institutional culture perspective, focusing specifically on universities as a form of tertiary educational institution.

1.3.3 Problem statement 3
Research into the concept of proactive coping is lacking in Southern Africa. This form of coping thus needs to be investigated within African countries, in order to contribute to the cross-cultural literature relating to stress and coping. Therefore, proactive coping must be investigated from a national culture perspective.

1.4 Research objectives
The following section will discuss the objectives that have been formulated in order to address the preceding problem statements.

1.4.1 General research objective
The primary aim of this research is to explore the proactive coping levels of university students in Southern Africa, in order to gather meaningful data on this construct and determine if differences occur between students of Southern African countries and universities.

1.4.2 Specific literature objectives
The literature objectives that were decided upon for this research are as follows:

1.4.2.1 Literature objective 1
To briefly examine the foundational concepts of proactive behaviour, stress and coping.

1.4.2.2 Literature objective 2
To investigate the concept of proactive coping by looking at Schwarzer’s Proactive Coping Theory (PCT) and drawing distinctions between the different
forms of coping strategies that individuals employ, as well as examine the various stages of proactive coping.

1.4.2.3 Literature objective 3
To debate whether proactive coping can be classified as coping in terms of coping’s traditional definition.

1.4.2.4 Literature objective 4
To examine national and institutional culture as well as look at relevant cross-cultural proactive coping research, to determine how individuals differ in terms of this coping style across nations and institutions.

1.4.2.5 Literature objective 5
To explore how a proactive coping style might positively affect individuals, specifically in a university context.

1.4.2.6 Literature objective 6
To discuss the national cultures of the main countries under study, as well as the institutional cultures of the three universities sampled.

1.4.3 Specific empirical research objectives
This research will be primarily exploratory in nature. The main purpose of the empirical section of the research is to gather primary data on the use of proactive coping by Southern African university students, in order to contribute to research that has been conducted on this construct. Further specific empirical research objectives are as follows:

1.4.3.1 Empirical objective 1
To make use of the Proactive Coping Inventory (PCI) developed by Greenglass, Schwarzer and Taubert (1999b) in order to measure the proactive coping levels of those sampled.
1.4.3.2 Empirical objective 2
To electronically administer this questionnaire to a sample of university students in Botswana, Namibia and SA.

1.4.3.3 Empirical objective 3
To determine with some form of statistical significance that the instrument is reliable and holds a measure of construct validity.

1.4.3.4 Empirical objective 4
To conduct exploratory factor analysis so that the number of factors in the PCI can be determined.

1.4.3.5 Empirical objective 5
To determine whether significant differences occur in the construct of proactive coping between university students from various Southern African countries (effect of national culture on proactive coping).

1.4.3.6 Empirical objective 6
To determine whether significant differences occur in the construct of proactive coping between students from various Southern African universities (effect of institutional culture on proactive coping).

1.4.3.7 Empirical objective 7
To determine whether significant differences occur in the construct of proactive coping across different genders and ages, as well as whether locality differences occur (that is, whether differences in proactive coping occur between local and international students).

1.5 Delineation of terms, constructs and concepts
Different constructs and concepts have different meanings depending on the nature of one’s perspective and research background. For the purposes of this dissertation, a list of operational terms will be more narrowly defined to minimise any such confusion.
1.5.1 National culture
Shiraev and Levy (2004) define a “nation” as a group of individuals who make up an independent state or political entity and share a common history, geographic origin and language. Furthermore, “culture” can be defined as a set of norms, values and beliefs that a group of individuals share that makes up their common heritage (Snyder, Lopez & Pedrotti, 2011). Thus, the researcher concludes that “national culture” is the set of common values and beliefs demonstrated by a group of individuals from a particular country or independent state.

1.5.2 Institutional culture
An institution can be described as an established, official organisation created to fulfil an educational, professional, social or religious purpose and play an important role in society (Oxford Dictionaries, 2010a). Thus the researcher defines “institutional culture” as the set of common values and beliefs demonstrated by a group of individuals from a particular institution. The institutional culture for the purposes of this study will focus on educational institutions in the form of universities.

1.5.3 Southern Africa
Southern Africa is the southernmost region of Africa and was traditionally defined by the United Nations as consisting of Botswana, Lesotho, Namibia, SA and Swaziland (New World Encyclopedia, 2008). However, this was deemed as too limiting because these five countries do not sufficiently express the cultural and geographic connections found in the region (New World Encyclopedia, 2008). For this reason, “Southern Africa” is now accepted as including all fourteen Southern African Development Community (SADC) countries, namely Angola, Botswana, the Democratic Republic of Congo, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, SA, Swaziland, Tanzania, Zambia and Zimbabwe (Southern Africa Trust, 2008).
1.5.4 **Universities**
Oxford Dictionaries (2010c) define a university as a higher-level educational institution where students study for degrees and academic research is conducted.

1.5.5 **Proactive coping**
According to Aspinwall and Taylor (1997), proactive coping can be defined as efforts undertaken by an individual prior to a potentially stressful event, in order to prevent the event from occurring or modify it before its occurrence. The concept has, however, been expanded to entail long-term, goal-orientated behaviours that occur before a stressful situation arises (Schwarzer & Taubert, 2002).

1.6 **The research process**
The research process involves an account of how the researcher plans to interact with the research domain to produce scientifically valid research. While this research does aim in different ways to be descriptive, explanatory and predictive, emphasis will be placed primarily on its descriptive goal. Furthermore, a deductive and application-oriented strategy will be used. The former refers to when a theoretical concept is selected and data is then collected to demonstrate or reject the chosen hypotheses; the latter occurs when a researcher attempts to establish how research findings obtained in one country or culture are applicable to a different country or culture (Shiraev & Levy, 2004). The theoretical model used for this study is Schwarzer’s (1999) PCT. Hypotheses based on a thorough literature review will be presented throughout Chapters Two to Four and data collected will reject or accept these.

1.7 **Central theoretical statement**
This study will investigate the use of proactive coping amongst university students, to determine whether differences occur in this construct across home countries, universities, ages, genders and localities.
1.8 **Expected limitations**

A number of expected limitations exist for this study. It is necessary to review these, so that any potential difficulties can be pre-empted and the study can take place more comprehensively.

It is expected that there will be difficulty in collecting cross-cultural data. English is an official language in all of the countries chosen for this study (Ethnologue, 2010), which removed the need to translate the questionnaire used to collect the data. However, the questionnaire is electronic in nature and thus following up on respondents to ensure a high response rate will be difficult, as no face-to-face contact will be made with the sample. Furthermore, collecting data electronically in foreign countries involves relying on individuals in those countries to timeously distribute the questionnaire. It is predicted that many follow-ups will need to be made with those in charge of distributing the questionnaire for the researcher.

Moreover, it is likely that cross-cultural literature on proactive coping will not be found as easily as cross-cultural literature on stress or coping in general or for constructs such as self-efficacy, which has been researched for a longer time period. The researcher for this reason may need to rely on a limited number of authors who have paid attention to this positive coping construct.

Importantly, a further limitation to this study is that culture is by no means the only determinant of an individual’s behaviour, yet this study primarily looks at proactive coping from a cultural point of view. This is due to the assumption that individuals originating from a specific country will portray the values of that society, and in a similar manner, students studying at a specific university will take on the values of that institution. The researcher does however acknowledge that not all cultures are homogenous, and that the approach used does not take into account numerous other factors that could influence the behaviour of individuals originating from the same country or studying at the same institution. Even though it is probable that there was a lack of homogeneity across the cultures under study, it is hoped that national or university identification will reduce these differences.
Furthermore, even though this research will be conducted from a national and institutional culture point of view, the results will importantly emphasise numerous other aspects related to proactive coping that will be discussed irrespective of culture, such as gender, age and locality differences.

1.9 Conclusion
The research to follow will consist of two main stages. It is essential that the theoretical framework within which the researcher will be working is clarified and the first stage will therefore encompass the reviewing of literature pertaining to the topic, as well as a qualitative analysis of all concepts (Chapter’s Two to Four). This will begin with a review of proactive behaviour, stress and coping, followed by literature pertaining to the construct of proactive coping as well as other relevant coping styles. The concept of proactive coping will be discussed from a national and institutional culture perspective, and cross-cultural data on proactive coping will be provided. The benefit of proactive coping for students in universities will be mentioned and the countries and universities under study will be examined.

The second stage of the research will comprise the empirical component of the dissertation. The research method will be clarified (Chapter Five), followed by an outline of the findings (Chapter Six). These findings will be discussed in detail and thereafter, recommendations will be made for universities and organisations in terms of assisting students and employees to make greater use of a proactive coping style (Chapter Seven). Possible limitations will then be discussed, as well as areas for future research (Chapter Eight).
CHAPTER TWO

PROACTIVE COPING THEORY

2.1 Introduction
According to Schwarzer and Knoll (2009), there has been a trend of late to widen the research of stress and coping to include positive strivings made by individuals. Positive strivings include individuals desiring to maximise their gains, seeking to obtain additional resources as well as building up their resistance to stress in order to ward off potential future crises or simply to develop their capabilities for their own benefit (Schwarzer & Knoll, 2009). By doing so, individuals are being proactive in their manner of coping as opposed to being reactive. This chapter provides a background to the concept of proactive coping, by discussing how the concept has developed since its initial definition in 1997 by Aspinwall and Taylor, through to Schwarzer’s (1999) PCT. However, it is first necessary to explain the concepts of proactive behaviour, stress and coping, as these form the theoretical background of proactive coping.

2.2 Proactive behaviour
According to Crant (2000, p. 436), someone who displays proactive behaviours will “challenge the status quo” as opposed to “passively adapting to present conditions” and will either create new opportunities or take the initiative to improve his or her current circumstances. Furthermore, someone with a proactive personality identifies opportunities, takes action, displays initiative and perseveres until meaningful change takes place (Robbins, Judge & Campbell, 2010). Thus, proactive behaviour involves the actual activities an individual performs to change a situation or the status quo, whereas a proactive personality is a possible dispositional variable involving the propensity for self-regulatory activities (Adebayo et al., 2008). A proactive personality is stable, cannot be changed easily over time and could possibly be the forerunner to proactive coping (Hu & Gan, 2011).
Proactive individuals are principled, resourceful and responsible (Schwarzer, 1999) and are optimistic about life (Greenglass, Schwarzer, Jakubiec, Fiksenbaum & Taubert, 1999a). They are generally unrestricted by situational influences (Crant, 2000) and will strive for improvement in their lives, as opposed to reacting to past or future problems (Greenglass et al., 1999a). Shonhiwa (2006) has recommended that African managers develop this trait, in the form of having a proactive mind in order to foresee issues. Seibert, Kraimer and Crant (2001) indicate that a proactive personality is indirectly related to satisfaction and career progression and highly proactive employees are more likely to be actively involved in behaviours that have a positive effect on their careers. Although proactive individuals are not seen as being overly challenging, they do take the initiative to develop and propose their own solutions to problems, thus being high in innovation (Seibert et al., 2001). A further proactive characteristic is proactive change management, which has been stated as being a key success factor for African managers to be effective (Shonhiwa, 2006).

According to Crant (2000), an individual has different motivations for behaving proactively, such as wanting to create conditions in which he or she will become a top performer, wishing to positively influence his or her image or desiring to assist others. Thus, it is an individual’s perception of the risk to his or her image, organisational norms or situational favourability that will influence whether he or she engages in proactive behaviours (Crant, 2000).

In order to be proactive, it is vital that an individual is able to self-regulate his or her actions. Self-regulation is defined by Vohs and Baumeister (2004) as individuals exercising control over themselves and bringing themselves in line with their own standards. Thus, individuals need to be able to direct their own actions (Fiske & Taylor, 1991, in Aspinwall & Taylor, 1997). Self-regulation is spoken of in the context of coping by Lazarus (1977), who states that when self-regulating, an individual manages his or her own emotional reactions whilst cognitively evaluating both the social and personal requirements of an
emotional situation, as opposed to passively reacting to internal and external pressures.

Further relating proactivity to coping, individuals are often able to recognise signals that problems may arise in the future and they can thus take active measures to deal with the stressful situation before it takes place (Greenglass et al., 1999a). Proactive behaviour consequently involves the processes through which individuals anticipate potential stressful situations and then act in advance to prevent them from occurring (Greenglass, 2002), emphasising initiative as opposed to reaction to a past stressor (Greenglass et al., 1999a).

![Figure 2.1: An integrative model of the antecedents and consequences of proactive behaviours](Crant, 2000, p. 438)
Proactive behaviour can eliminate much stress before it takes place, provided that individuals modify, reduce or remove the stressful occurrence (Greenglass, 2002). As can be seen from the diagram above, ‘stress coping’ is one of the context-specific behaviours that are exhibited within certain situations if an individual is said to be proactive. Should these behaviours be demonstrated, positive outcomes such as increased job performance, feelings of personal control, career success, effective leadership, positive job attitudes, team performance, role clarity, entrepreneurship and organisational innovation will take place (Crant, 2000).

The concept of stress will be presented in the following section.

2.3 **Stress**

*In light of daily obstacles and disappointments, one may assume that life is inherently stressful.*

Schwarzer and Knoll (2009, p. 6)

Stress is widespread, occurring in all areas of life such as interpersonal relationships, family, work and school (Greenglass, 2002). These areas can be sources of anxiety and frustration: for example, work stress and perceptions of unfair treatment at work may result in anger, which leads to higher levels of anxiety (Greenglass, 2002). Other work-related sources of stress might include an individual’s job itself due to demanding tasks that exceed the individual’s coping resources, an individual’s role within the organisation being too ambiguous, relationships at work that cause friction, a competitive organisational climate, restricted career development, lengthy work hours, an overload of work, the implementation of new technology or frequent travel (Reuter & Schwarzer, 2009). Bearing these examples in mind, what exactly is “stress”?

Stress is widely accepted as being a complex process, rather than a descriptive variable or a concept that is defined by way of one explanation (Reuter & Schwarzer, 2009). Hans Selye, who formulated the theoretical
concept of stress, defines the concept as a “non-specific response of the body to any demand” (Selye, 1978, p. 55). To further this, Schlebusch (2000) explains that stress refers to relationships between individuals and their environments, when it is perceived and evaluated that an environment poses a threat to one’s well-being and when environmental demands exceed one’s coping resources. A “threat” involves some form of harm that has not yet happened (Monat & Lazarus, 1977). A person-environment transaction produces a particular quality of experience through either underarousal or overarousal and this experience can result in psychological or physiological distress (Aldwin, 1994). Thus, the researcher notes that what is common from the explanations of stress presented is that there exists a link between an individual and his or her environment (external surroundings). When an individual perceives that threats or risks are imminent in his or her environment, that person will experience what is known as “stress”. This is in congruence with Cassidy (1999), who speaks of stress in terms of the fit between an individual and his or her world, with a lack of fit producing psychological or physical problems.

A potentially stressful situation is any event that holds the potential to be harmful or deteriorating (Aspinwall & Taylor, 1997). It must be noted that the demands that a situation produces can be either continuous or changing: that is, they can reflect ongoing dangerous situations or they can occur only in the future, thus creating a threat to individuals who do not feel that they can adequately match the impending demands with their current resources (Schwarzer & Knoll, 2009).

Stressors, also termed “stress stimuli”, are events that impose on an individual, such as major change or catastrophes, or daily aggravations or disturbances (Lazarus & Folkman, 1984). Stressors can be any situation, person, object or event that an individual perceives as being stressful and difficult to cope with (Schlebusch, 2000). Stressors can be avoided (Aspinwall & Taylor, 1997), but it is worth noting that not all stress is negative in nature. According to Selye (1978), it is possible to differentiate between unpleasant or harmful stress (“distress”) and more positive stress (“eustress”). Although an
individual’s body experiences similar non-specific responses to either negative or positive stimuli, eustress does cause less damage than distress (Selye, 1978). Furthermore, eustress provides challenges that encourage individuals to work harder to meet their goals, whereas distress occurs as a result of persistent stressful situations and generates negative health outcomes (Landy & Conte, 2010).

Stress results in psychological, physiological and behavioural reactions that occur when an individual attempts to adapt and adjust to internal and external demands that he or she cannot cope with (Schlebusch, 2000). According to Gan et al. (2010), there are four manifest variables of stress, namely conflicts, frustration, changes and pressures. For example, emotional distress occurs when work demands are either incompatible with one another or are excessive and thus cannot be met (Greenglass, 2002). If someone feels that a stressful situation can be controlled, then he or she will experience lower amounts of stress because the person will perceive that he or she can cope with it. In a similar way, if there is a high degree of certainty about the outcome of the event being positive, then this hope will result in more confidence and less stress (Schlebusch, 2000).

Stressors cause the alarm reaction experienced in the first phase of the General Adaptation Syndrome (Selye, 1978), a discussion of which follows.

2.3.1 The General Adaptation Syndrome
According to Selye (1978), stress is made up of a set of responses or changes that appear together in the form of a syndrome. He termed this the “General Adaptation Syndrome” (GAS) [Selye, 1978, p. 38]. The GAS is the “defensive physiological reaction” of an individual that commences in reaction to a harmful stimulus (Monat & Lazarus, 1977, p. 6). As can be seen in Figure 2.2 below, which shows the GAS model, there are three phases that illustrate the basic stress response (Schlebusch, 2000), namely the shock/alarm reaction phase, the stage of resistance and the stage of exhaustion. In the first phase, brought on by stressors, individuals are in general states of arousal, allowing them to react by either fighting or fleeing (Schlebusch,
The sympathetic nervous system is activated as one’s body initially protects itself against adverse conditions, but it must be born in mind that this is a short-term reaction to a state of emergency (Schwarzer & Taubert, 2002). Often, stress can be mastered in this stage (Schwarzer & Taubert, 2002), but if it happens that the stress continues, it must be noted that no individual can endlessly live in a state of alarm (Selye, 1978). Thus in the resistance phase individuals become used to the stress after it occurs for prolonged periods of time, and one adapts and copes with physiological responses that are above normal. According to Schwarzer and Taubert (2002), adaptation takes place but often individuals will not cope well and may become sick as their immune systems are compromised. Finally, persistent stress overwhelms one’s bodily resources and energy is depleted in the exhaustion phase (Schlebusch, 2000).

Figure 2.2: A diagram of the GAS model

(Myers, 2008, p. 398)

When this GAS response is experienced, large parts of the body are affected in general by stressors; individual manifestations are coordinated and possibly dependent on one another; and defences are stimulated in order to assist the
body in desensitising itself (Selye, 1978). Stress often has detrimental effects on physical and mental health (Greenglass, 2002). However, stress can be related not only to the causes of diseases but could also occur as one’s response to a particular disease and its treatment (Schlebusch, 2000). Anxiety, depression, adjustment disorders, sleep disorders, illness, burnout, suicidal tendencies or even death are some of the most common ways that one’s body responds to excessive levels of stress (Schlebusch, 2000; Schwarzer & Taubert, 2002).

Stress cannot be avoided but the amount of stress experienced can be managed. It is thus of great importance for individuals to learn how to cope with stress to prevent these negative effects on the body. It is for this reason that coping research has been prolific in previous decades, as this body of research investigates how individuals manage distressing emotions and problems (Greenglass, 2002). Coping will be discussed in the following section.

2.4 Coping
The concept of coping follows on directly from having an understanding about what stress is, because the way in which one deals with stress is known as coping (Schlebusch, 2000). According to Merriam-Webster (2010), the first known use of the term ‘coping’ was documented in 1601. Monat and Lazarus (1977, p. 8) define the concept as “efforts to master conditions of harm, threat, or challenge when a routine or automotive response is not readily available”. Coping furthermore explains a “complex stress buffering process and the interaction between mitigating variables” (Louw, 2011, p. 1). These explanations are in line with Lazarus and Folkman (1984), who state that any definition of coping must include efforts to manage stressful demands, regardless of the outcome of these efforts. Coping labels behaviours that occur on top of simple behaviours such as habits or routines (Schwarzer & Knoll, 2009).

Coping strategies play a role in the psychological and physical well-being of individuals, specifically when individuals are faced with stressful situations or
challenges (Greenglass, 2002). As such, it is a critical concept in understanding how individuals adapt when faced with stressful situations (Wu et al., 2008). Furthermore, in a work-related context, coping with stress will enable individuals to manage or overcome demands that pose threats or challenges not only to an individual’s functioning, but also to the functioning of the organisation as a whole (Reuter & Schwarzer, 2009).

Coping includes both behavioural and cognitive efforts to manage specific external or internal demands, which are evaluated as strenuous and exceeding an individual’s resources (Lazarus & Folkman, 1984). Coping has been investigated in many contexts. For example, Louw and Viviers (2010) investigated coping in the context of South African police officers, stating that it is a necessity for police officers to decrease the intensity and frequency of perceived stress, in order for them to cope in a more effective manner.

It should be noted that coping is a “complex, multidimensional process that includes a variety of intrapersonal and interpersonal strategies for managing problems and regulating emotions” (Folkman, 1991, p. 7). That is, the conditions that establish how an individual copes in certain situations are complex and primarily unknown, but are likely to depend on the options available to the individual, the conditions that are taking place and the individual’s personality (Monat & Lazarus, 1977). As explained by Hambrick and McCord (2010), coping is multifaceted because individuals differ in the way in which they appraise situations and the way in which situations influence the options available to them. Additionally, the person-centred characteristics predisposing an individual to appraise and respond in certain ways also differ (Hambrick & McCord, 2010).

Coping occurs on several different levels, such as cognitive-reflective, emotional, attitudinal and behavioural levels (Greenglass et al., 1999a). According to Lazarus (1977), individuals possess certain belief systems, motives and competencies to cope with situations. They also organise and interpret in a different way their interaction with their environment, by selecting what they will respond to in order to fit with their own needs (Lazarus, 1977).
There are three important features of coping. Firstly, coping is process-orientated. In other words, it is viewed as a process because it refers to what an individual thinks or does and how these thoughts or actions change as a situation develops (Lazarus & Folkman, 1984; Folkman et al., 1991). Coping is thus perceived as a response to stressful situational demands (Greenglass, 2002). Secondly, coping is contextual because it refers to what individuals think or do in specific contexts (Folkman et al., 1991). Therefore, an individual copes according to specific, not general, stressful situations (as discussed on the previous page). Thirdly, coping is defined “without reference to its outcome” (Folkman et al., 1991, p. 242), indicating that the emphasis is placed on the efforts to manage a stressful situation (process-orientated), not how successful these efforts are. To manage stress does not mean that an individual is mastering the stressful situation. Management of stress through coping could also mean minimising, tolerating, accepting or avoiding the situation (Lazarus & Folkman, 1984).

Folkman et al. (1991) explain that coping serves two main functions; namely to manage or adjust the problem that is causing distress to an individual (problem-focused coping) and to control an individual’s emotional responses to the problem (emotion-focused coping). With problem-focused coping, an individual attempts to locate the cause of an issue and then either changes or removes the problem. This is referred to as “primary control”, because an individual is trying to adjust a situation to cope with a stressor (Schlebusch, 2000, p. 6). An essential aspect of problem-focused control is perceived control; that is, whether an individual perceives that he or she can control a stressful event (Greenglass et al., 1999a). This is also termed “self-efficacy” and will be discussed in Section 2.6.1.1(a).

Emotion-focused coping, on the other hand, centres more on “secondary control”, with individuals attempting to reduce their negative emotions and increased arousal caused by stress (Schlebusch, 2000, p. 6). Thus, the latter function of coping allows one to adjust to the situation, especially when primary control efforts in the form of problem-focused coping do not succeed and stressful situations cannot be changed (Folkman et al., 1991;
Schlebusch, 2000). It has been found however that emotion-focused coping is positively correlated with psychological distress such as depression and job anxiety, but in other research, that it is a beneficial means of coping with stress if positive emotions are employed (Greenglass et al., 1999a).

Greenglass et al. (1999a, p. 3) state that the distinction between problem- and emotion-focused coping is important, but it does not capture the “multivariate aspects of coping”. By restricting coping to a “bipolar” definition, many psycho-social and cognitive factors have been excluded that otherwise play a role in the way that individuals construct their coping strategies (Greenglass, 2002, p. 53). Traditional views of coping also assume that when individuals are faced with stressful situations, they attempt to minimise the stress; yet in reality, individuals approach stressful scenarios with many different goals, such as attempting to complete the task at hand, relying on social support systems, and so forth (Greenglass, 2002).

Coping has also traditionally been viewed as reactive, indicating that individuals respond only after a stressful event has been experienced (Greenglass, 2002). However, there has been a trend towards positive coping, incorporating the role that social support, reflection and planning have in dealing with stress (see Greenglass, 2002). This will be discussed in the following section, introducing the focus of this dissertation: proactive coping. According to Louw and Viviers (2010), a phenomenon that is often not considered or researched by stress and coping theorists is that while many individuals struggle to cope effectively with the stress that daily circumstances bring, other co-workers are often able to live energetic and spirited lives despite their exposure to the same conditions. The researcher believes that the answer to this paradox might lie in the concept of proactive coping.
2.5 **Schwarzer’s Proactive Coping Theory**

*Proactive coping is autonomous and self-determined goal setting and realisation of goals; it deals with self-regulatory goal attainment processes and explains what motivates people to strive for ambitious goals and to commit themselves to personal quality management.*

Schwarzer (1999, in Greenglass et al., 1999a, p. 4)

Lopes and Cunha (2008) explain that social psychology research has conventionally been unbalanced, with negative human functioning being emphasised and prominence being given to coping with dysfunctional processes. Yet, according to Schwarzer and Taubert (2002), when Selye introduced the term ‘eustress’ in 1956 and Lazarus introduced ‘challenge’ in 1966 as being a major cognitive stress appraisal, it was inevitable that a positive understanding of coping with stress would be developed. Lazarus in 1991 then added ‘benefit’ as a further cognitive stress appraisal category and subsequently, proactive coping was added to this trend of positive coping research (Schwarzer & Taubert, 2002).

Therefore, coping theories have recently been broadened as a reaction to earlier coping conceptualisations that neglected purpose, meaning and goals (Schwarzer & Taubert, 2002). There has been a need to redesign coping theory to expand it into “volition and action theory” and for this reason a systematic distinction is made in PCT between proactive coping and three other coping forms (Schwarzer & Taubert, 2002, p. 25). These various forms of coping represent its multifunctional nature (Greenglass, 2002).
PCT stems from a time-related classification of various coping manners (Schwarzer & Taubert, 2002). It presents an alternative perspective to Beehr and McGrath’s (1996) distinction between five coping situations, namely preventive, anticipatory, dynamic, reactive and residual coping (Schwarzer & Taubert, 2002). According to PCT, there are four perspectives of coping, which can be portrayed graphically along two dimensions, namely ‘timing’ and ‘certainty’ (Schwarzer & Taubert, 2002). This is displayed in Figure 2.3 below.

![Figure 2.3: Outline of PCT](Reuter & Schwarzer, 2009, p. 504)

According to Reuter and Schwarzer (2009), ‘timing’ on the horizontal axis relates to the time perspective of the demands placed on an individual, also known as the temporal aspect of coping (Schwarzer & Taubert, 2002). Distressing or harmful encounters could have occurred in the past (Schwarzer & Taubert, 2002) or they could be continuous, ongoing or changing. They could also exist in the future, when an individual feels threatened at the
possibility of being incapable of coping with the demand based on his or her current resources (Schwarzer & Taubert, 2002). Individuals can thus cope before a stressful situation occurs, while it is taking place or after it has happened (Schwarzer & Taubert, 2002).

A situation could also be viewed subjectively as either certain or uncertain, and this represents the ‘certainty’ dimension of the theory on the vertical axis. Based on these dimensions, the four perspectives of coping emerge. The following discussion is based on Schwarzer and Taubert (2002), Reuter and Schwarzer (2009) as well as Schwarzer and Knoll (2009), unless otherwise stated.

2.5.1 Reactive coping
Reactive coping refers to a reaction to a negative event that has occurred in the past (‘certain’ ‘past harm/losses’ in Figure 2.3). Thus, resilient efforts must be made to deal with a stressful demand that is either ongoing or has already taken place. An individual can compensate for or alleviate the harm or loss, accept what has occurred, search for meaning in order to reconceptualise his or her life, or readjust his or her goals. Situations requiring one to cope reactively include responding to the loss of one’s job or the failure of a university exam. This is related to recovery self-efficacy, whereby an individual is optimistic about his or her competence to overcome setbacks and regain control in his or her life (Schwarzer, 1999).

2.5.2 Anticipatory coping
Anticipatory coping, however, relates to critical threats that are inevitable or fairly certain in the future, but have not yet occurred (‘certain’ ‘future threats and challenges’ in Figure 2.3). Because the stressful demand or event is imminent, there is a risk that it might cause harm or loss at a later stage. Thus, this perceived known risk must be managed either through preparatory actions, dealing with the upcoming problem or feeling good despite the risk. Examples where one might cope in an anticipatory manner include preparing for an upcoming job interview or the completion of a university semester assignment. An individual’s resources are therefore invested in preventing or
overcoming the future stressor, which is related to coping self-efficacy, the
optimistic belief of being able to successfully cope with certain situations and
deal with barriers (Schwarzer, 1999). Individuals might solve the problem by
gaining help, increasing effort, investing more resources in anticipation of the
stress or by redefining the event as being less threatening than originally
perceived. Anticipatory coping was written about as early as 1977 by Lazarus,
who stated that the nature of a harmful situation would be changed based on
the extent to which an individual prepared effectively for the detrimental
situation by avoiding or rising above the danger before it occurred or by being
better able to perform adequately in the confrontation. The emotions that
might have been felt while being faced with danger (such as depression, fear
or grief) might also be changed if one copes anticipatorily, with exhilaration
being experienced instead (Lazarus, 1977).

2.5.3 Preventive coping
Preventive coping pertains to threats that could possibly occur in the future
(‘uncertain’ ‘future threats and challenges’ in Figure 2.3). Effort or planning is
required in order to build up general resistance resources that will result in
less future strain, minimal impact or consequences of the stressor or even
less chance of the stressful event occurring at all. Various unknown future
risks that must be managed result in ambiguity and the creation of anxiety,
which leads to a broad range of coping behaviours. Examples of non-
normative stressful life events include physical disability, poverty or forced
retirement. Whereas anticipatory coping focuses on short-term, high-certainty
events, preventive coping prepares for long-term, uncertain events. For
example, one’s skills could be developed to prevent undesirable outcomes or
alternatively, resources such as social support systems or material wealth
could be accumulated just in case threatening life situations occur (the
researcher notes that most individuals take out disability cover or life
insurance, just in case an unexpected tragedy occurs; this is a form of
preventive coping). Thus, coping becomes a type of risk management as
individuals protect themselves against future threats. According to Gan et al.
(2010), preventive coping could assist university students because they will
recognise potential stressors, eliminate problems early and therefore
experience less frustration in the form of financial strain, exam failure or interpersonal problems. This form of coping also plays a role in the adjustment of students to university (Gan et al., 2010). Snyder et al. (2011, pp. 353) would term efforts to cope in a preventive manner as “primary prevention”, because it involves lessening or eliminating psychological or physical problems before they take place, thus stopping negative situations before they occur.

2.5.4 Proactive coping

However, ‘proactive coping’ differs from the above forms of coping because it deals with future, self-promoting challenges. Aspinwall and Taylor (1997) were the first to define proactive coping, explaining it as efforts undertaken by an individual prior to a potentially stressful event in order to prevent the event from occurring or modify it before its occurrence. Thus, an individual can be deemed a ‘proactive coper’ when he or she anticipates that a stressful experience may take place before it actually does by paying attention to potential stressors, acting once they are detected and using feedback to modify these appraisals and actions (Aspinwall & Taylor, 1997). Action is thus taken to avoid the stressful experience or minimise its effects, with the result that the individual is well-prepared because of this advanced planning (Aspinwall & Taylor, 1997). Folkman and Moskowitz’s (2004) explanation is similar, with proactive coping being said to entail coping in advance in order to prevent or lower the impact of potential stressful situations. In agreement, Aspinwall, Sechrist and Jones (2005) state that proactive coping involves preferring to ‘plan ahead’ for events through using one’s current resources to prevent or counteract the future effects of negative situations.

The researcher believes that the concept of proactive coping put forward by these authors, however, actually reflects a combination of anticipatory and preventive coping, despite Aspinwall and Taylor (1997) reasoning otherwise. Although proactive coping relates to relatively ‘certain’ ‘future threats and challenges’ as seen in Figure 2.3, stressors in this case are not necessarily concrete (such as is the case with reactive coping) and this form of coping is not preceded by negative appraisals. The focus is also not on preparing for
potential negative events, such as is the case with preventive coping, but on individuals developing general resources to facilitate promoting themselves toward personal growth. Preventive coping, as has already been explained, occurs when individuals face the risk of a critical future event for which they need to build up general resistance resources, and for this reason both Roesch et al. (2009) and Hu and Gan (2011) state that Aspinwall and Taylor’s (1997) definition of proactive coping is more prevention-orientated. Although the behaviours produced by preventive and proactive coping are similar, such as accumulating resources, planning in the long-term and developing skills, Schwarzer and Knoll (2009) note that the motivation for preventive coping stems from threat appraisal and as a result, worry levels are high. However, proactive coping emanates from challenge appraisal and striving towards goals, with worry levels thus being lower. Furthermore, proactive coping and anticipatory coping are terms that have often been used interchangeably (see Aspinwall et al., 2005). As has already been mentioned, individuals who use an anticipatory coping style would prepare for the consequences of a certain future stressful event by anticipating it and preparing in advance to avoid it or reduce its negative effects.

Both of these terms differ from proactive coping because the latter involves preparing for stressful events in general, through building up resources that will assist an individual in dealing with challenging goals whenever they arise (Schwarzer & Taubert, 2002). It consequently expands previous forms of coping to entail long-term, goal-orientated behaviours that occur before generalised stressful situations arise. The definition put forth by Schwarzer and Knoll (2009, p. 4) is thus more appropriate, namely that proactive coping is “an effort to build up general resources that facilitate promotion toward challenging goals and personal growth”. As stated by Crant (2000), proactive behaviour arises from the setting of goals, such as preventing a problem or creating a desirable impression. In doing so, proactive copers have a vision for their lives and do not view demands or risks as threats or losses in the future, but as challenges that they are motivated to overcome. Constructive paths of action are generated and long-term, goal-orientated behaviours occur before stressful situations are experienced. The resources that one builds up
create opportunities for development, progress and improved quality of life, with goals being successfully managed. PCT emphasises that proactive copers actively seek to improve their lives and environment, even when no stressful event is imminent (Roesch et al., 2009). For example, one’s work environment can be developed through the design of better working conditions and an increase in personal performance, which in turn might result in an individual rendering his or her life as more meaningful or purposeful.

Proactive copers are committed to high personal standards (Schwarzer & Knoll, 2009). To be a proactive coper, action self-efficacy is required, whereby individuals develop initiatives to try new behaviours and imagine successful scenarios (Schwarzer, 1999). They thus optimistically believe that they are capable of initiating and continuing along difficult courses of action.

Such individuals perceive life to be filled with resources, which they accumulate, prevent from being depleted, and mobilise as and when needed (Greenglass et al., 1999a). This requires having a high level of developed social skills. Making use of available resources to solve issues and believing in their abilities to handle challenges successfully results in the perception of fair treatment at work because they do not see others as undermining them; it also implies greater professional efficacy due to their belief in themselves being able to deal with challenging situations (Greenglass, 2002).

The extent to which individuals make use of a proactive coping style such as using mental simulation, goal setting, planning and seeking social support will also more likely result in experiencing greater life satisfaction (Greenglass, 2002). Higher performance levels and better living conditions that result from proactive coping result in individuals experiencing more meaningful and purposeful lives (Schwarzer, 2011, in Snyder et al., 2011).

Proactive individuals also believe that their lives are determined by personal, not external, factors and they therefore make things happen as opposed to waiting for them to happen (Greenglass et al., 1999a). This implies that proactive copers do not believe that the environment, external factors or luck
determine outcomes, but rather that coping is a function of vision, resourcefulness and responsibility combined (Roesch et al., 2009). When individuals cope proactively, they are less likely to blame others when situations do not go as planned because they feel prepared to deal with stressful situations (Greenglass, 2002). The researcher notes that this suggests that proactive copers have a strong internal locus of control, which refers to individuals perceiving situations as being a result of their own actions as opposed to outside causes (Landy & Conte, 2010).

Individuals who engage in proactive coping will be better adjusted for stressful events than those who do not prepare in advance (Aspinwall & Taylor, 1997). This is because proactive individuals strive to improve their lives (whether personal or at work) by building up resources that ensure progress and quality functioning (Schwarzer & Knoll, 2009). Therefore, the researcher believes that in order to be a proactive coper, it is essential that individuals exhibit the proactive behaviours discussed in Section 2.2. For example, in order to be a proactive coper, one must have highly proactive attitudes; that is, one should plan, reframe thoughts positively, accept certain situations and believe in the potential of changes that can be made in order to improve oneself and one’s environment (Greenglass et al., 1999a). In this way, proactive coping links directly with having a proactive personality, which according to Crant (2000) involves individuals identifying and acting on opportunities, showing initiative, taking action and persevering until meaningful change takes place. Furthermore, Hambrick and McCord (2010) suggest that the ideal personality profile of an exceptional proactive coper would include high conscientiousness (specifically achievement-striving), extraversion (especially cheerfulness) and agreeableness (particularly altruism), together with low neuroticism (especially depression). However, the researcher notes that more research is required in order to conclusively understand or predict the personality profile of a proactive coper.

Often, traditional coping is emphasised as being reactive and much research has overemphasised passive or reactive responses to events (Crant, 2000). However, as stated in Section 2.1, individuals have a tendency to be more
positive in the way they manage themselves by ensuring that they cope using a forward time perspective (future-orientated) as opposed to dealing with stressful situations that have already taken place (Schwarzer & Knoll, 2009; Greenglass, 2002). Visions and goals that are self-created may produce opportunities or threats, which in turn result in effort being put in to produce growth and rewards (Schwarzer & Knoll, 2009). Proactive coping becomes a case of ambitiously managing and steadfastly pursuing one’s goals, as opposed to managing one’s risks in the case of reactive coping (Greenglass, 2002). Opportunities for growth are thus created. For example, Wong (1998, in Schwarzer & Taubert, 2002) states that one of the dimensions that provides meaning in stressful situations is the motivational dimension. This element includes coping characteristics such as seeking to actualise one’s potential, striving to grow oneself personally and pursuing goals that are worthwhile (Wong, 1998, in Schwarzer & Taubert, 2002). Schwarzer and Taubert (2002) recognise these behaviours as representing the ability to cope proactively.

From the above, it can be inferred that proactive coping will prepare individuals for the arrival of stressful situations, by affecting whether they actually occur as well as what form they take should they occur (Aspinwall & Taylor, 1997). This is achieved by proactive copers actively reading and responding to environmental threats, altering their efforts and tactics accordingly and when necessary, accepting reality (Davis & Asliturk, 2011).

### 2.5.4.1 Characteristics of proactive coping

Both Lopes and Cunha (2008) and Gan et al. (2010) state that proactive coping is a style, not a behavioural set. It represents a dispositional variable through which individuals are inclined to think and behave in advance, as opposed to coping strategies that correspond to specific situations (Gan et al., 2010). Hambrick and McCord (2010) agree with this when they mention that certain individuals succeed more successfully when faced with stressors due to the dispositional influence of their personalities. Proactive coping is a generally positive approach to stress, which leads to individuals adjusting better and enjoying improved mental health (Wu et al., 2008).
The above is in contrast to Aspinwall and Taylor (1997, p. 431), who state that proactive coping should be seen as a set of skills as opposed to a “stylistic preference”. Indeed, many authors (such as Reuter & Schwarzer, 2009; Greenglass, 2006; Schwarzer & Taubert, 2002) imply that proactive coping behaviours can be exhibited. Furthermore, it has already been mentioned in Section 2.4 that coping does include behavioural efforts (Lazarus & Folkman, 1984), and coping has been said to occur on different levels, one of which is the behavioural level (Greenglass et al., 1999a). It can thus be concluded that there is a lack of clarity amongst authors as to whether proactive coping is a style or a behavioural set, or indeed even a personality disposition. For the purposes of this research, however, the researcher will endeavour wherever possible to avoid the term “proactive coping behaviours” and will rather emphasise the use of proactive coping as a style of coping. This is due to the fact that the items in the Proactive Coping Inventory, to be introduced in Section 5.3, tend to infer that proactive coping is more a style than a behavioural set, as they imply that coping proactively comes naturally to an individual and depends on one’s character.

Proactive coping is multidimensional in the sense that coping is perceived as having many goals, only one of which is the traditional goal of minimising stress (Greenglass, 2002). It is also a forward-looking coping strategy, because it integrates the process of improving the quality of one’s life with self-regulating one’s attainment of goals (Greenglass, 2002). The multidimensional aspect of proactive coping is demonstrated by what it involves: reflection by envisioning success; foreseeing future problems; planning how to deal with these issues or stressors; taking the necessary steps to prevent the problem from occurring; and managing the resources individuals need to cope effectively, such as information, practical assistance, advice and emotional support (Greenglass et al., 1999a). This can be summed up as initiation, reflection, planning and prevention (Greenglass et al., 1999a). Proactive copers will be effective at both reducing the incidence of stressors as well as the emotional effect these stressors have (Hambrick & McCord, 2010). Proactive coping can also take place simultaneously in a
range of domains, such as thoughts, emotions and actions (Greenglass et al., 1999a).

Theory and empirical evidence have shown proactive coping to be a positive and unique psychological construct (Roesch et al., 2009). Indeed, proactive coping was included in Snyder et al.’s (2011, p. 498) section on “Experts’ Views on 21st-Century Positive Psychology”, indicating that proactive coping is viewed as a challenge that lies ahead in the positive psychological research realm. Positive psychology is defined by Davis and Asliturk (2011) as a branch of psychological science that focuses on understanding the development of resilience, virtue and well-being. It can also be expected that proactive coping correlates with other positive constructs such as a positive self-concept and optimism (Greenglass, Fiksenbaum & Eaton, 2006). However, one cannot achieve well-being, virtue and resilience only through being optimistic, expressing positive emotions and focusing on the positive aspects of a stressful situation (Davis & Asliturk, 2011). Instead, goal setting and pursuit, personal growth, life improvement and self-regulation will be emphasised as greater importance is placed on proactive coping and less on reactive coping as research is done to understand how individuals live (Schwarzer, 2011, in Snyder et al., 2011). As stated by Greenglass et al. (1999a), proactive coping involves individuals using positive emotional strategies as well as both social and non-social resources to cope (the accumulation of resources will be discussed in detail in Section 2.6.1). The field of coping as a result has thus become broader and now includes positive emotions and strivings, goals, finding benefits and searching for meaning (Schwarzer & Knoll, 2009), which proactive coping embodies. In this way, it integrates a positive approach to dealing with stress: it incorporates components of positive psychology by focusing on improving the quality of one’s life (Greenglass, 2002) and in fact goes conceptually further than other positive psychological constructs (Roesch et al., 2009).

The researcher believes that the most effective means of summing up proactive coping is provided by Greenglass et al. (1999a, p. 4), as follows:
{Proactive coping} is an approach to life, an existential belief that things will work out not because of luck or other uncontrollable factors, but because the individual takes responsibility for outcomes.

This implies that proactive coping is not just a once-off occurrence, but instead a lifestyle whereby an individual continuously focuses on preparing for the future and taking charge of his or her life.

2.5.4.2 The relationship between proactive coping and stress

Due to the fact that proactive copers perceive demands, opportunities and risks as challenges, this by implication means that those who cope proactively would experience more eustress than distress (as discussed in Section 2.3) because eustress involves the perception of stress as challenging, not threatening as in the case of distress. This is confirmed by Schwarzer and Knoll (2009), who state that proactive copers interpret stress as ‘eustress’. Thus the researcher elaborates that stress from a proactive coping point of view is not necessarily perceived as posing a negative threat to individuals, but will be seen instead as an opportunity to grow and develop as a person. That is, proactive copers will in a sense ‘thrive’ on stress because the existence of stressors will give them a chance to turn the stressors into positive motivators. In this way, during the course of daily activities, individuals perceive stressful events as opportunities in which they can make use of their skills and abilities to achieve independence (Greenglass et al., 2006). This also shows that coping serves functions other than simply reducing distress, which dominant conceptual research models demonstrate (Greenglass, 2006).

What if one lives in a chronically stressful environment, where one has little control over the stressors experienced? Aspinwall and Taylor (1997) propose that in this type of environment, proactive coping is difficult or even impossible to exhibit due to the fact that chronic stress reduces an individual’s perception of being in control, aggravates cognitive load and reduces one’s opportunities to engage in proactive coping. For this reason, individuals often resort to coping reactively instead. Furthermore, chronically stressful environments
often cause negative consequences such as depression, further decreasing the probability of individuals reacting proactively (Aspinwall & Taylor, 1997).

The researcher believes that the purpose of proactive coping is to lower the amount of alarm individuals are faced with when experiencing the first phase of the GAS, by increasing an individual’s general resistance to stress (see Figure 2.4 below). Whereas one would usually peak in terms of resistance levels in the second phase (once one has had a chance to adapt to the stressor), proactive copers would instead have all the necessary resources to be resistant to stress before the first phase has even occurred. Higher resistance to stress implies less of an upward curve and instead results in a straighter line occurring from the alarm to exhaustion phases of one’s response to stress, because individuals would have prepared in advance by increasing their resources to cope with stress (see Section 2.6.1). The proposed model below however contrasts with Folkman (1991) who states that coping is not a stable process. Indeed, stress is an active and unfolding process (Schwarzer & Taubert, 2002). Whether proactive coping can really be classified as “coping” will, for this reason, be discussed in Section 2.7.

Figure 2.4: An adapted version of the GAS model
What must be noted in the figure above is that the researcher does not propose that those who cope proactively will not be affected by stressful events at all. As can be seen, a peak in resistance to stress is still experienced after the alarm stage no matter how well equipped an individual is to deal with harmful or potentially negative situations. However, if one possesses the necessary proactive coping resources to be described in Section 2.6.1, then one will experience less of a “shock” to one’s system and will cope more effectively than a person who has not prepared in advance for stressful events.

The researcher also highlights that Selye’s GAS model has been criticised as not being supported in psychology, due to the fact that Selye focused on physiological reactions and disregarded the role that emotions and cognitions play in coping with stress (Schwarzer & Taubert, 2002). As indicated by Schlebusch (2000), one’s thought processes, perceptions of stressors and coping skills can also affect how one responds to stress. Also, because stressful events tend to be incredibly complex especially in social contexts, they cannot be reduced to being explained by primitive forms such as fight-or-flight responses such as in the GAS (Schwarzer & Knoll, 2009; Schwarzer & Taubert, 2002). Coping depends on the temporal aspect of demands as well as the subjective certainty of the situation (Schwarzer & Knoll, 2009), as discussed in Section 2.5. More recent theories of psychology (such as proactive coping) thus draw attention to how an individual interprets his or her environment when determining how stressful a situation is (Schwarzer & Taubert, 2002).

The researcher believes that it is for these reasons that the Cognitive-Transactional Theory of Stress (CTT) [see Reuter & Schwarzer, 2009] has been proposed as an alternative to Selye’s GAS theory, because this theory of stress better reflects proactive coping. According to Reuter and Schwarzer (2009), stress is defined in the CTT as any relationship between an individual and his or her environment that is appraised as being demanding, challenging or exceeding the individual's resources, thus jeopardising the well-being of that individual. Stress is perceived as being an ongoing process that is
maintained by cognitively appraising one’s demand and resistance resources (Schwarzer & Taubert, 2002). One’s resulting emotional response is mediated by the relationship between these demands and resources (Reuter & Schwarzer, 2009).

Lazarus’ (1991) Cognitive-Motivational-Relational Theory is the basis for CTT. This author explains that complex emotional processes are made up of causal antecedents, mediating processes and outcomes/effects. Reuter and Schwarzer (2009)’s process model based on this theory is illustrated in Figure 2.5 below. Antecedents include objective environmental demands, events or constraints as well as personal variables (resources) such as beliefs, motives, commitments, social networks, competencies or wealth, as seen in the figure below (Lazarus, 1991; Schwarzer & Taubert, 2002; Reuter & Schwarzer, 2009). These are mediated by cognitive appraisals of these demands and resources to produce coping efforts. This links with Greenglass (2002), who explains that psychosocial processes and reactions mediate and intervene in a cognitive manner between stressful situations and responses. Thus, one must purposefully access and process information in order to select, construct, regulate and evaluate courses of action (Greenglass, 2002). Further to this, these cognitive appraisals are comprised of two simultaneous processes: demand and resource appraisals. According to Schwarzer and Taubert (2002) as well as Reuter and Schwarzer (2009), demand appraisal occurs when an individual evaluates a situation or event as threatening, challenging or harmful, whereas resource appraisal occurs when an individual looks at his or her current coping options for dealing with the demands that he or she assessed. The individual will evaluate his or her social support structure, material resources or level of competence in order to readapt to the situation and ensure that equilibrium between him or herself and the environment is established (Schwarzer & Taubert, 2002; Reuter & Schwarzer, 2009). These coping processes alter the relationship between the person and the environment, which in turn affects his or her emotional state (Lazarus, 1991).
In this way, one’s coping strategies develop from previous patterns of behaviour, while a focus is also kept on being future-orientated (Greenglass, 2002). As a result of an individual experiencing stress and coping, outcomes/consequences occur that are either immediate/short-term (such as physiological changes) or long-term (such as psychological well-being, social functioning or somatic health) [Lazarus, 1991; Schwarzer & Taubert, 2002; Reuter & Schwarzer, 2009], as shown in Figure 2.5.

The way in which proactive coping is based on this theory is clear. Proactive copers rely heavily on both internal resources (self-efficacy and optimism) and external resources (social support), amongst other general resources. These will be discussed in detail in Section 2.6.1, in the first stage that individuals pass through when coping proactively. Additionally, proactive copers clearly appraise demands as challenges rather than losses or threats, as previously explained. Thus, proactive copers by implication will view stressful situations as opportunities to prove themselves by mobilising their physical and mental resources (Schwarzer & Taubert, 2002). They will anticipate that they will gain or master something from the experience or will personally grow from the
venture (Reuter & Schwarzer, 2009). Furthermore, those who cope proactively will experience a stressful situation as interesting, pleasant or exciting, feeling confident that they will be equipped to meet the demands it brings (Schwarzer & Taubert, 2002).

As a result, positive outcomes occur including an increased positive affect that leads to lower absenteeism levels (Greenglass, 2006). According to Greenglass and Fiksenbaum (2005), adults who cope proactively will exhibit high levels of life satisfaction, internal control, self-efficacy, professional efficacy and perceptions of fair treatment at work, as well as experience less perceived pressure (Hu & Gan, 2011). Proactive coping is also negatively correlated to neuroticism (Hambrick & McCord, 2010). Furthermore, a reduction of negative outcomes or consequences such as depression, emotional exhaustion, cynicism, anger, job burnout, self-blame, denial and cynicism will result from proactive coping (Greenglass, 2002).

Thus, PCT bridges the gap between coping and action, and extends the concept of coping to include the pursuit of goals and personal growth (Schwarzer & Knoll, 2009). It combines intentional and motivational features with conscious maintenance of oneself (Greenglass, 2002) and proposes that certain individuals are more able to live by accumulating resources and preparing for inevitable obstacles (Hambrick & McCord, 2010). According to Schwarzer and Knoll (2009), this more precisely and comprehensively predicts the behaviour of individuals when struggling and striving. As stated by Aspinwall and Brunhart (2000), proactive coping allows individuals to deal with developing problems before they become bigger, which assists in protecting one’s physical and mental health. By drawing distinctions between four coping perspectives, the focus is moved from responding to negative events towards more broadly managing risks and goals, such as through actively creating opportunities and positively viewing stress (Schwarzer & Knoll, 2009; Schwarzer & Taubert, 2002). A more comprehensive view of how individuals struggle with life is offered by coping through personal growth and persistent goal pursuit (Schwarzer & Taubert, 2002).
2.6 **Stages of proactive coping**

Aspinwall and Taylor (1997) divide proactive coping into five stages, namely resource accumulation, attention-recognition, initial appraisal, preliminary coping as well as eliciting and using feedback. These stages are illustrated in Figure 2.6, together with the critical tasks carried out at each stage, how the various stages are interrelated and the feedback that occurs at each stage. Each stage will be presented individually in this section.

![Figure 2.6: The five stages of proactive coping](image)

*(Aspinwall & Taylor, 1997, p. 420)*
Although a discussion of much of Aspinwall and Taylor’s (1997) research is to follow, it has already been noted that their definition of proactive coping differs from the current generally accepted definition by Schwarzer and Knoll (2009). Folkman and Moskowitz (2004) in this regard note that although Aspinwall and Taylor (1997) emphasise the importance of resource accumulation, the purpose of these resources is not to prepare for a specific upcoming event as stated in their definition, but instead to enable individuals to progress toward challenging goals that will allow for personal growth. This should be born in mind when analysing the stages of proactive coping to follow.

2.6.1 Stage One: Resource accumulation

The way in which individuals are able to cope depends on the resources available to them and any constraints that inhibit whether they are able to use these resources to cope with stressful situations (Lazarus & Folkman, 1984). As seen in Figure 2.6, proactive coping thus begins with resource accumulation, whereby an individual builds up and preserves skills and resources before specific future stressful events occur. This will ensure that when the stressors of the event are detected, individuals are prepared to manage them (Aspinwall & Taylor, 1997). As mentioned by Eckenrode (1991), when individuals possess favourable resources, they have been shown to get by better when faced with stressful situations than those who are not so advantaged. For this reason, this stage of proactive coping has been likened to preventive coping because it does not yet deal with seeking challenges and taking charge (Hu & Gan, 2011). Certainly, the researcher notes that resource accumulation need not only be discussed in the context of proactive coping. For example, Louw and Viviers (2010) did not focus on proactive coping but nonetheless mentioned coping resources that play a role in the handling of stress.

Attention was given particularly in the 1970s to the search for coping resources that would reduce the impact brought about by being exposed to environmental stressors (Louw, 2011). The concept of resource accumulation though was formally put forth by Hobfall in 1988, with the Conservation of Resources (COR) theory [Greenglass, 2002]. This theory states that
individuals put in effort to obtain resources, which they then retain, protect and foster in order to put them to use most effectively (Greenglass, 2002). Stress as a result occurs when a threat of resource loss takes place or when an individual actually loses his or her sustaining resources (Hobfall, 1988/1989, in Greenglass, 2002).

For this reason, it can be said that there are two main elements of a proactive coper’s belief system; firstly that one’s life is determined by him or herself and secondly that his or her life abounds with resources that can be acquired and mobilised to assist in attaining goals (Roesch et al., 2009). The better an individual’s resources, the more empowered that individual is to cope with the stressful event more effectively (Greenglass, 2002), but the fewer resources an individual has, the more challenging and severe his or her stressors will be (Aspinwall & Taylor, 1997). For example, if an individual has a lack of time as a resource and suffers from fatigue, then he or she may fail to recognise warning signs of stressful events in the future or may not have the energy to obtain the necessary skills to overcome stressful events (Aspinwall & Taylor, 1997).

Various groups of resources are mentioned by Lazarus and Folkman (1984), Aspinwall and Taylor (1997), Adebayo et al. (2008) and Reuter and Schwarzer (2009). In order to summarise these resources to provide clarity for the reader of this dissertation, the researcher has taken the various resources discussed by these authors and formulated four categories of resources necessary for proactive coping to occur, namely personal resources, energies, material resources and social resources. Personal resources include being capable and assertive, being able to problem-solve, having planning and organisational skills as well as possessing positive beliefs such as self-esteem, hope, optimism and empathy. Energies are made up of health, time and well-being. Material resources comprise of money, affluence as well as objects such as clothes and computers. Finally, social resources include social skills, social acceptability, social integration, familial bonds and social support in the form of friend and family networks.
The researcher proposes the scenario of a worker who is informed that he is being retrenched (a stressful situation) and in a month will be without a job. If he is emotionally exhausted and has no social support structure to encourage him to search the Internet or newspapers for a new job, then he will struggle to re-enter the workplace. In a similar way, if this individual lacks monetary resources, then he will be unable to go on training courses to increase his skills, which would have assisted him in finding a new job once retrenched. This individual could therefore be labelled as not being proactive in coping with his upcoming retrenchment. A proactive coper would have ensured that he possessed the resources mentioned above in advance of a retrenchment – that is, he would have developed a support system and saved monetary resources because he would have been aware of the possibility of retrenchment due to the poor economic climate.

An issue relevant to this study’s student sample that needs to be highlighted is freedom from “daily chronic distraction” (Aspinwall & Taylor, 1997, p. 422). The researcher classifies this under the “energies” category of resources. “Busyness” is also termed ‘cognitive load’ (Gilbert, Pelham & Krull, 1988, in Aspinwall & Taylor, 1997). When one’s attention is compromised by other demands, one cannot focus entirely on coping proactively. If individuals are bombarded by information and working memory is limited (and in the case of students, if one does not correctly handle the complexity of their instructional materials) then cognitive overload will result (Sweller, 1988, in Lewis, 2008). This limits an individual’s ability to cope proactively because busy environments may compromise one’s ability to recognise that stressors are imminent; gather feedback about the success of initial coping efforts; and collect information about the stressful situation (Aspinwall & Taylor, 1997).

Greenglass (2002) has conducted much research into the concept of proactive coping and explains that in order for an individual to cope proactively, he or she will rely on both internal and external resources (see Figure 2.7 below). Internal resources include self-efficacy and optimism, whereas external resources include support in the form of information and practical help / emotional sustenance, found in the individual’s social context.
within which the need for coping develops (Greenglass, 2002). These resources lead to the ability of an individual to cope proactively, which in turn leads to positive outcomes and reduces negative outcomes, which have already been mentioned in Section 2.5.4.2. Proactive coping thus mediates the relationship between resources and outcomes (Greenglass, 2002). In other words, proactive coping occurs as a result of other positive psychological constructs, because these resources provide the energy necessary for individuals to engage in proactive coping behaviours and thoughts (Roesch et al., 2009).

![Theoretical Model: Resources, Proactive Coping and Outcomes](adapted from Greenglass, 2002, p. 43)

These internal and external resources will now be explained in detail and will be continuously referred to for the remainder of this dissertation.

### 2.6.1.1 Internal resources

In order for an individual to be able to cope internally when a stressful situation arises, it is necessary that he or she feels competent in handling such situations (self-efficacy) and is optimistic about his or her ability to face the stressful situation (optimism). Optimism represents the affective element
of proactive coping, whereas self-efficacy defines the internal cognitive element.

a. **Self-efficacy**

*It is crucial to feel competent to handle a stressful situation. But actual competence is not a sufficient prerequisite. If the individual underestimates his or her potential for action, no adaptive strategies will be developed. Therefore, perceived competence is crucial.*

Reuter & Schwarzer (2009, p. 503)

The construct of self-efficacy has been widely researched since its initial conceptualisation in 1977 by Albert Bandura. Because general self-efficacy has been shown to be a universal construct, it typifies a fundamental belief that is inherent in all individuals (Luszczynska, Gutiérrez Doña & Schwarzer, 2005). Thus, the construct of self-efficacy is characteristic in individuals worldwide, with research having been conducted across various cultures and countries¹.

Bandura (1997, p. 3) defines perceived self-efficacy as “beliefs in one’s capabilities to organise and execute the courses of action required to produce given attainments”. In a similar manner, Schwarzer (1992) explains that self-efficacy refers to the ability of an individual to control this or her actions, by self-confidently believing that one has the capability to cope with and control stressors and environmental demands by taking adaptive action. According to Schwarzer (1999, p. 121), a self-efficacious individual “responds confidently with better strategies, more effort, and prolonged persistence” to overcome any of life’s barriers. Indeed, the decision to engage in proactive behaviours

¹ A web search on ‘self-efficacy’ returned 7,750,000 sites containing references to this concept (Google, 2010b), as well as 531,000 on-line scholarly articles containing the term (Google Scholar, 2010b). In contrast, the term ‘proactive coping’ was cited only 791,000 times on the web (Google, 2010a), and only 55,000 scholarly articles contained this concept (Google Scholar, 2010a). This illustrates that self-efficacy has been researched approximately ten times as much as proactive coping, demonstrating how widely researched self-efficacy is in comparison to proactive coping, a much newer topic.
has been said to be a function of an individual’s self confidence (self-efficacy) and the specific goals or intentions set by him or her (Crant, 2000). Perceived self-efficacy is a personal resource that reflects an individual’s optimistic beliefs about him or herself being competent to handle stressful demands through adaptive means (Greenglass, 2002). It is “reinforced by successes and weakened by failures” (Hofstede, 2001, p. 163) and is thus cumulative over time, providing the basis for how an individual’s development of a sense of self-esteem and mastery evolves (Garmezy & Masten, 1991).

How does self-efficacy relate to coping? McCarthy and Newcomb (1992) propose that individuals cope both cognitively and behaviourally based on their perceived self-efficacy beliefs. The strength of an individual’s confidence in his or her own effectiveness (self-efficacy beliefs) will influence whether he or she attempts to cope with difficult situations, how much effort he or she will expend in behaviour directed towards goals, as well as how long he or she will show commitment in the face of obstacles (Bandura, 1977a & 1977b).

If individuals perceive that a threatening situation exceeds their coping abilities and do not believe that a desired result can be reached, then they will fear and tend to avoid the situation altogether, lacking the perseverance or inspiration to act towards achieving the goal (Bandura, 2001). However, if highly self-efficacious individuals judge themselves capable of organising and carrying out courses of action required to successfully manage intimidating situations, then they will become involved in the activity and will behave in a confident manner (Bandura, 1977a; Borich & Tombari, 1997, in Ching, 2002). In this way, not only does an individual’s perceived self-efficacy reduce his or her inhibitions and anticipatory concerns, but it also affects one’s coping efforts through expectations of success in the future. As mentioned in Section 2.4, self-efficacy is also known as “perceived control”, referring to the belief that an individual can influence his or her environment (Greenglass et al., 1999a). As stated by Cassidy (1999), one’s perception of control in a situation is the most important psychological factor that mediates the process of stress and coping because when individuals are certain that they can cope with threats, they have little reason to mull over them (Bandura, 1997).
Self-efficacy beliefs affect, amongst other things, the amount of stress individuals experience when they cope with strenuous environmental demands (Bandura, 1997). This author explains that individuals with a high sense of self-efficacy will view new social realities as a challenge and thus as less stressful situations, compared to those with a low level of self-efficacy who will view them as a threat and therefore experience higher anxiety levels and more health problems. This is referred to as “coping efficacy” (Bandura, 1997, p. 141). The researcher notes that this draws a parallel to CTT discussed in Section 2.5.4.2 and highlights the correlation between self-efficacy and proactive coping. That is, proactive copers appraise situations as challenges as opposed to threats; and according to the above, in order to appraise situations as challenges, individuals must have a high sense of self-efficacy. Thus, self-efficacy is a resource necessary for individuals to cope proactively.

Perceived self-efficacy together with optimism is also viewed as a prerequisite for coping with work-related stresses such as demotion, promotion, work overload or job loss (Schwarzer & Taubert, 2002). The researcher notes that this once again could be related to the ability of a proactive coper to perceive situations as challenges rather than threats, envisioning success through these negative work situations. Indeed, in a study by Luszczynska, Scholz and Schwarzer (2005, p. 454), general self-efficacy was found to be related to active coping through the use of a “fighting spirit” and more regular planning, thus predicting whether one will successfully adapt to stressful situations.

Therefore, self-efficacy further relates to proactive coping because those who are self-efficacious will cope by taking charge of a situation, generating a plan of action and taking direct action by focusing his or her efforts on solving the problem being faced (Greenglass et al., 1999a). They will also exert control over a situation with more vigour and also more often than those who believe they have low levels of perceived control (Aspinwall & Taylor, 1997). As stated by Crant (2000), taking control of a situation is an important element of an individual behaving proactively because it serves the purpose of removing ambiguity and uncertainty and ensures individuals do not simply adapt to
unfavourable circumstances. Baumeister (1991, in Schwarzer & Taubert, 2002) states that the need for efficacy and control is in line with proactive coping; in order to cope proactively, individuals must clearly understand their capabilities and weaknesses (Davis & Asliturk, 2011).

To summarise, highly self-efficacious individuals will maintain control over stressful situations and will be more likely to cope proactively. They will focus more on active, future-orientated strategies (Ruiselová & Prokopčáková, 2010) and will exercise control over potential threats (Bandura, 1997).

b. Optimism

Only optimists truly engage in proactive coping.

Lopes & Cunha (2008, p. 107)

According to Schlebusch (2000, p. 132), “the value of an optimistic and positive attitude in stress management can hardly be overstated”. To fully comprehend this statement, a clear understanding of optimism is vital. Optimism can be defined as always seeking the best in any situation, while expecting positive outcomes to occur (Seckinger, Langerak, Mishra & Mishra, 2010). It relates to the tendency to hope or believe that circumstances will turn out for the best, even if something negative takes place. This can be summed up as individual’s general expectations that positive outcomes will occur (Uskul & Greenglass, 2005).

Individuals are optimistic for numerous reasons, for example due to their inherent talents or because they are hard-working (Carver, n.d.). Optimism may also be based on one’s spiritual or religious beliefs, how competent an individual perceives him or herself to be or how one has learned to cope (Aspinwall & Brunhart, 2000). According to Aspinwall and Brunhart (2000), optimistic beliefs predict both psychological well-being and physical health. Optimists are also usually healthier physically and better adjusted psychologically than pessimists (Uskul & Greenglass, 2005).
Optimists and pessimists favour different coping and adaptive strategies (Lopes & Cunha, 2008). As said by Aspinwall and Brunhart (2000), optimists have been proven to be more active in their coping efforts and demonstrate lower levels of avoidant coping. They favour “primary control-oriented active coping” (Lopes & Cunha, 2008, p. 107). This implies that optimists do not give up when a problem arises (Schlebusch, 2000) and actively make efforts to solve problems rather than avoid them (Aspinwall & Brunhart, 2000). This therefore results in optimists engaging in proactive behaviours (Lopes & Cunha, 2008).

Research has indeed shown optimism to be positively correlated to proactive coping (Lopes & Cunha, 2008). These same authors assert that a relationship between pessimism and proactive coping has not been revealed, which indicates that optimism, not pessimism, is the essential dimension that influences proactive coping. Optimists expect positive outcomes and are more likely to experience a positive blend of feelings (Carver, n.d.). Thus, for example, proactive copers will evaluate difficult situations more positively and will perceive them to be challenging, not threatening (Uskul & Greenglass, 2005). This is confirmed by Schlebusch (2000), who states that optimistic individuals tend to view life as challenging rather than passively approaching situations. They take a problem-solving approach to coping with stress, plan more than pessimists, see the best in situations, fare better when starting university and appraise stress in terms of potential growth (Snyder et al., 2011). Optimists therefore believe that adversity is able to be handled successfully; in comparison, pessimists expect the worst and are more doubtful and hesitant when attempting to overcome challenges (Carver, n.d.).

Moreover linking optimism to proactive coping, it can be said that optimistic individuals will focus on abilities and behaviours that facilitate the attainment of goals, rather than detract from them (Greenglass, 2006). When confronted by challenges, optimistic individuals will display confidence and will persist in their efforts even when progress proves to be slow or difficult (Carver, n.d.). It should however be noted that proactive copers are not unrealistically optimistic, implying that even though they do not anticipate undesired
outcomes, they do recognise the possibility that loss and failure may occur (Davis & Asliturk, 2011). For example, Aspinwall and Brunhart (2000) explain that when individuals are working towards their goals and their progress is halted, they will reassess whether they expect to reach their goals. If, upon reassessment, their expectations of accomplishing their goals are favourable, they will continue to work towards them, whereas if their expectations are unfavourable, they will discontinue their efforts. The researcher believes that this example demonstrates both self-efficacy (belief in abilities to conquer obstacles) and optimism (belief in a positive outcome should they assess the challenge as manageable).

As stated by Lopes and Cunha (2008, p. 106), “being proactive requires a positive approach to exploratory behaviour”. In this way, optimists adopt enthusiastic outlooks on life that results in less space for negative thoughts, emotions and behaviours (Schlebusch, 2000). Proactive coping does, though, require more than just optimism because it equips individuals with wide skills to successfully manage life goals and stressors (Uskul & Greenglass, 2005).

2.6.1.2 External resources

Although it was discussed in Section 2.2 that one’s external environment is the source of many demands that result in high levels of stress, the same external environment can produce resources that assist an individual in coping adequately with stress or shielding him or her from its demands (Cassidy, 1999). The positive resources stemming from one’s external environment that will be discussed in the context of proactive coping is one’s social support system. In a similar way to the above-mentioned internal resources, external social support is a valuable resource and a prerequisite in order for proactive coping to occur.

Pasch and Bradbury (1998, in Devoldre, Davis, Verhofstadt & Buysse, 2010) define social support as the way in which individuals provide everyday support to one another and how they assist one another in coping with personal problems. The closeness of social relations varies: individuals will have intimate connections with certain members of their social networks while at
the same time will have other members of their social network who are less important to them (Antonucci, 1991). This relates to Bronfenbrenner’s (1979) ‘nested systems’ analogy. He explains that every individual has a social context that consists of four levels (micro, meso, exo and macro levels) nested within one another. The micro level consists of systems that individuals are in direct contact with, such as home or schools. The meso level consists of two or more micro levels interlinked, such as the home-school environment. The exo level includes systems with which individuals have no direct contact, but can still provide support or be a resource or source of stress, such as school governing bodies. Finally, the macro level includes systems on a large scale, such as the labour market of a country. Thus, every individual operates within a complex social context and even though not all systems are directly experienced, they still form part of an individual’s world. All of these social levels will contribute to an individual’s perception of support in some way and it is this perception that directly influences an individual’s level of stress (Cassidy, 1999). However, according to Han and Choe (1994), the most important networks for building social relationships, closeness and social interdependence are one’s family, school and region.

Individuals make use of social support during stressful events when they directly draw on the resources that their social networks provide (Greenglass, 2002). It is thus a coping response when one mobilises support from social network resources when experiencing a particular stressful circumstance (Greenglass, 2002). Social support assists individuals to cope with stress because those who are part of someone’s social support network provide that individual with information resources relevant to stressors (such as by offering relevant advice), assist him or her in correctly appraising stressful situations (through the disclosure and discussion of problems), provide emotional assistance (through individuals sharing their concerns) as well as offer tangible support during stressful times (Aspinwall & Taylor, 1997; Wills, 1990, in Greenglass, 2002).

According to Bandura (1992), social support not only buffers against stressors by reducing the harshness of negative life events that result in depression and
stress, but it also has a positive proactive function. This is because social support fosters competencies to cope by altering how threatened individuals view potential stressors (Bandura, 1992). For example, talking about one’s feelings and sharing thoughts in a social context may assist in problems being solved or emotional distress being lessened (Greenglass, 2002). Thus, there is an inverse relationship between stress and one’s social support system, because those who have social support networks have been found to be relatively resistant to the effects of the stress that they experience (Greenglass, 2002).

Social support is not fixed, but rather it is up to individuals to seek out, grow and maintain their social networks (Bandura, 1992). Social support networks can empower individuals through helping them feel less alone and thus more in control of situations (Cassidy, 1999). Loneliness refers to a subjective and personal experience of psychological pain and discomfort, associated with a lack of intimate relationships (Schlebusch, 2000). It results in feelings of isolation, strengthening a perception of being alienated from others which consequently contributes to stress (Schlebusch, 2000). As stated by Mbige (2005, p. 69) “we cannot succeed on our own”. This relates to the concept of “ubuntu”, which will be discussed in Section 3.3.2.1. Individuals from African countries interact interdependently with one another (Mbige, 2005), often living in communities that provide them with comfort, assistance and a sense of security (Shonhiwa, 2006). It can thus be generalised that social support is encouraged in Southern African countries.

It is interesting to observe that Louw (2011) found in his study that social support did not have a mediating effect when burnout was suffered by individuals. Burnout occurs when an employee feels tired because despite working hard, he or she cannot do everything that needs to be done (Snyder et al., 2011). This might imply that by the stage of burnout, individuals are so stressed that no amount of external resources will be able to assist them. Thus, the researcher proposes that social support should form part of someone’s life well before stressful situations arise, so that individuals benefit from support systems both before and during stress. This may result in less
stress being experienced when the troubling event arises and it would thus be said that the individual coped in a proactive manner.

Social support has been found to correlate positively with proactive coping, indicating that individuals are more likely to engage in proactive coping activities when they have access to individuals who are available to provide support when it is needed (Greenglass et al., 2006). Greenglass (2002) also explains that self-efficacy (already mentioned as an internal proactive coping resource) is positively correlated to social support, with individuals high in self-efficacy reporting greater support from their social context and also being more inclined to create support systems for themselves. The relationship also works in the opposite direction, with social support enhancing perceived self-efficacy which in turn enables successful adaptation and lessens stress (Greenglass, 2002).

Two forms of social support that are relevant for proactive coping are emotional and informational support. Certain individuals in one’s social support network might be equipped to help the person deal with emotional problems, whereas others may help an individual in terms of being a source of useful information (Cassidy, 1999). Regarding emotional support, family, friends and spiritual nourishment assist in coping with stress because they provide emotional support together with guidance and a sense of belonging (Schlebusch, 2000). They bring warmth, nurturing, happiness, reassurance and a sense of well-being to individuals (Antonucci, 1991; Cassidy, 1999; Reuter & Schwarzer, 2009). Emotional support can assist an individual in sharing his or her feelings about a stressful situation, thus also allowing him or her to change the meaning of a stressful event (Greenglass, 2002). As stated by Cohen (1991), an individual needs others to talk to about problems so that they can assist in defining problems and providing ways of coping with problems and the effects of stress.

Informational support allows an individual to alter his or her perception of the meaningful aspects of a stressful situation (Greenglass, 2002), for example through individuals providing advice when others in their social network are
going through stressful situations (Reuter & Schwarzer, 2009). This is especially valuable when evaluating ambiguous stressors (Aspinwall & Taylor, 1997). As mentioned by Crant (2000), if an individual is proactive, then he or she will actively look for information and opportunities for improving situations, as opposed to passively waiting for information to come to them. Aspinwall and Taylor (1997) note that informational support is as valuable to proactive coping as emotional support, despite perceptions that emotional support is the more important benefit of social support networks. Information aids in Stages Two and Three of proactive coping, by recognising potential stressors and initially appraising them, after which individuals can turn to others to seek assistance in interpreting any feedback received (Aspinwall & Taylor, 1997). The researcher believes that informational support seeking is similar to instrumental support seeking, which involves individuals accepting assistance or help when needed (Snyder et al., 2011).

The researcher proposes that women will exhibit higher levels of social support utilisation, due to Greenglass’s (2002) statement that the connection between coping and social support is stronger in women than men. This has also been stated by Greenglass et al. (1999a), who found that females scored significantly higher than males on both the Instrumental and Emotional Support Seeking subscales of the PCI (to be explained in Section 5.3). Women make more use of social support from others in order to develop preventive and instrumental coping strategies and are more likely to seek emotional support, practical assistance, information and advice from others (Greenglass, 2002). Social networks thus assist women in coping with stress.

To summarise, the incorporation of social support as a resource necessary for proactive coping is important because it focuses on the significance of relational and interpersonal skills for effective coping, with meaning being placed on resources in others (Greenglass, 2002). Recognising the importance of using others as resources transforms the cognitive and behavioural coping inventory of an individual, with the interactive and interpersonal side of coping being emphasised (see Greenglass et al., 1999a). Social support suggests that proactive coping does not stem only
from personality, inner convictions or beliefs, and also implies that proactive coping is much wider than simply a style or behaviour, as debated earlier. Relational skills and interpersonal strength are thus positive coping strengths that encouragingly can be effectively developed in individuals (Greenglass, 2002).

2.6.2 Stage Two: Recognition

Knowledge and awareness are the first steps in coping with stress. Before looking at ways to reduce the stress in your life you must have a clear idea of what stress is and how much stress you suffer from.

Schlebusch (2000, p. 1)

The above section discussed in detail the resources necessary for proactive coping to occur. After this first stage of resource accumulation has occurred, one must subsequently possess the ability to recognise that a potential stressful event, or potential stressor, is on its way. This is known as the attention-recognition stage, and depends on one’s capacity to “screen the environment for danger” and be aware of signs that suggest that threats may arise (Aspinwall & Taylor, 1997, p. 419). These signs can be external (for example, being informed of an upcoming performance appraisal meeting with one’s supervisor) or internal (for example, realising that one has a limited time period to meet a deadline and thus needing to prioritise one’s work).

Schlebusch (2000) explains a number of sources of stress that can be identified in one’s life. These include illness, anger, violence, divorce, work environments, family stress and stress resulting from technology. Furthermore, stressors can be grouped into frustrations, pressures and conflicts. If individuals can recognise these stressors, then they can plan how best to overcome them. Individuals who possess qualities such as being vigilant and monitoring one’s environment will seek, not avoid, information on stressors. Those who are repressive will, in contrast, ignore threatening information (Aspinwall & Taylor, 1997). Thus, proactive copers are those who will make sufficient emotional or cognitive efforts to both anticipate and
manage problems in one’s environment (Aspinwall & Taylor, 1997). However, individuals should be careful of being hypervigilant, which involves focusing on so many possible threats that one is not able to manage them all (Aspinwall & Taylor, 1997).

According to Aspinwall and Brunhart (2000), individuals who are highly optimistic (one of the internal resources necessary for proactive coping) are more likely to give attention to negative information that is threatening, severe or relevant to them. This indicates that optimistic individuals are realistic in their approach to recognising useful negative information, as they focus on giving attention to problems in a proactive manner instead of merely ignoring negative stressors in a naïve manner. Furthermore, optimists may ensure that they gather more information about stressful situations because they put a greater emphasis on active, not avoidant, coping (Aspinwall & Brunhart, 2000).

As stated by Aspinwall and Taylor (1997, p. 422), “one must be able to anticipate the future and modify one’s current behaviour to behave proactively”. To refer to the scenario proposed in Section 2.6.1, the researcher elaborates that a proactive individual would recognise signals from his or her organisation that indicate upcoming retrenchments and continue to pay attention to this threatening information to gather whether he or she might be affected. Aspinwall and Brunhart (2000) add that such an individual might also meet with co-workers or his or her supervisor to gain useful information that might assist him or her in dealing with the situation through, for example, acquiring new skills or applying for other jobs. This example also illustrates the importance of a social support structure in detecting potential threats, as informational support can assist in making an individual more aware and vigilant of stressors (Aspinwall & Taylor, 1997).

2.6.3 Stage Three: Initial appraisals

After recognising the stressor, it is necessary to preliminarily assess the current and potential status of the stressor as well as any related assessments, known as the initial appraisal stage (Aspinwall & Taylor, 1997).
According to Lazarus and Folkman (1984), coping is characterised by continuous appraisals as well as reappraisals, due to the fact that the person-environment relationship is constantly changing. Indeed, coping processes cannot be fully understood without acknowledging the role that cognitive appraisal plays during the coping process (Louw, 2011). Folkman et al. (1991) explain that “cognitive appraisal” is the process through which one assesses his or her person-environment relationship together with the various options and resources that are available to change and assist this relationship.

According to Schlebusch (2000), appraisal, perception and evaluation all assume importance when one deals with stress and physical or psychological demands that upset one’s equilibrium. This author indicates three types of appraisal, namely primary appraisal, secondary appraisal and re-appraisal. The first type occurs when one assesses the importance of the stressor for one’s well-being, whereas the second occurs when one feels that he or she can do something about the situation. The final type takes place when there are changes in the individual’s evaluation due to changes in the stressful situation. For example, Jerusalem and Schwarzer (1992) found that when individuals are faced with continuous failures, stress appraisals change in the long run from being evaluated favourably to unfavourably.

As can be seen in Figure 2.6, negative emotional arousals (that is, negative states of perceived threats or stress) may be generated from the detection and appraisal of potential stressors. The need to regulate these negative emotions may influence or compromise the tasks that individuals perform when coping proactively, by limiting an individual’s ability to detect and minimise potential stressful events or by hindering an individual’s ability to cope (Aspinwall & Taylor, 1997).

In this stage of proactive coping, Aspinwall and Taylor (1997) suggest asking questions such as, “what is the stressor?”, “what is likely to become of this stressful situation?”, “should I be worried about this?” and “is this something I should monitor?” These questions illustrate the two tasks of this stage, namely defining the problem and regulating the arousal that occurs (Aspinwall
& Taylor, 1997). The problem, or stressor, should first be defined by way of investigation. A number of variables influence this; for example, Fiske and Taylor (1991, in Aspinwall & Taylor, 1997) state that stressors that are dramatic, in close proximity to an individual and are relevant to the individual will more likely be noticed. Furthermore, stressful appraisals can be harmful, threatening or challenging, or more commonly, a complex combination of these (Folkman et al., 1991). Emotions are also always involved when appraising situations (Folkman et al., 1991).

In order to be proactive, it is also necessary to mentally simulate the possible implications of the stressful event or what course the event could run (Aspinwall & Taylor, 1997). Mental simulation is the imitative representation of events (Taylor & Schneider, 1989, in Zhao, Hoeffler and Zauberman, 2007), which involves “moving oneself from a current situation toward an envisioned future one”, anticipating and managing emotions as well as initiating and maintaining problem-solving activities (Taylor, Pham, Rivkin & Armor, 1998, abstract). Mental simulations provide an initial plan for how to deal with the stressor and they also indicate the most probable outcome of the problem (Aspinwall & Taylor, 1997). Thus, what an individual simulates will likely determine his or her appraisal of the stressor (Aspinwall & Taylor, 1997).

Social support networks once again play a role in this stage of proactive coping, because individuals can test their mental simulations and judgements by comparing them with other’s reactions (Aspinwall & Taylor, 1997). This assists in clarifying an individual’s understanding of the situation, acquiring new information and helping determine the appropriateness of his or her reactions (Aspinwall & Taylor, 1997). However, as noted by Cohen (1991, p. 218), perceived social support is effective “not because it provides a reasonable approximation of available resources, but because the belief that support is available is what is critical in appraising whether events are stressful”.
2.6.4 Stage Four: Preliminary coping efforts

The above assessments will assist individuals in paying attention to the stressor and may result in initial coping efforts (preliminary coping). These activities will likely prevent or minimise recognised or suspected stressors. Aspinwall and Taylor (1997) suggest that proactive coping at this stage is usually active as opposed to being avoidant, with individuals making use of behavioural activities such as taking preliminary action and looking for information from others, or cognitive activities such as planning.

It has been noted that the coping responses that take place are determined not only by the knowledge individuals have of various coping options, but also by individuals’ beliefs regarding how useful these options are (Louw & Viviers, 2010). Thus, preliminary coping efforts are dependent on how controllable the individual perceives the stressful situation to be (Aspinwall & Taylor, 1997). When situations are perceived as being amendable to change, individuals are more likely to make the effort of solving the problem or acting to overcome the situation, whereas if it is perceived early enough that the stressor is insurmountable or not able to be changed, then individuals are likely to alter their coping efforts accordingly (Aspinwall & Taylor, 1997). The researcher notes that this is moderated by the resources mentioned in Section 2.6.1. If an individual is highly self-efficacious and optimistic, he or she will believe in his or her capabilities to successfully make a difference in the stressful situation by exhibiting the required behaviours (Aspinwall & Taylor, 1997). Yet, it must be noted that individuals do not normally know in advance whether their proactive coping efforts will actually assist them in achieving their goals (Wu et al., 2008). The researcher notes that it is for this reason that individuals make use of preliminary coping efforts: to assess whether their coping strategy will in fact work, and if it will, to continue coping in that way.

The above explanation implies that the timing between one's perception of the stressor and one's actions are of importance: one will be saved the effort of expending resources if one deems that the management of the stressor is not likely (Aspinwall & Taylor, 1997). This relies on the initial appraisals discussed in the previous stage and on preliminary problem-solving efforts to gain
information about the possibility of overcoming the stressor. Furthermore, individuals will deal with small problems by exerting less effort than when handling larger stressful situations (Aspinwall & Taylor, 1997). This protects an individual’s resources (such as time and money) from becoming depleted too early.

2.6.5 Stage Five: Elicitation and use of feedback

Appraisals of stressful events differ depending on the type or amount of evaluative feedback that is received (Jerusalem & Schwarzer, 1992). According to Crant (2000), feedback is a valuable resource to individuals because it assists them in producing and achieving goals. Making use of feedback assists an individual to modify his or her preliminary coping efforts from the previous stage. The elicitation and use of feedback thus revolves around acquiring feedback regarding the development of the stressful situation, the effects that one’s preliminary coping efforts have had thus far on the stressful event and whether the stressful event requires further coping efforts. Therefore, an individual will ask him or herself whether there is anything more that he or she can do or whether it is better to wait to see if a problem arises (Aspinwall & Taylor, 1997).

Proactive coping efforts are likely to produce this information about potential stressors. The information gathered will be useful in providing feedback for evaluative purposes and will assist individuals to subsequently manage the stressor (Aspinwall & Taylor, 1997). For this reason, Aspinwall and Taylor (1997) note the presence of feedback loops, with the first three stages together with the regulation of negative emotional arousal comprising of interrelated tasks. Here, initial appraisals propose that potential threats will lead to enhanced attention to the potential stressful event and will also prompt attempts to accumulate resources and regulate one’s emotions. One can use this feedback to modify evaluations of the potential stressful event and modify one’s strategies for minimising the event’s effects. This relates to constantly reappraising changes in the environment as explained by Lazarus and Folkman (1984), because shifts in the environment lead to a re-evaluation of
what is taking place, as well as the significance of the changes and what can be done about them.

Making use of evaluative feedback information will assist individuals to alter their coping efforts and perhaps return to their original appraisals, so that future coping efforts will be more effective in preventing the stressful situation or reducing its negative effects (Aspinwall & Taylor, 1997). This will ensure that one’s resources are conserved and that one manages his or her ongoing stress effectively, because if proactive efforts fail, motivational and cognitive resources may be depleted further with the result of resources and coping efforts being drained (Aspinwall & Taylor, 1997). If, as explained in the previous step, an individual attempts to control a stressor but it is found that the stressor cannot be overcome, feedback will assist the individual in deciding not to expend further resources or effort.

As this implies, internal and external resources also affect this stage of proactive coping. For example, if individuals believe that they can take action to overcome a problem, they will be more inclined to act in accordance with this and will feel more committed to this decision (Schwarzer, 1992). This self-efficacious belief illustrates an individual’s perception of control of his or her environment. Furthermore, highly self-efficacious individuals will remain with their goals, investing more effort into them and persisting longer than those who are less self-efficacious (Schwarzer, 1992). For this reason, Aspinwall and Taylor (1997) state that individuals high in self-efficacy and optimism will often be less inclined to pay attention to evaluative feedback, because they will resist information in order to persist with the handling of stressful tasks. However, they would also be better able to recognise when coping strategies will be effective versus when stressors are not amendable. In a similar way, those in an individual’s social support network provide feedback to them about the effects of their actions, answering questions such as how they performed and whether or not they overreacted (Aspinwall & Taylor, 1997), thus providing an objective view of the situation.
It should be noted that individuals do not necessarily cope proactively by following these steps in this sequence. For example, Guribye, Sandal and Oppdal (2011) found in their study that individuals first formed common goals before accumulating resources. Furthermore, instead of evaluating feedback at the end, individuals tended to recognise another potential stressor. Additionally, Hu and Gan (2011) suggest a sequential model of dealing with stress in which individuals firstly initiate preventive coping when a target stressful situation is uncertain, by accumulating resources. When the situation approaches, he or she will evaluate and appraise it as a challenge, thereafter making use of proactive coping to create opportunities before the stressful situation begins. The researcher believes that such suggested alternatives require further study (beyond the scope of this dissertation) due to the fact that Aspinwall and Taylor’s (1997) stages relate more to preventive and anticipatory coping than proactive coping.

2.7 Is proactive coping really ‘coping’?

Based on this chapter, the researcher finds it necessary to debate whether proactive coping can actually be defined as ‘coping’ by drawing on original coping research together with more recent research on proactive coping.

The researcher notes that an initial problem with the concept of proactive coping is that it does not fit directly into Lazarus and Folkman’s (1984) original definition of coping (see Section 2.4, where it is mentioned that coping involves managing specific stressful demands). In order for proactive coping to fall within the bounds of ‘coping’, it should, like other forms of coping, refer to what individuals do or think within a specific context or situation (Monat & Lazarus, 1977; Folkman et al., 1991). However, every individual is constantly experiencing some degree of stress, meaning that stress is a non-specific response of the body to demands (Selye, 1978). This implies that it is a general reaction. In the strictest sense, however, one can only really ‘cope’ with stress that takes place in a specific context. Coping is widely known as being contextual and thus takes place within specific stressful situations instead of general conditions. This is because general stressful situations are ambiguous, which results in there being difficulty for individuals to identify
what they are actually coping with (Folkman et al., 1991). Yet as stated by Schwarzer and Taubert (2002), there is not necessarily a concrete stressor that triggers proactive coping: instead, self-imposed visions and goals prompt an individual to create his or her own opportunities and risks, with the struggle for rewards and growth possibly resulting in unanticipated stress. Goal-orientated behaviours occur before a stressful episode takes place. Can proactive coping then truly be termed ‘coping’ in its strictest sense, if it refers to building up resources to deal with stressful events in general?

In response, the researcher believes that coping need not be limited to Lazarus and Folkman’s (1984) original definition. Greenglass (2002) draws attention to the fact that coping conceptualisations require modification. In recent research (see Greenglass, 2002), coping has, for example, been defined more broadly so as to be viewed as an approach to life, whereby individuals direct their efforts towards managing their goals, as well as identifying and utilising the social resources necessary to achieve these goals. Two aspects can be highlighted from this. Firstly, the function of coping has expanded not only to include lessening distress, but also to increasing one’s potential to improve his or her quality of life and potential for growth (Greenglass, 2002). This also emphasises the multidimensional nature of coping. Secondly, the fact that social resources can be relied upon to assist with coping efforts implies that coping does not occur in a “social vacuum” because individuals can mobilise their resources to increase their coping effectiveness (Greenglass, 2002, p. 53).

Furthermore, proactive coping must be process-orientated in order to be defined as ‘coping’ and the success or failure of efforts to proactively manage a stressful situation are irrelevant (see Section 2.4). For example, Lazarus and Folkman (1984) explain that coping occurs as a process in all stressful situations, whether long-term or short-term. This is due to the fact that there is always an “unfolding, shifting pattern of cognitive appraisal and reappraisal, coping, and emotional processes” (Lazarus & Folkman, 1984, p. 143). The researcher believes that this aspect of coping is not necessarily in contrast with proactive coping, owing to the fact that a proactive individual copes not
through a single response, but through a view of him or herself and his or her world (Greenglass et al., 1999a). Moreover, the stages that one passes through when coping have already been discussed in the previous section. The researcher also draws attention to McGrath (1977) who states that stress and responses to stress vary with the experience one has with the stressful situation or conditions, as well as with practice in those behaviors that one uses to cope with or avoid the consequences of a stressor. Thus, one’s past experiences that led to positive reinforcements or to successfully mastering a situation will likely reduce the perception of a future threat, whereas experiences that led to negative reinforcements or failure will increase one’s sensitivity to a threat (McGrath, 1977). The researcher believes that past successes would increase an individual’s self-efficacy beliefs, thus increasing his or her ability to cope proactively in the future. This, together with the sequential stages proactive copers pass through, further accentuate the process-orientated view of coping proactively.

There is also a general trend towards positive psychology, with Greenglass et al. (1999a) stating that proactive coping does not include negative strategies such as self-blame or behavioural disengagement, but instead focuses positively on the task at hand. Thus, the researcher believes that there is value in an individual building up resources and behaviours that result in positive actions because these actions will result in an individual dealing positively with future situations.

Does proactive coping serve one of the two functions explained in Section 2.4? That is, do you cope proactively in a manner that either focuses on managing the problem or dealing with the emotions surrounding that problem? Whether proactive coping actually fits into one of these functions is not clearly stated in the literature. Folkman et al. (1991) explain that problem-focused forms of coping include decision-making, information gathering, time management, goal setting and interpersonal conflict resolution. The researcher proposes that Stages One and Four of proactive coping (see Sections 2.6.1 and 2.6.4 above) possibly tie in with the problem-focused function of coping. “Informational support” was discussed in Section 2.6.1.2 as
one of the resources necessary for proactive coping to take place, which includes actively looking for information to improve situations. This links with "information gathering" listed above. Preliminary coping efforts, discussed in Section 2.6.4, involve activities that are likely to prevent or minimise stressors. The forms of problem-focused coping listed above are examples of activities that would be effective in this regard. Aspinwall and Taylor (1997) also state the need for cognitive activities such as planning, organisation, goal-setting and mental simulation, which the researcher perceives as problem-focused coping strategies. In addition, Schlebusch (2000) states that optimists are inclined to cope with stress by being problem-focused because they ask what they can do about the problem rather than how they feel about it. For this reason, optimism (an internal resource necessary for one to cope proactively) fits in with the function of problem-solving.

In addition, some forms of emotion-focused coping that the researcher feels are relevant to proactive coping include social comparisons, support groups or talking to someone who understand and cares, as a behavioural technique to make oneself feel better (Folkman et al., 1991). These tie in with emotional support as an external resource necessary for effective proactive coping, as explained in Section 2.6.1.2, where individuals in one’s social support network assist one in dealing with emotional problems. However, Aspinwall and Taylor (1997) mention that emotion-focused coping strategies may be maladaptive with regards to proactive coping. Based on the above, the researcher concludes that proactive coping could be classified as ‘coping’ due to the fact that it meets the functions of coping as explained by Folkman et al. (1991), namely being both problem-focused and emotion-focused.

However, another view might be that the focus of proactive coping is neither specifically problem- nor emotion-based, as the PCT was developed as a result of criticisms of original definitions of coping (see Greenglass et al., 1999a). Instead, proactive coping introduces a new function of coping; that is, goal management as opposed to managing stressful problems and risks. As explained by Wu et al. (2008), problem- and emotion-focused coping are usually discussed in the context of an individual confronted with a specific
stressful situation, but proactive coping has a different focus altogether. For this reason, the researcher questions whether there is a need for proactive coping to demonstrate these functions at all, in order to be classified as a form of “coping”. This is substantiated by Hambrick and McCord (2010), who state that if individuals successfully cope in a proactive manner, then they would seldom need to cope in traditional ways such as suppression or venting.

The researcher also draws attention to a limitation of proactive coping, stemming from Lazarus (1977) who explains that individuals use a number of different coping processes, depending on their personal traits, the nature of environmental demands and incidents as well as how these demands and incidents are evaluated. Thus, an individual can do all in his or her means to develop the necessary resources to prepare him or herself for stressful situations before they occur, but might still need to rely on other forms of coping if a stressful situation requires it. Other forms of coping include practising positive mental viewpoints or directing attention away from the stressful event (Lazarus, 1977).

It can thus be concluded that there is a lack of clarity amongst authors when dealing with whether proactive coping can be classified as ‘coping’ and indeed, how proactive coping can in fact be defined. It has already been debated as to whether proactive coping is a style, behaviour or personality trait. What can be stated conclusively is that proactive coping emphasises taking responsibility for one’s future, highlighting the focus of proactive coping of aiming to reach one’s goals, overcoming challenges, and aspiring to grow personally through stressful situations.

To summarise this section, the researcher emphasises the following quote:

_To the extent that coping efforts are directed towards prevention, building up resources, and setting goals for improving one’s quality of life, coping is proactive._

Greenglass (2002, p. 53)
2.8 Conclusion

This chapter began by detailing a number of different concepts necessary for the understanding of proactive coping, such as proactive behavior, stress and coping. It discussed PCT in detail with an emphasis on proactive coping and concluded by debating proactive coping’s place in the coping literature.

It can be concluded by saying that although almost every situation in life continuously holds the potential to be stressful, coping in a proactive manner can assist individuals by improving their overall quality of life (Schwarzer & Knoll, 2009). This is because so far as proactive coping efforts are successful, the amount of stress experienced by an individual will be lower than the stress experienced by an individual who does not make use of proactive coping strategies (Aspinwall & Taylor, 1997).

The following chapter will focus on proactive coping from a national culture perspective.
CHAPTER THREE

THE RELATIONSHIP BETWEEN PROACTIVE COPING AND NATIONAL CULTURE

It makes a difference where and when we grew up. The culture we belong to and the legacies passed down by our forebears shape the patterns of our achievement in ways we cannot begin to imagine. It’s not enough to ask what successful people are like, in other words. It is only by asking where they are from that we can unravel the logic behind who succeeds and who doesn’t.

Gladwell (2008, p.19)

3.1 Introduction
Cross-cultural comparisons are made in order to recognise and acknowledge that significant similarities and differences occur across cultures regarding values, beliefs, structures, world-views and dominant practices (Lott, 2010). This results in increasing the authenticity of knowledge as well as the reliability of predications made, which thereafter enhances how relevant and useful research applications are to significant life situations (Lott, 2010). For example, it has been said that culture impacts on one’s personality. Those who believe in the concept of a ‘national culture’ expect that individuals from each country will have average personalities that reflect their particular culture (Usunier & Lee, 2009). Whether coping styles are affected in a similar manner by culture, and whether a ‘national culture’ even exists in Southern African countries due to a lack of homogeneity, will be investigated and debated in this study.

It is necessary to discuss culture in detail in this Chapter due to the fact that the data for this study was collected from students at universities in different Southern African countries, as will be explained in Chapter Five. Students from various African countries study at these universities as international
students. It was therefore decided to compare the responses of the students from the different countries represented (national culture, the focus of this chapter), as well as to compare the responses of each set of students from each university (institutional culture, the focus of Chapter Four). From the outset of this chapter, the researcher, however, acknowledges two important points. Firstly, it is accepted that an assumption has been made concerning cultural influences: namely, that individuals who originate from a specific country or study at a specific university will take on the values of that country or university. This will be discussed as a limitation in Section 8.2 of this dissertation. Secondly, it is acknowledged that not all positive psychologists regard culture as affecting human strengths and values, as debated in Snyder et al. (2011). These authors demonstrate that certain researchers and practitioners will deem cultural values to influence their work, whereas others believe that numerous human strengths are valued universally and thus positive strengths are free of culture.

The researcher holds the view that proactive coping could be culturally embedded and thus aims in this study to investigate to what extent proactive coping is affected by national and institutional culture. Understanding culture enables individuals to be more aware of the behaviour of others and why this behaviour is difficult to change, by understanding the forces that underlie how others define themselves and the groups that others identify with (Schein, 2004). It is also important to make comparisons of constructs, concepts or data across national borders because if the leaders of countries are to cope with global issues such as the recent economic recession, the AIDS crisis, poverty or organised crime (all issues particularly relevant to leaders and citizens of Africa), then they need to learn to cooperate with one another [Hofstede, Hofstede & Minkov, 2010]. As stated in the quote above, it is vital to understand the differences (and similarities) of individuals from various cultures if individuals are to cope with the daily pressures of succeeding in a globalised world, because “behaviour is best understood as a complex product of the cultures of which we are a part” (Lott, 2010, p. 7). Therefore, the researcher hopes to glean important proactive coping comparisons from comparing one country’s set of data to another’s.
3.2 What is culture?

Hofstede et al. (2010, p. 6) write that ‘culture’ can be defined as the “collective programming of the mind that distinguishes the members of one group or category of people from others”. It is a distinctive way of operating that is guided by a common value system and differentiates a group of individuals collectively (Shonhiwa, 2006) through shared assumptions, beliefs, values and ideologies (Peterson & Spencer, 1990). Furthermore, it is that part of an environment that is “constructed by human beings to embody shared learning” (Lott, 2010, p. 10). Cultural assumptions are usually located at a subconscious level within an individual (Usunier & Lee, 2009) because they are deeply embedded, enduring and not easily changed (Peterson & Spencer, 1990). According to Schein (2004), four characteristics of culture are structural stability and predictability, depth (implying that culture is deeply embedded and subconscious), breadth (because culture covers all of a group’s functioning) and patterning (integration of climate, values and behaviours into a coherent whole). Cultural legacies matter because they are powerful, persistent and exist long after their original worth passes (Gladwell, 2008). This is in agreement with Peterson and Spencer (1990), who mention that culture is enduring and inflexible, requiring intense long-term efforts or cataclysmic events to change it.

Culture is learned from the environment and is not something that individuals are born knowing (Francesco & Gold, 2005). Culture in this way results from complex group learning processes (Schein, 2004) and is thus a collective phenomenon because it is shared with those who live or lived in the same social environment in which it was learned (Hofstede et al., 2010). These shared environments may be physical, geographic, political, economic, ideological or occupational (Lott, 2010). Berry (1994) explains that from an ecological perspective, individuals adapt both biologically and culturally to their environment. Individual psychological characteristics are then developed as a function of these biological, cultural and ecological variables surrounding them (Berry, 1994). This is illustrated in Figure 3.1 below. It can thus be deduced that the use of a proactive coping style occurs at an individual level.
but is influenced by various factors external to an individual, such as through cultural transmission (including enculturation and socialisation) [Berry, 1994].

Differences occur between cultures and these differences result in cultural assumptions about specific cultures that usually result from learned behaviour (Usunier & Lee, 2009). Individuals never cease learning behaviours that are relevant to their cultural membership (Lott, 2010); however, these behaviours are influenced by culture, but not determined by it (Usunier & Lee, 2009). Indeed, the context in which individuals live will affect how they develop their strengths as well as how these strengths are defined, manifested and enhanced (Snyder et al., 2011). For example, Gladwell (2008, p. 108) explains that children from educated families learn skills because over the course of their young lives their mothers and fathers teach these to them through “nudging and prodding and encouraging and showing [them] the rules of the game”. Cultural advantages therefore do exist, with our actions being “imbedded in a multicultural context” (Lott, 2010, p. 7). The fact that culture is learned demonstrates that all individuals adapt to their specific reality; that is,
because the natural and social environments in which individuals live and operate change, so too do individuals change accordingly (Usunier & Lee, 2009). In this way, all individuals discover new solutions to solve new problems due to the changing environments in which they operate. The researcher notes that it can therefore be debated whether cultural influences are stable and long-lasting in the 21st-Century, an era characterised by rapid change.

Usunier and Lee (2009) note that it should not be implied that culture necessarily be generalised to entire societies (or countries), as culture can instead refer to activities shared by particular groups of people within societies. Many cultures intersect to define individuals, from predominant cultures such as ethnicity and gender to less predominant cultures such as occupation or educational institution (Lott, 2010). Ethnicity refers to what individuals learn from within their families regarding the customs, practices and traditions of their communities of origin (Lott, 2010). It can be referred to as the “collective fingerprint of our identity” with many layers or levels (Usunier & Lee, 2009, p. 6). According to Usunier and Lee (2009), many interrelated elements thus work together to form a member of society’s culture, including knowledge, law, morals, manners, skills and habits. These elements, or components, often connect and overlap with one another (Tierney, 1988). This supports Lott’s (2010) statement that all individuals are in fact multicultural, even if living in seemingly homogenous environments. Social institutions are one way of attaining these cultural elements because they encourage individuals to act in accordance with a set of rules in exchange for rewards (Usunier & Lee, 2009). In the case of universities as social institutions, the researcher notes that examples of rewards for students would be learning from the expertise of lecturers and eventually gaining their degrees. This therefore implies that students absorb a university’s culture in return for such rewards.

However, it can also be argued that there are limitations to attributing differences between people to culture. Francesco and Gold (2005) note that there are numerous definitions of culture that results in no clear indication of
what makes up national or organisational culture. This is due to the fact that culture is a multifaceted concept that makes it difficult to measure (Francesco & Gold, 2005). A problem directly related to this study is that questionnaires used by researchers are often developed in Western countries, which “impose predetermined categories instead of discovering indigenous concepts or developing theories grounded in data from a sample of organisations in diverse cultures” (Francesco & Gold, 2005, p. 7). This study makes use of a questionnaire developed by Western and European scholars (to be discussed in Chapter Five). Because this study uses a Southern African sample, this poses the question of whether the items in the questionnaire are relevant to those individuals who have been brought up in African, not Western or European, cultures.

Figure 3.2: Sources of culture
(Usunier & Lee, 2009, p. 8)

Although arguably the most discussed source of culture, national culture is seldom the main source of an individual’s culture (Usunier & Lee, 2009).
Figure 3.2 above indicates a number of different sources of culture, nationality being just one of them. Indeed, Lott (2010) emphasises that every individual belongs to many different cultures simultaneously. As mentioned previously, Han and Choe (1994, p. 213) believe that ‘family’, ‘region’ and ‘school’ are the most prevalent ‘we’ networks because they serve the primary purpose of promoting communal relationships amongst their members. For example, as stated by the Botswana Vision 2016 Council (2011), family should be the central institution for supporting and developing Batswana and for transmitting social and moral values.

It can be noted that two sources of culture shown in Figure 3.2, namely ‘corporate or organisational culture’ and ‘sex’, will also be highlighted in this study (although the focus will be institutional, not organisational, culture). This study will determine whether differences in proactive coping levels occur across universities and genders. University institutional culture will be discussed in detail in Chapter Four. As explained by Snyder et al. (2011), it is necessary for studies to be conducted cross-culturally across nations as well as multiculturally within nations, to determine if possible differences exist between cultural groups and to appreciate heterogeneity within groups. To conduct research on the relationship between proactive coping and other sources of culture highlighted in Figure 3.2, will be included as a recommendation for future research in Section 8.3.3 of this dissertation.

It is necessary to note, at this point, that it is difficult to hypothesise whether men will exhibit higher levels of proactive coping than women. Men and women differ in the way in which they “translate their values into action” (Lott, 2010, p. 60). It could be assumed that men would have higher levels of self-efficacy based on generalisations that men are dominant, competitive and independent (Lott, 2010). They are however less reluctant to seek help (Lott, 2010) and thus do not rely as much on social support. This perhaps indicates that women would be higher in emotional and instrumental support seeking, but men would make more use of a proactive coping style.
Due to the fact that differences occur between the concepts of national and institutional culture, these differences will be clarified and the concepts discussed the section below (national culture) and in Chapter Four (institutional culture).

3.3 National culture

*Each of us has his or her own distinct personality. But overlaid on top of that are tendencies and assumptions and reflexes handed down to us by the history of the community we grew up in, and those differences are extraordinarily specific.*

Gladwell (2008, p.204)

An individual often learns his or her ‘national character’ as a child through socialisation, education systems and child-rearing practices (Usunier & Lee, 2009, p. 10). According to these authors, national culture refers to homogeneity within countries and differences between countries. The assumption is that individuals in one country behave differently to those from other countries due to specific cultures being “associated with geographic regions that usually correspond to countries” (Francesco & Gold, 2005, p. 20). Despite globalisation, many countries have been able to integrate both local and global cultural forces (Usunier & Lee, 2009).

As explained by Shiraev and Levy (2004), less recent cross-cultural psychology believed that cultures are relatively static and confined within geographic locations, yet it is known that cultures are integrating and moving. National culture is often studied because the borders of countries are easily definable, resulting in a relatively straightforward means of segmentation; yet, the borders on maps are for the most part drawn with little regard for cultural identities (Usunier & Lee, 2009). There are thus problems with the assumption that national culture represents all individuals living in that country. If anything, theoretical frameworks dealing with national culture represent only an average score of individuals’ behaviour within a country, thus not implying that all
people in a country hold the same values (Francesco & Gold, 2005). Indeed, Usunier and Lee (2009, pp. 9-10) explain that,

*National culture is too general to avoid the traps of cliché and stereotype. It is difficult for anyone to understand the nuances of multiple cultures. At best national culture offers a broad brushstroke.*

Many individuals cannot be described as having one particular cultural identity; as stated by Shiraev and Levy (2004), cultural identity is becoming increasingly dynamic as individuals absorb different backgrounds, choices, interests and ideas in one individual self. Furthermore, few nations are made up of groups that are truly ethnically, religiously and linguistically homogenous (Usunier & Lee, 2009). Bandura (1997) also states that diversity exists within and between cultures, with members in the same national culture often adopting different viewpoints or orientations depending on their social circumstances. Many nation-states are multicultural, especially those where there are numerous official languages, political systems or religious groups (Usunier & Lee, 2009). SA is a case in point, comprising many races, ethnic groups, languages and so forth (see Section 3.3.2.1). Based on research from the South African Social Attitudes Survey (SASAS) conducted in 2003, Grossberg, Struwig and Pillay (2006) illustrate that 64 percent of respondents from the Eastern Cape in SA believe that it is better if racial or ethnic groups maintain their distinctive customs. The figure for SA at large is slightly less, at 56 percent. This implies that South Africans in general encourage heterogeneity within the nation, supporting different ethnic and racial groups’ cultures within the overall national culture. The fact that many countries do not have a coherent national culture will be highlighted as a limitation of this study in Chapter Eight.

Despite the limitations of national culture, this study will investigate proactive coping from a national culture perspective due to the ease with which this form of data can be collected and analysed. The fact that so many elements of culture exist, particularly in a country like SA, seems to decrease the likelihood of a country being culturally homogenous. As stated by Earley (1994), there are numerous subcultures within any national boundary as well
as many individual deviations within each subculture. Yet nationality can be strengthened by having many cultural elements that tie subcultures together (Usunier & Lee, 2009). For example, a strong national identity could serve to strengthen the influence of national culture on individuals’ values. Strong national identities can exist even in culturally diverse countries because although members of a society differ in their behaviour, they nonetheless share common basic values (Francesco & Gold, 2005). For example, Grossberg, Struwig and Pillay (2006, p. 54) explain that in SA, the process of “nation-building” has sought to grow a more common, shared loyalty amongst all citizens towards the country and its institutions, which will transcend identities based on race or former orders. These authors go on to state that ideological and intellectual forces, such as popular slogans (for example, SA as the “rainbow nation”), national icons (the most popular being Nelson Mandela) and sporting achievements (particularly SA’s 1995 Rugby World Cup victory) have succeeded in forming a national ideology with the post-1994 democracy.

Although no one particular culture is globally superior or inferior to another, it cannot be denied that certain cultural differences exist, resulting in the ability to evaluate and rank cultures based on evidence of sets of ‘culturally determined’ criteria (Usunier & Lee, 2009). This will be covered in the sections to follow.

3.3.1 Hofstede’s cultural framework
Between 1967 and 1973, Geert Hofstede analysed a large set of data relating to employee values in the company IBM (Francesco & Gold, 2005). This data covered more than 70 countries, although Hofstede at first analysed only the 40 largest countries and later extended this to 50 countries and three regions (Hofstede, 2009). As a result, this is often deemed to be the most comprehensive study of how culture influences values, at least in the workplace.

Hofstede developed a model based on this research that identifies four primary dimensions to differentiate between cultures, namely power distance
index (PDI), individualism index (IDV), masculinity index (MAS) and uncertainty avoidance index (UAI). Many studies subsequent to the original IBM study have validated Hofstede’s results and because the IBM study has been replicated and extended on different international populations, there are now scores available for 74 countries and regions (Hofstede, 2009). Furthermore, Hofstede added a fifth dimension of culture, long-term orientation (LTO), after conducting another international study. This dimension has been applied to 23 countries (Hofstede, 2009). The world average for each of these dimensions is illustrated in Figure 3.3 below.

![Figure 3.3: World Averages of Geert Hofstede’s™ Cultural Dimensions](image)

It is necessary to briefly explain each of these dimensions.

- **PDI** refers to the extent to which less powerful members of organisations (that is, followers) accept power being unequally distributed in the organisation (Francesco & Gold, 2005). It is shown by the behavioural values of superiors who exercise power, as well as by subordinates who act according to the status and power shown by their superiors (Usunier & Lee, 2009).

- **IDV**, however, is more difficult to describe because it must be explained by its two extremes: individualism versus collectivism. Individualism occurs when
societies have loose ties between individuals, with each person being
expected to look after him/herself (Hofstede, 2009). Individual rights and
preferences are highly valued (Francesco & Gold, 2005). Individualism has
been said to centre on three core emphases, namely uniqueness,
independence and the self as the unit of analysis (Snyder et al., 2011).
Collectivism on the opposite extreme refers to the degree to which people are
integrated into groups (Hofstede, 2009). Collectivistic countries therefore
value the overall good of the group at large, with individuals subordinating
their own needs and interests for the benefit of the group (Francesco & Gold,
2005). The three core elements of collectivism are conformity, dependence
and the perception of groups as the unit of analysis (Snyder et al., 2011).

- **MAS** refers to the distribution of roles between genders. Masculine cultures
  are deemed as being competitive and assertive, valuing dominant ‘tough’
  characteristics such as success, money and competition (Francesco & Gold,
  2005; Hofstede, 2009). Feminine cultures, on the other hand, contain
  individuals who are caring and modest, and a value is placed on ‘tender’
  characteristics such as personal relationships and one’s quality of life
  (Francesco & Gold, 2005; Hofstede, 2009).

- **UAI** looks at a society’s tolerance for ambiguity and uncertainty, indicating the
  extent to which members of a culture feel comfortable in unstructured
  situations (Hofstede, 2009).

- Finally, **LTO** is also described by its two extremes: long-term orientated
cultures value perseverance and thrift, whereas short-term orientated cultures
value tradition and the fulfilment of social obligations (Hofstede, 2009). Because no LTO scores are available for Southern African countries, this
dimension will not be discussed further.

Many factors influence an individual’s behaviour, such as the various sources
of culture shown in Figure 3.2. Research has been conducted on how
Hofstede’s dimensions of national culture differ according to various factors.
For example, Mishra (1994) found that young, highly educated urban
individuals displayed lower levels of collectivism in his study. This could imply
that the respondents in the present study would be more individualistic due to their status as university students who for the most part are relatively young. The researcher acknowledges that Hofstede’s cultural framework is not the only way of measuring the culture of a nation. Other means of describing the shared attitudes, values or beliefs of a country include cultural complexity, vertical and horizontal relationships, egalitarianism, tightness as well as activity versus passivity (Shiraev & Levy, 2004). Other cultural frameworks include Kluckhohn and Strodtbeck’s Variations in Values Orientations, Schwartz’s Value Survey, Trompenaar’s Dimensions of Culture, Ronen and Shenkar’s Country Clusters, Hall’s High- and Low-Context Cultural Framework and the World Values Survey (Francesco & Gold, 2005). However, due to the complexity of some of these dimensions or frameworks, and due to the vast information available based on Hofstede’s research, this dissertation focuses primarily on Hofstede’s dimensions. This is despite the fact that to the researcher’s knowledge, no research has been conducted on the relationship between Hofstede’s dimensions and proactive coping.

3.3.2 National culture of the countries to be studied

The high-impact transformation that has taken place and continues to do so in countries such as South Africa offers fertile ground for analysing emerging cultures.

Shonhiwa (2006, p. ix)

According to Shonhiwa (2006, p. 8), Africa is a “complex cultural kaleidoscope” due to its racial, ethnic and tribal differences, with Sub-Saharan Africa specifically presenting a “puzzling picture of cultural dynamics”. A brief discussion of the national culture of each African country under study will be presented in this section.
3.3.2.1 South Africa

The primary – although not exclusive – identities that characterise and have created tensions within South Africa are based on racial, ethnic, religious, gender and linguistic groupings.

Grossberg, Struwig & Pillay (2006, p. 54)

The choice to investigate SA arose due to the researcher living and working in this country. According to the U.S. Department of State: Bureau of African Affairs (2010), SA has a population of 49.99 million and an annual population growth rate of 1.2 percent as of 2009. There are eleven official languages, namely Afrikaans, English, isiNdebele, isiXhosa, isiZulu, Sepedi, Sesotho, Setswana, siSwati, Tshivenda and Xitsonga. The predominant religion is Christianity, followed by traditional African, Hinduism, Islam and Judaism. Furthermore, Statistics SA (2010) explain that the largest population group is made up of Africans (79.4%), followed by whites (9.2%), coloureds (8.8%) and Asians/Indians (2.6%).

Hofstede’s cultural framework has been discussed in the previous section and it is therefore relevant to look at how SA fared on the dimensions discussed. A graphical representation of Hofstede’s scores for SA is shown in Figure 3.4 below. Before discussing the scores for SA though, the researcher draws emphasis to a small footnote that is found in Table 1.2 in Hofstede et al. (2010, p. 36): the data for SA in Hofstede’s original study was collected from whites only. This has important implications that will be touched on below.
Figure 3.4: Geert Hofstede™ Cultural Dimensions for SA
(Hofstede, 2009)

According to Hofstede (2001), SA scores 49 for PDI, more or less 10 percent lower than the world average indicated in Figure 3.3. Thus, SA can be described as fairly decentralised with flatter organisational structures, smaller proportions of supervisors and empowered employees that make their own decisions. Employees are more prone to be viewed as equals because there is an equal distribution of power. This is in line with what Shonhiwa (2006) explains as an “Afrocentric” management style, which focuses on trust, consensus, consultation and individual worth among group members. Additionally, the link between managers and their subordinates is less formal than in a Eurocentric management style (Shonhiwa, 2006). In the context of proactive coping, this might imply that employees would be more willing to ask for help from their supervisors or others in the organisation. As mentioned in Section 2.6.1.2, external resources are necessary for the facilitation of proactive coping. Thus, it can be assumed that individuals in SA will feel more comfortable with approaching their superiors for emotional or informational assistance required to cope proactively. Indeed, Africans in general are more inclined towards consensus in problem-solving (Shonhiwa, 2006). This links with the collectivistic nature of SA that will be discussed next.
It is generally assumed that African countries have highly collectivistic national cultures, which is generally accepted to be true in SA with the concept of “ubuntu” being popular in this country. Ubuntu is described by Werner (2007) as a combination of social behaviours including seeking consensus, sharing and helpfulness. It refers to the phrase “I am because we are”, whereby an individual’s humanity is tied up with the humanity of others and it is only through relationships that individuals discover who they are (Mbigi, 2005, p. vi). The concept of ubuntu thus emphasises a collectivistic culture whereby people belong to strong, loyal and cohesive in-groups that protect one another above all (Hofstede, 2009). The underlying belief behind an Afrocentric leadership style is also collectivism, with leaders focusing on their followers never falling too far behind anyone else (Shonhiwa, 2006). Yet, SA scores 65 for IDV (Hofstede, 2001), approximately 20 percent higher than the world average in Figure 3.3. This indicates that SA’s culture is in fact more individualistic. This can, however, be explained by the fact that Hofstede used a ‘whites-only’ sample for his research (Hofstede et al., 2010) and it can be assumed that the ‘white’ racial group in SA have experienced a more Western (and thus individualistic) influence than other Africans. Indeed, Usunier and Lee (2009) state that because of technological advancements, global media, travel, the Internet and immigration to name a few, cultures worldwide are becoming more homogenous. Cultural distance is a term used to indicate the extent to which various cultures are different or similar (Shenkar, 2001). This author indicates that there are a number of ways for the gaps between cultures to be closed, including globalisation that encourages convergence; geographical proximity that facilitates personal contact and reduces entry barriers; and personal experience in other cultures. Shonhiwa (2006) states, for example, that it would be expected that the leadership style of South Africans would be Eurocentric because of SA’s cultural heritage; that is, Africans in general have experienced a Western influence on their management principles and styles.

How IDV relates to proactive coping is interesting to debate. The researcher proposes that those who live in collectivistic environments would have greater access to both emotional and informational social support because of the
community environment in which they operate, with Bandura (1997) stating that a strong sense of shared responsibility is promoted in collectivistic cultures. Social support is necessary to cope more proactively and thus collectivists would exhibit higher levels of proactive coping. An example of the effect that collectivism has on psychological well-being is provided by Sinha and Verma (1994). These authors researched “allocentrics”, with the knowledge that the majority of individuals who live in collectivistic countries will be allocentric and those in individualistic countries will be idiocentric. Their results showed that allocentrics who received more social support recorded higher levels of optimism. It can consequently be assumed that there is a relationship between social support and optimism from a collectivistic point of view; that is, allocentrism is correlated with psychological well-being under the condition of social support (Sinha & Verma, 1994). However, Bandura (1997) also states that individualistic societies provide extensive opportunities for personal development and reward individuals when they pursue personal success. Personal development and growth are outcomes of proactive coping and thus the researcher believes that elements of individualism are also important for proactive copers to be effective.

SA scores 63 in terms of MAS (Hofstede, 2001), approximately 10 percent less than the world average. It can be understood that individuals in SA demonstrate more masculine than feminine traits, such as placing value on independent decision-making, advancement, challenge, earnings and success (Francesco & Gold, 2005). The researcher notes that this might relate to proactive coping because in order to succeed and advance in one’s career or studies, one would need to be self-confident (high in self-efficacy) and positive about one’s prospects (high in optimism). One would also need the informational resources to succeed because they will proactively look for opportunities (high in social support). Furthermore, as stated by Hambrick and McCord (2010), an exceptional proactive coper would be highly conscientious especially in the facet of achievement-striving, indicating a drive to succeed. Masculine cultures strive for achievement to a greater extent and the researcher thus predicts that masculine cultures will exhibit high levels of proactive coping. However, feminine cultures might also be high in proactive
coping due to their emphasis on the facilitation of personal relationships and thus possibly, social support.

Finally, SA has a score of 49 for UAI (Hofstede, 2001), which is about 15 percent less than the world average. This indicates that the South African culture favours unstructured situations, with more flexibility and more acceptable behaviours (Francesco & Gold, 2005). There is more tolerance of different opinions and fewer rules than countries that prefer avoiding uncertainty. In the context of proactive coping, individuals in SA are empowered to think for themselves but do not necessarily plan for their own futures by foreseeing stressful events and thinking of long-term solutions to overcome these. This can be assumed due to the fact that they have a relatively low UAI, indicating that the SA culture generally favours unstructured situations, are more flexible, take more risks and accept a wider range of behaviours. It has already been stated in Section 2.6.1.1(a) that taking control of a situation is an important element of proactive behaviour due to the fact that it ensures that ambiguity and uncertainty are removed from situations and makes certain that individuals do not simply adapt to unfavourable circumstances (Crant, 2000). Based on this, the researcher believes that proactive coping will thrive in a high UAI culture, because these cultures will tend to avoid uncertainty and ambiguous situations. For this reason, it can be assumed that a country such as SA would be relatively low in proactive coping due to their UAI score below 50.

Apart from SA’S low UAI score which implies that South Africans might demonstrate low levels of proactive coping, according to the rest of Hofstede’s scores, South Africans should be relatively high in proactive coping.

3.3.2.2 Botswana

Initially, this study aimed to investigate only Botswana students together with South African students due to the economic similarity of these two African countries. Calderisi (2007) explains that SA and Botswana, together with Mauritius, are the only countries in Africa to continuously appear in the World Economic Forum’s International Competitiveness Tables since 1980. These
tables serve as a guide for where investors should place their money. Furthermore, even though Botswana is a relatively small country, with a population of 1,990,876 as of July 2009 [Central Intelligence Agency (CIA) World Factbook, 2010], Calderisi (2007) points out that it has always progressed economically and has continuously enjoyed political freedom and a liberal democracy. In fact, Calderisi (2007, p. 74) goes so far to say that SA, Botswana and Mauritius should be “constant reminders that the rest of Africa is capable of much better”.

The U.S. Department of State: Bureau of African Affairs (2010) states that Botswana has an annual population growth rate of 1.434 percent as of 2008. English is Botswana’s official language, but Setswana and Ikalanga are also spoken. The ethnic groups in this country include Tswana (79%), Kalanga (11%) as well as Kgalagadi, Herero, Bayeyi, Hambukush, Basarwa (“San”), Khoi and whites (10%). The main religion is Christianity at 70 percent. Apart from six percent of the population adhering to indigenous beliefs and four percent believing in other religions, 20 percent of the population does not believe in religion at all.

Due to the fact that no Hofstede values are available for Botswana, the researcher will examine this culture using other available information on this country’s values. According to the Botswana Vision 2016 Council (2011), the five national principles of Botswana derived from Botswana’s cultural heritage are democracy, self-reliance, development, unity and Botho. The latter refers to individuals being well-rounded, well-mannered, disciplined and courteous, realising their full potential both as individuals and as part of their communities. These principles are designed to promote social harmony and Botho in particular has been highlighted as becoming central to education and the workplace in Botswana. UB School of Graduate Studies (n.d.) state that Botho is the same as the concept of “ubuntu” (as it is known in the Zulu culture) discussed previously, implying a philosophy that promotes the common good of society. These concepts mean that humanness is an essential component of human growth, with community always coming first and human interests, dignity and needs being fundamental to human
existence (UB School of Graduate Studies, n.d.). Furthermore, philosophies of life and education are said to go hand-in-hand in Botswana due to the fact that life philosophies help to identify the purposes and goals that each society values, and education philosophies assist in transferring these values to the youth.

Additionally, the seven pillars of Botswana’s National Vision 2016 include being an educated, informed nation; a prosperous, productive and innovative nation; a compassionate, just and caring nation; a safe and secure nation; an open, democratic and accountable nation; a moral and tolerant nation; and a united and proud nation (Botswana Vision 2016 Council, 2011). Botswana aims to be a society that distinguishes itself by pursuing excellence through a culture of discipline and hard work, and its education system will support the many languages and cultural traditions Botswana possesses. Additionally, the Botswana Vision 2016 Council (2011) state that the “give me” attitude of Batswana should be eliminated in the future as the need for self-reliance is emphasised.

Thus, it can be presumed that Batswana will also exhibit a proactive coping style due to their emphasis on being a caring and just society (social support emphasised), being encouraged to realise their full potential and giving prominence to Botho and the community.

3.3.2.3 Namibia

Once again, no Hofstede values are available for Namibia and its cultural values will thus be examined using other existing information. According to the U.S. Department of State: Bureau of African Affairs (2010), Namibia has a projected population of 2.1 million people with an average annual growth rate of 2.6 percent. Their HIV/AIDS prevalence rate is estimated to be 13.3 percent. Approximately 50 percent of the population belong to the Ovambo ethnic group, with the remaining ethnic groups including Kavango (9%), Herero (7%), Damara (7%), Nama (5%), Caprivian (4%), San (3%), Baster (2%) and Tswana (0.5%). Despite these considerable cultural differences and
ethnic stereotyping, Countries and Their Cultures (2011) explain that there is a widely shared national orientation particularly among young Namibians, with urban areas including universities representing multi-ethnic sites where interaction takes place across ethnic boundaries. However, ethnicity still occurs as a force within Namibia. In this line, Ruigrok (2005) writes that for many decades, culture and racial discrimination abounded in Namibia until independence from apartheid SA in 1991, when cultural policy became more important. The slogan of the 2001 Namibian cultural policy is ‘Unity in diversity’, emphasising especially to the younger generation that every individual is entitled to his or her own culture provided that it does not impinge on the rights of other cultures (Ruigrok, 2005). The aim of the policy is therefore to encourage respect, tolerance and mutual understanding in order to achieve national unity. Namibia is a predominantly Christian country but other religions include Islam, Judaism, Baha’ism and indigenous beliefs (U.S. Department of State: Bureau of African Affairs, 2010). English is Namibia’s official language; however, Oshivambo, Afrikaans, German, Herero, Nama/Damara and other indigenous languages are also spoken. According to Ruigrok (2005), the Ministry for Elementary Education, Sport and Culture broadened the term “cultural legacy” in 2001 to include language and spirituality and these have thus become a part of the Namibian cultural legacy as well. The Ministry believes that their rich heritage gives the country a unique Namibian and African identity, which forms the basis for further development.

3.3.2.4 Zimbabwe

Zimbabwe has a population of 11.39 million with an estimated annual population growth rate of 0.3 percent. Apart from an HIV/AIDS adult prevalence rate of approximately 15.3 percent, their population growth rate is lowered by a high rate of emigration. According to Sahwira Online (2006), the culture of Zimbabwe has become Westernised with a nuclear family perspective being encouraged and traditional guidelines becoming less prominent. The introduction of the market system has resulted in families being separated, which has changed the way children are brought up, with extended family members no longer being part of the child rearing process
due to long distances between families (Sahwira Online, 2006). Zimbabweans yearn for secondary qualifications, which the researcher believes is part of the reason why so many Zimbabweans study in foreign universities. Furthermore, Sahwira Online (2006) explain that in Zimbabwe, individuals give those in authority the benefit of the doubt and elders are thus given much respect, with children being expected to do as they are told. Their culture emphasises keeping quiet more than speaking up. English is Zimbabwe’s official language but Shona and Ndebele are also spoken. Shona is the main ethnic group at 71 percent, followed by Ndebele (16%), other African groups (11%), whites (1%), as well as mixed and Asian ethnic groups (1%). Christianity is largely practised (75%), but offshoot Christian sects, Animist and Muslim religions are also present. Men are still valued somewhat more than women in Zimbabwe (Sahwira Online, 2006).

It is unfortunate that no Hofstede scores are available for Botswana, Namibia or Zimbabwe. Hofstede provides scores only for SA (as discussed above), ‘West Africa’ (including Nigeria, Ghana and Sierra Leone) and ‘East Africa’ (including Ethiopia, Kenya, Zambia and Tanzania). However, general information about the cultures of Southern African countries can be obtained from sources other than Hofstede. Shonhiwa (2006) explains a number of important African values:

- **Ubuntu** is a concept applicable in all African countries and all Africans value the spirit of ubuntu. Emphasis is placed on extended families, which is seen as fostering an important social support system. Ubuntu was consistently named as an important leadership trait and admired quality in African leaders in Shonhiwa’s (2006) study.

- Africans prefer collectivism to individualism, with specific focus on spiritual collectivism that respects spiritual guidance. An Afrocentric leadership style makes use of the collective knowledge of followers/subordinates.

- Due to the fact that Africans inherently trust and believe in the fairness of their leaders, they look up to their leaders without question and refrain from criticising them. Hierarchical structures play a role and authority is accepted. The researcher notes that this indicates a high PDI, which
contradicts Hofstede’s relatively low PDI value for SA. However, an explanation might lie in the fact that even though there is much respect for authority in African cultures, there is nonetheless an informal relationship between managers and subordinates reflecting a low PDI (as discussed in the previous section).

- Africans are highly optimistic and believe in higher powers that underlie their attitude towards life and sense of being.

The above statements imply that an African culture exists, with little or no differences between African countries with regard to the values discussed. The researcher notes that both social support systems and optimism have been mentioned above. Due to the fact that these are external and internal resources (respectively) necessary for one to cope proactively, it could be hypothesised that the Southern African sample used in this study would exhibit higher levels of proactive coping than individuals from areas outside of Southern Africa.

It must be noted, however, that Botswana, Namibia and Zimbabwe have also been susceptible to Western influences, such as through European education systems in their countries that promote cultural integration and impact on the views and attitudes of children (Shonhiwa, 2006). Mbigi (2005) explains that most urban, modern Africans have in fact lost their collective identity due to the influence of colonialism, resulting in a situation where they are neither African nor Western. This is in agreement with Shiraev and Levy (2004), who state that many individuals develop a bicultural identity because although part of their identity is based in local norms, beliefs and customs, they are also influenced by an ever-increasing global culture. As local population units become larger and more diffuse and differentiated, individuals will be given more options regarding their conduct and in this way, personal rather than collective goals will guide the behaviour of individuals (Berry, 1994). Thus, the choices that individuals make will be influenced less by shared norms and increasingly more by the beliefs of individuals (Berry, 1994). This skews the predictability of whether Africans will be high in proactive coping or not based on traditional African values.
3.4 How culture influences coping

...Each cultural context in which we participate or behave will contribute to who we are, our beliefs about ourselves and others, how we interpret events, how we relate to and interact with others, and what we accomplish in promoting change in our lives and communities.

Lott (2010, p.14)

Those positive psychology researchers who hold that human strengths are culturally embedded believe that the majority of positive processes and traits manifest themselves in distinct ways in different cultures for diverse purposes (Snyder et al., 2011). For this reason, the researcher has investigated how cultural values might affect the concept of coping because it is believed, as stated in the quote above, that cultural contexts influence the manner in which individuals behave and manage their lives.

According to Aldwin (1994), culture influences the kinds of stressors that individuals experience as well as the appraisal process (mentioned in Section 2.6.3 of this study). The cultural influence on appraising stressful situations comes either through values and beliefs that are common within wider cultural settings or that are developed in more specific social situations. Particular coping behaviours may be deemed more appropriate than others in certain cultures and in addition, what is considered suitable within cultures is not standardised but varies from individual to individual (Aldwin, 1994). Thus, culture also affects one’s choice of coping strategy and it also provides the institutional mechanisms by which one copes (Aldwin, 1994). As stated by Satcher (2001, in Snyder et al., 2011), culture influences what coping styles and social supports individuals make use of.

This is demonstrated in Figure 3.5 below. This model shows that cultural demands and resources influence situational demands as well as individual resources, which in turn both influence how stress is appraised (Aldwin, 1994). An individual’s coping resources were discussed in the context of proactive coping in Section 2.6.1. Additionally, cultural beliefs and values
affect not only an individual's beliefs and values, but also the reactions of others in a situation, which in turn affects the appraisal of stress (Aldwin, 1994). In this way, an individual's coping is affected by the appraisal of stress, his or her coping resources, cultural resources as well as the reactions of others. Furthermore, coping efforts are influenced by cultural demands and resources, by individual coping resources and by cultural beliefs and values through social support.

Figure 3.5: A socio-cultural model of stress, coping and adaptation

(Aldwin, 1994, p. 193)

The above is in agreement with Folkman et al. (1991), who explain that sociological variables such as ethnicity, cultural background, socio-economic status and gender influence the coping appraisal process. Other variables relevant to this study that influence the appraisal process include contextual variables such as family conditions, work conditions and socio-political conditions.
The researcher notes that one’s cultural upbringing might influence whether an individual is higher in their self-efficacy beliefs and more optimistic (internal resources necessary for proactive coping), and contextual variables might be directly related to whether someone has a high degree of social support (external resource necessary for proactive coping). For example, the schooling years of individuals influence their formation regarding their conception of their intellectual capabilities (self-efficacy) [Bandura, 1997]. Furthermore, social support is influenced by one’s ethnic group, organisational membership and gender (Antonucci, 1991), and culture influences whether individuals seek help and what forms of help they seek (Satcher, 2001, in Snyder et al., 2011).

3.4.1 International research on proactive coping and culture

It is necessary to highlight international research on proactive coping in order to show how research on this construct differs worldwide, and reveal the lack of quantitative empirical studies using the PCI in Southern Africa.

Taubert (1999, in Schwarzer & Taubert, 2002) examined a Canadian and Polish-Canadian sample and found that the proactive coping subscale of the PCI was positively correlated with general self-efficacy as well as with the Planning and Active Coping subscales of the Brief Cope instrument. The Proactive Coping subscale was also negatively correlated with behavioural disengagement, depression and self-blame. A detailed discussion of these Canadian and Polish-Canadian results will be presented in Section 5.7.2 when the validity of the PCI is discussed. Furthermore, a Turkish-Canadian sample was investigated by Uskul and Greenglass (2005), with the sample comprised of 181 Turkish immigrants living in Canada. Proactive coping was found to predict satisfaction with life and was also negatively correlated to depression. Thus, when individuals cope using proactive strategies, they are self-initiating and active as opposed to passive and are less likely to report feelings related to depression (Uskul & Greenglass, 2005).

Schwarzer’s study that investigated teachers in Germany is cited in Schwarzer and Taubert (2002). It was found that proactive coping correlated...
positively with perceived self-efficacy, procrastination and self-regulation. Furthermore, those teachers who were higher in proactive coping were less cynical and emotionally exhausted in addition to more personally accomplished than those teachers who were more reactive (Schwarzer & Taubert, 2002). These three dimensions define job burnout and thus higher levels of proactive coping imply lowers levels of burnout (Schwarzer & Taubert, 2002). In Norway, proactive coping research has been conducted by Guribye et al. (2011) among Tamil refugees using an ethnographic fieldwork methodology to investigate proactive coping as a process in a natural setting. It was found that these refugees appraised their shared life situations and accumulated resources communally, indicating that proactive coping efforts take place in a dynamic social setting with group members feeling collectively responsible for their future well-being. They cooperate in order to prevent undesirable change and promote desired outcomes. This may force individuals to make use of accumulated proactive coping resources, with unforeseen social events creating challenges that force them to modify and adapt the way in which they cope (Guribye et al., 2011).

Bode, de Ridder, Kuijer and Bensing (2007) conducted research on proactive coping interventions in the Netherlands, using a sample of 158 middle- and older-aged individuals. It was found that the brief educational programme conducted was effective in increasing proactive coping competencies in individuals between the ages of 50 and 75 and that this increase remained stable three months after the programme ended. Thus, proactive coping was found to promote successful aging by stimulating individuals to focus on personal growth, investing in their future and optimising their lives in middle and late adulthood (Bode et al., 2007). In this way, risk management (recognising that the process of aging would result in possible losses) and goal management (emphasising positive life development through improved self-regulation capacities) were combined, with proactive, future-orientated techniques being joined with self-management methods [Bode et al., 2007]. Proactive coping training interventions will be discussed as a recommendation for future research in Section 8.3.2 of this dissertation.
Proactive coping research from the Slovak Republic is provided by Ruiselová and Prokopčáková (2010). They translated the PCI into Slovak and found that women who are counterfactual in their thinking (that is, who think of different alternatives or outcomes to situations) are highly proactive in their coping strategies and also make greater use of emotional and instrumental support. Women with higher levels of sense of coherence were also found to cope both proactively and preventively, and those who were highly anxious scored lower in proactive and preventive coping (Ruiselová & Prokopčáková, 2010).

Wu et al. (2008) conducted research into proactive coping in a Chinese context, due to the fact that this construct has received much attention in Western societies but not in other areas of the world. Wu et al. (2008) thus researched 313 Taiwanese college students with a mean age of 20.35 years. Their results indicated that proactive coping is positively correlated with optimism and self-esteem, and negatively correlated with depression, anxiety and pessimism. Furthermore, Gan et al. (2010) researched proactive coping (known as “future-oriented coping” in the Chinese context) with 403 students and Hu and Gan (2011) used a sample of 216 students, both at a Chinese university. The PCI has also been adapted for the Hindi culture by Bhushan, Gautam and Greenglass (2010).

Proactive coping research from Australia indicates that significant positive relationships occur between the constructs of general self-efficacy, proactive attitudes and proactive coping (Albion, Fernie & Burton, 2005). Furthermore, these authors found that a proactive attitude is associated with having been previously employed. Lo (2002) established that positive self-esteem was significantly correlated with proactive coping behaviours in an Australian undergraduate nursing student sample. These students thus put more effort into their studies and sought information and advice from their lecturers and friends (Lo, 2002).

Multiethnic research from the United States of America is presented by Roesch et al. (2009), who investigated 709 undergraduate students comprising of Caucasian, Mexican-American, Asian-American and Filipino-
America students for the purposes of examining the dimensionality of the PCI. These authors’ main results on whether the PCI is comprised of three, five or seven factors will be discussed in Section 7.2.1 of this dissertation. It can also be noted that the sample scored generally highly on each scale of the PCI, indicating negative skewness (Roesch et al., 2009). Additionally, the internal consistency of each scale was adequate across the sample.

Relevant African research on proactive coping was conducted in Nigeria by Adebayo et al. (2008), who investigated 141 non-traditional (adult) postgraduate students. These authors found that the relationship between subjective well-being and work-school conflict was moderated by proactive coping due to the fact that as work-school conflict increased, those students who coped proactively reported a higher degree of subjective well-being. Higher levels of proactive coping were associated with high levels of subjective well-being (Adebayo et al., 2008). In terms of South African proactive coping research, it was already mentioned in Section 1.2 of this dissertation that the only such research found by the researcher was by Strümpfer (2003), Nxumalo (2010) and Meiring (2010). Only Meiring (2010) made use of the PCI, and found that a small sample of 30 parents of autistic children had a moderate to high tendency to make use of proactive coping.

What this overview of international proactive coping research highlights is the absence of such research in Southern Africa. Although studies have been conducted on self-efficacy beliefs in a number of African countries (Magogwe & Oliver, 2007; Anyster, Goodman & Wallis, 2006; Wood & Olivier, 2004), limited research studies have been carried out concerning proactive coping in a Southern African context.

The researcher notes, however, that Scholz, Gutiérrez Doña, Sud and Schwarzer (2002) sampled 19,120 individuals from 25 countries and found that self-efficacy might be rated higher in individualistic countries than in collectivistic countries, due to the fact that collectivistic cultures value effort and hard work more highly than they do ability. It might be proposed,
therefore, that the same might hold true for proactive coping. If SA is presumably more individualistic than other Southern African countries, such as Botswana, Namibia or Zimbabwe, then it might be hypothesised that South Africans would exhibit higher proactive coping levels than those from other Southern African countries.

3.5 Conclusion
Interestingly, Snyder et al. (2011) mention that individualists are in the minority because the world is populated by those who are collectivistic. In fact, the world is comprised of approximately two billion individualists, versus four and a half billion collectivists (Snyder et al., 2011). This holds important implications for proactive coping, because it can be assumed that collectivists would cope more proactively due to the fact that they would make more use of social support, such as through asking for help (Synder et al., 2011). It is hoped then that the world is made up of many proactive copers.

This chapter has discussed culture in detail. It focused on how culture influences coping and provided international research on proactive coping. Furthermore, national culture was discussed and the national cultures of the countries under study were looked at. The focus of this dissertation will now turn to institutional culture.
CHAPTER FOUR

THE RELATIONSHIP BETWEEN
PROACTIVE COPING AND INSTITUTIONAL CULTURE

The people who stand before kings may look like they did it all by themselves. But in fact they are invariably the beneficiaries of hidden advantages and extraordinary opportunities and cultural legacies that allow them to learn and work hard and make sense of the world in ways others cannot.

Gladwell (2008, p.19)

4.1 Introduction

Universities are examples of institutions with their own cultures that define the behaviour of their students through the values, beliefs and norms that they make known. According to Lott (2010), it is within an individual’s various cultures that he or she learns how to behave and what to feel and believe, in keeping with the prescriptions transmitted to him or her across time and generations from others. However, even though cultural differences are easily recognised at a national or ethnic level, individuals often find it more difficult to understand at a group, occupational or organisational level (Schein, 2004). For this reason, this chapter will focus on universities and their institutional cultures, as well as how this relates to proactive coping. Indeed, it has been stated by Snyder et al. (2011) that universities act as socialising systems that can assist in promoting youth development.

Before discussing institutional culture however, the researcher will firstly present a discussion on how proactive coping will benefit university students, the target population of this study, in order to further emphasise the importance of this study.
4.2 **How does proactive coping benefit university students?**

SA’s education system, which serves to prepare scholars for university studies, has come under scrutiny of late. For example, the Human Sciences Research Council found that, when compared to other poorer countries, the quality of education in SA fares dismally, owing to among other reasons, a lack of skills, poor teacher training and shortages of educational resources (Newman, 2008). The researcher notes that this is especially apparent in the rural areas of SA, and hence students who come from disadvantaged backgrounds might arrive at university even more under-prepared to deal with the demands of university than those who have been educated in better equipped schools.

These problems are particularly troublesome owing to the fact that university students undergo incredible pressure and stress throughout their years of study, and entering university itself is a stressful experience that presents interpersonal, academic and financial challenges (Gan et al., 2010). These authors explain that successful adjustment to university life is thus a primary goal of students. Difficulties that result in stress also arise when university students complete their studies and begin searching for a job (Hu & Gan, 2011). On top of university pressures, Bandura (1997) states that major role transitions occur when individuals change from adolescence to young adulthood, because young adulthood is characterised by individuals having to learn to manage financial resources, enter into vocational careers, adapt to societal norms associated with adult status as well as deal with new social demands that arise from the management of lasting relationships. Individuals who enter adulthood without the necessary skills will find adulthood depressing, aversive and filled with hardships (Bandura, 1997). The researcher notes that this young adulthood life stage is characteristic of university students, the majority of whom begin tertiary educational studies immediately upon finishing high school. These pressures are therefore relevant to the university sample under study.

Based on SA’s poor education system, it is believed that many school-leavers in this country are entering university ill-prepared for the increased work load
and ill-equipped with the competencies and skills required for study at a tertiary institution. The researcher proposes that if university students are encouraged to make use of a proactive coping style, this might assist them in dealing with such pressures and also help them to cope with the transition to adulthood and entering the working world upon leaving university. Because proactive coping equips individuals to build up resources that will result in them being prepared for stressful situations that arise, this form of coping should provide many benefits for university students.

Proactive coping, for example, has been shown to play a vital role in adjusting to university because high levels of proactive coping are correlated with low levels of stress in university transition (Gan et al., 2010). These authors suggest that the process begins with future students perceiving stressful situations as challenges and opportunities, thereby believing in the potential that the change might bring. Proactive coping techniques are then used to alter their environment, resulting in them experiencing lower levels of stress upon entrance to university and consequently, less maladjustment (Gan et al., 2010). As stated by Davis and Asliturk (2011), individuals who succeed are those who approach challenges intending to be successful, but who nonetheless seek information, plan alternative courses of action and develop resources in anticipation of predicted stressors.

In addition to its positive effects on adjusting to university life, proactive coping in the form of collecting personal resources was found to be one of the cognitive buffers that students in Nigeria can make use of in order to lessen the negative impact of work-school conflict (Adebayo et al., 2008). Thus, when subjective well-being is threatened by potential stressful situations, proactive copers are able to utilise their resources to overcome these challenges and avoid negative consequences (Adebayo et al., 2008). Additionally, Raffety et al. (1997) found that the use of proactive coping increases four days prior to university students writing an examination and then peaks immediately before it. It was also seen that high levels of “facilitating test anxiety” were associated with higher levels of proactive coping (Raffety et al., 1997). This implies that when students made use of proactive
coping, the test anxiety they subsequently experienced proved useful and had positive effects on their studies. Vernon et al. (2009) concluded in their study that a proactive coper’s ability to perceive stressful events as challenges rather than threats could lead to activities and thoughts incongruent with the development of post-traumatic stress disorder (PTSD) in female undergraduate students with trauma histories. Proactive coping also correlates positively with successful job hunting upon completion of university studies, by means of adequate preparation activities and positive job searching behaviours (Hu & Gan, 2011).

In addition to the benefits that proactive coping has for university students, it is also useful to briefly mention the benefits that self-efficacy and optimism hold for students, due to the fact that these were shown in Section 2.6.1.1 to be vital resources for individuals if they are to cope in a proactive manner. Self-efficacy has been found to influence whether students believe in their capacity to succeed in a task (Ching, 2002), and Pajares (2002) highlights that “there is ample reason to believe that self-efficacy is a powerful motivation construct that strongly predicts academic self-beliefs and performances”. Self-efficacy beliefs influence the attainment of performance due to the fact that they affect an individual’s perseverance, effort and persistence (Pajares, 2002) and enhance motivation (Luszczynska et al., 2005). In addition, students with high levels of self-efficacy are more enthusiastic about their work, more receptive to performance feedback, manage their time better and set more challenging goals for themselves (Schunk, 1995, in Wood & Olivier, 2004). If students are self-efficacious in an academic environment, they tend to make more habitual use of self-regulatory practices and cognitive strategies (Pajares, 2002) and are more successful in solving conceptual problems (Bandura, 1997).

Bandura (2002) importantly explains that intellectual self-development is affected by the ability of an individual to regulate his or her own learning activities and motivation levels. Thus, self-efficacy is vital in the study of university students, because one of education’s major goals is to equip students with the capabilities to self-regulate themselves. Due to the fact that
one’s involvement in personal goals and social activities also relate to one’s self-efficacy beliefs, Bandura (1997) states that high self-efficacy is related to the development of satisfying social relationships, which furthermore produce life satisfaction. Thus, these beliefs are connected not only to academic benefits, but also to social benefits in students (Wood & Olivier, 2004). Self-efficacy is also related to one’s choice of occupation, because according to Bandura (2002), individuals will consider groups of attractive occupations if they believe them to be within their capabilities, resulting in them preparing better educationally. In terms of optimism, Snyder et al. (2011) cite research by other authors who found that learned optimism results in improved academic performance, greater satisfaction in interpersonal relationships, more effective coping with stressful life situations in general, more productive work records and less vulnerability to depression.

Other general benefits of proactive coping are also relevant in the context of university students. For example, this style of coping emphasises individuals controlling their own lives and making use of strategies based on self-determination and initiation (Greenglass, 2002). Indeed, Gan et al. (2010) explain that university students who cope proactively will see opportunities and enhance their own capabilities. Proactive copers will notice possible obstacles in advance and take action to overcome them, such as by making a “plan B” in time or gathering sufficient resources to prevent them landing in a difficult scenario (Wu et al., 2008, p. 114). This is because proactive copers “get on with life” and are thus more functionally able to perform, which links with optimism, hope and enthusiasm (Greenglass, 2006, p. 80). Students who cope proactively can turn obstacles into more positive experiences, resulting in the improvement of their quality of life (Greenglass et al., 1999a). For these reasons, such university students will take responsibility for their own actions and will pick themselves up when things go wrong, looking for possible solutions and asking how they might improve in the future.

Bearing the above discussion on SA’s education system in mind, it could be argued that certain students may be entering Southern African universities with learning needs, which according to Eisenberger, Conti-D’Antonio and
Bertrando (2005) will unfortunately result in such students displaying negative behaviours such as exhibiting poor work performance; lacking resilience; not understanding how to approach a task with a successful plan of action; having trouble academically and socially in terms of planning, organising and controlling their lives; and behaving as though they have no autonomy over how they live their lives (Eisenberger et al., 2005). This would further decrease their use of a proactive coping style. Within the lecturing environment, the researcher has experienced students who appear to lack a proactive coping style. For example, students that the researcher has come into contact with demonstrate the following:

- Not preparing in advance for tests and exams (which are usually stressful events from a student’s perspective);
- Not being positive about passing their modules (low levels of optimism);
- Not believing that they ‘have what it takes’ to pass their tests or exams (low levels of self-efficacy);
- Not coming from social backgrounds where they have access to external support networks (low levels of social support, whether due to socio-economic status or family circumstances).

These factors are detrimental to university students’ levels of educational performance.

The researcher contrasts this with the following scenario of a university student preparing to complete a semester assignment. If the individual makes use of a proactive coping style, he or she would view the upcoming deadline as a challenge to be met, not a risk that implies the possibility of failure. The student would begin work on the assignment well in advance of the deadline and will not wait for the lecturer to provide reminders in class; instead, he or she would have initiated work on the assignment well in advance. However, unforeseen events that cannot be prepared for do occur. Assume the individual is an international student and the day before submission of the assignment, is told that his or her mother has been diagnosed with Stage Two breast cancer. Owing to a lack of funds and the imminence of the university’s examination period, the student decides to remain in the country of study until
the upcoming holiday period when he or she will return to be with his or her mother. If the student was a proactive coper, this heartbreaking news would not affect the submission of the semester assignment in an excessively negative way because he or she would have begun work on it early. Personal resources can be drawn on to help him or her through this difficult time, such as a close social support system of friends who can provide listening ears and perhaps offer to proofread the assignment before submission. The student is optimistic and thus does not entertain thoughts that the cancer may be terminal. Importantly, the individual allows time to reflect on the situation but then picks him or herself up and submits the semester assignment. He or she is realistic despite being optimistic and thus will accept a mark that is not as high as would normally be achieved. The student is able to correlate the assignment mark with the amount of stress that he or she was under in the period immediately before its submission. The student also believes in his or her capabilities to cope with the imminent examination period: class has regularly been attended and examinations have been strategically planned for in advance. The individual’s self-efficacious attitude will ensure that he or she works hard and envisions each examination being written with confidence. Success is pictured despite this personal setback.

The above scenario demonstrates many advantages and characteristics of proactive coping, such as the benefits of securing both internal and external resources and the perception of threats as challenges. Specifically though, the researcher wishes to highlight the importance of proactive coping for international students, who study in foreign countries. Just as immigrants must deal with additional life stressors such as adjusting to the norms, language and customs of their host country (Uskul & Greenglass, 2005), so too must international students deal with testing circumstances such as learning to cook and clean for themselves, buying food and clothes with a limited budget and coping with homesickness. These challenges are over and above the already highly demanding requirements of tertiary studies. Furthermore, it is assumed that international students will not have access to social support systems as easily as home country students and thus will display lower levels of proactive coping, instrumental support seeking and
emotional support seeking. If students were capable of preparing themselves for ever increasing stressful circumstances (such as when examination periods begin) by building up their levels of informational support (knowledge required for studying and exam-taking purposes) and close friends or helpful lecturers (social support), it is likely that they will overcome stressful situations better and succeed in their university studies. Furthermore,

- if lecturers are encouraging and influence students to believe more in their abilities (support higher levels of self-efficacy),
- if students receive constructive feedback on tests and assignments which leads them to perceive their studies in a positive light (become more optimistic),
- and if students are surrounded by friends who support them in their studies and lecturers who have open-door policies for when students are going through difficult times and need course-related assistance (improved levels of social support),

then the researcher believes that students will leave their university being able to cope more proactively, regardless of their cultural upbringing in their home country.

The focus of this chapter will now turn to institutional culture, because the culture that students experience at university may affect whether they make use of a proactive coping style. Because this study focuses on universities as institutions, the concepts of “institution” versus “organisation” must firstly be clarified and differentiated.

4.3 “Institution” versus “organisation”

It is often accepted that an organisation and an institution are one and the same thing; however, differences between these two concepts exist and they should not be used interchangeably. In the same way, “institutional culture” is not the same as “organisational culture” or even “institutional climate” (Jansen, 2004). For this reason, it is necessary to differentiate between these terms.
According to Hofstede et al. (2010), organisations are places where people work. They can be defined as managed, systematic structures that serve an administrative or functional purpose, existing in order to pursue continuous collective goals or meet certain needs (BusinessDictionary, 2011b; Merriam-Webster, 2011b; Oxford Dictionaries, 2010b). These authors further explain that each organisation has a management structure that determines relationships, roles, responsibilities and authority. On the other hand, institutions are official, established corporations, organisations or foundations that are created to pursue a particular endeavour, including educational, professional, social or religious purposes (BusinessDictionary, 2011a; Merriam-Webster, 2011a; Oxford Dictionaries, 2010a). They are often of a public nature and play an important role in society. Institutions correspond to the basic elements of society (namely family, school and community) and they represent rules and laws related to these elements (Hofstede et al., 2010). For example, universities are people-oriented institutions that are dominated by social interaction (Sporn, 1996). For this reason, it can be concluded that universities are institutions and not organisations because they serve an educational purpose and, in the case of public universities, are public domains. For this reason, one of the focuses of this study will be institutional culture as opposed to the more commonly discussed organisational culture. This will be elaborated on in the section to follow.

4.4 Institutional culture

*Leaders in higher education can benefit from understanding their institutions as cultural entities.*

Tierney (1988, p. 5)

Higher education institutions have long been recognised as having a unique character and distinctive nature (Peterson & Spencer, 1990). It is known that institutions are influenced and shaped not only by external forces (such as economic conditions), but also by strong internal forces such as its processes and the goals and values held by those involved in the workings of the institution (Tierney, 1988). It is evident, therefore, that institutions do form their
own cultures. But what exactly is “institutional culture”? According to Higgins (2007, p. 98), institutional culture is “an item of contested vocabulary in a conflictual and disputed social process” because the term itself is so difficult to define. From an academic perspective, this author says that institutional culture is a complex collection of disciplinary values that constitute academic activities. Jansen (2004), writing about how far South African institutions have come in terms of social integration and non-racial communities, attempts a shallow definition by stating that institutional culture is “the way we do things around here”. Tierney (1988) comes closer when writing that this culture concerns the decisions, actions and communication that take place both on an instrumental and symbolic level, although he uses the terms institution and organisation interchangeably.

Clark (1981, in Dill, 1982) explains that the culture of academic institutions is more complex than other organisations, with systems of belief arising on three levels (namely the culture of the institution, the culture of the academic profession and the culture of academic discipline) [Dill, 1982]. However, Higgins (2007) states that institutional culture represents the power and authority struggle between academics and administrators, yet it should be defended by academic workers. Importantly, however, institutional and academic culture is often viewed in terms of its “whiteness” in SA, whereby black staff and students feel alienated and disempowered upon encountering traditionally white universities due to this invisible norm (Higgins, 2007, p. 106). This is probably linked to the fact that the internal forces forming an institution’s culture have their roots in the institution’s history (Tierney, 1988; Hofstede & Hofstede, 2005), with most African universities having been founded and managed based on the traditional Western (“white”) way of doing things. For example, there are many European, Western or Anglo-Saxon values and attitudes that make up cultural and subjective factors in African universities (Higgins, 2007), and in Western societies, there has always been a powerful academic culture in terms of symbolic life and tradition (Dill, 1982). Despite this, institutional culture should in fact accommodate and establish racial diversity in terms of differences and similarities (Jansen, 2004). Institutional culture is notably also directly related to institutional
transformation (Jansen, 2004), with Higgins (2007) going so far as to state that it is the key to successfully transforming higher education in SA.

The above has important implications for proactive coping. Even though ‘ubuntu’ is a national cultural value in most African countries, and even though universities often mirror the national culture of a country (to be discussed later), the above implies that universities in Southern Africa in fact mirror the values of traditionally “white” countries in Europe, England and the West. Can it be assumed then that the institutional culture of African universities would actually value African norms and beliefs? The researcher will attempt to answer this when discussing the institutional cultures of the universities under study.

According to Dill (1982, p. 304), “academic institutions possess distinctive cultures which are developed and sustained by identifiable actions of the community members”. Because light can be shed on the meaning of institutional culture by looking at its expressions or elements, an effective way of studying university institutional culture is to group approaches into four categories, namely geospatial; traditions, artefacts, myths and symbolism; behavioural processes and patterns; and espoused beliefs and values (Peterson & Spencer, 1990).

1. Firstly, geospatial approaches describe the campus’ physical architecture such as the nature, location and design of campus structures, sculptures, statues, traffic patterns and other infrastructure (Peterson & Spencer, 1990). These are tangible elements within a culture that express information regarding its shared values and serve as visible manifestations of deeper institutional beliefs or future institutional directions (Peterson & Spencer, 1990). These elements are relatively permanent and thus provide a sense of historical context and present status that spreads cultural meaning. According to Renard (personal communication, 18 June 2011) there are, in essence, two types of university layouts; namely integrated and satellite campuses. With the integrated campus, a blurring between the academic realm of the university and the public realm of the town occurs. This engenders a strong
sense of shared community as the town population and the student body intermingle to a high degree and can be said to be co-dependent. The town is stimulated by the student culture and the students benefit from the public infrastructure. This fosters a culture of “learning something from anyone” and “learning to be a part of the whole within the town” (Renard, 2011). An example would be Rhodes University in Grahamstown, SA, which forms part of the greater public environment and, therefore, naturally engenders an atmosphere of communal dependency among students. Satellite campuses, in contrast, are highly independent facilities that can be seen to encourage self-dependency because students are separated from the public (Renard, 2011). A high level of independence is thus necessary for effective operation of the campus as it does not benefit from nearby infrastructure. An example of this is Nelson Mandela Metropolitan University, one of the universities under study. These two types of campuses illustrate how the structure and architecture of a university represent much deeper institutional values and beliefs.

2. Secondly, traditions, artefacts and myths are symbols that also convey a broad range of information concerning the shared assumptions that members hold about the institution as well as insight into the past and current ideologies that guide the actions of its members (Peterson & Spencer, 1990). Examples include ritualistic or symbolic ceremonies and major events such as graduation ceremonies; heroic, sacred or villainous figures; sagas that represented the institution’s successes or failures; strongly held beliefs, myths or images; and the language and jargon used to describe these (Peterson & Spencer, 1990). This is also stated by Satcher (2001; in Snyder et al., 2011) who says that culture can be determined from the language groups that professionals use, their mindset of looking at the world as well as what is emphasised in their textbooks. Jansen (2004) moreover explains that in universities, institutional culture is demonstrated by whose language leads public meetings and whose language is excluded; the content and image of the institution’s emblem; and the way in which universities speak about the future. However, as noted by Peterson and Spencer (1990), the above
symbols often illustrate an idealised perception of the institution, with values and beliefs frequently declared but not necessarily practised.

3. Thirdly, behavioural processes and patterns involve behavioural activities that are sustained and repeated over time and have a relatively standard form and content (Peterson & Spencer, 1990). These manifested behaviours are present in the institution’s operations, representing the social architecture of the institution (Peterson & Spencer, 1990). Examples might include who receives honorary degrees; the way in which females are constructed in social relations on campus; what books are in the library; the extent to which blacks and whites feel accepted at the institution; the diversity of the repertoire of the university choir; and who continues to gain access to institutional contracts versus who is marginalised (Jansen, 2004). Furthermore, Dill (1982) discusses that the actions of community members include emphasising the institution’s core values through symbolic events (such as honouring distinguished researchers) as well as transmitting the institution’s core values through the design of structural bonds (such as appointing faculty members). Respectively, these are known as managing ‘meaning’ and managing ‘social integration’ (Dill, 1982, p. 304). As explained by Tierney (1988), culture is reflected not only in what is done, but also how it is done and who is involved in doing it, through looking at how the institution is run and what is expected from its leaders. Even though institutions might have similar curricula or mission statements, they might perform differently due to individuals’ varying perceptions or the different ways in which the institutions’ identities are communicated. Thus, the researcher believes that how the university is governed and the nature of the academic community (Peterson & Spencer, 1990) should also be included in this approach.

4. Finally, the espoused beliefs and values of an institution are either explicitly stated in mission statements and organisational charters, or implicitly held and shown only through the actions of members (Peterson & Spencer, 1990). For example, when speaking about what holds a university together, Tierney (1988) states that individuals often look at the institution’s values, mission or
bureaucratic procedures. Groups of professionals also embody a particular culture because they have between them a shared set of norms, values and beliefs (Satcher, 2001, in Snyder et al., 2011). The researcher believes that the academic community’s education philosophy and perspectives on teaching and learning mentioned by Peterson and Spencer (1990) would also fit into this approach. It should be noted, however, that while these values and beliefs are often widely communicated and are said to form the institution’s identity, they often present the institution in its ideal, not actual, form (Peterson & Spencer, 1990). In fact, it is the values and beliefs that are actually embedded in institutional members that guide the daily actions of members (Peterson & Spencer, 1990).

Organisational culture, despite its dissimilarity to institutional culture, plays a significant role in the functioning of academic institutions due to the distinctive nature of these institutions (Dill, 1982). University organisational culture is made up of the strategy, mission, environment and leadership of each university, as well as the university’s information (communication) and socialisation processes [Tierney, 1988]. Although each of these are present in every university, the way in which they occur, as well as the structure they take and the importance they are given, differs in each academic institution. The expressions of academic institutions explained in the preceding paragraphs are the behaviours that result from a group’s culture, made up of underlying forces and shared norms that cannot be seen (see Schein, 2004).

To simplify and summarise, the researcher defines “institutional culture”, as mentioned in Section 1.5.2, as the set of common values and beliefs demonstrated by a group of individuals from a particular institution. It can be referred to as the “glue” that reflects or holds institutions together through dominant belief or behavioural patterns (Peterson & Spencer, 1990, p. 7) as well as the prevailing ethos and deep-seated norms and assumptions of institutions (Steyn & van Zyl, 2001, in Higgins, 2007). Additionally, institutional culture encompasses every other aspect experienced at a university by staff and students; that is, the way of life at that university. This will be perceived
differently by different individuals at different universities (Steyn & van Zyl, 2001, in Higgins, 2007).

According to Hofstede et al. (2010), the values of a country are related much more to the structure and functioning of its institutions than to differences in personal identities. Although it is not clear whether national culture does in fact affect institutional culture, it has been said that “institutions cannot be understood without considering culture, and understanding culture presumes insight into institutions” (Hofstede et al., 2010, p. 24). In other words, these two concepts must be understood together rather than separately, for one of two reasons: according to Hofstede et al. (2010), some believe that institutions are the real reason behind the differences in acting, thinking and feeling that countries display; while others believe that institutions follow the mental programming of the culture on which they were founded and in which they have grown, thus adapting to their local culture. The latter perspective implies that national culture together with other elements within an institution’s environment determine the internal culture of an institution. In this line, Martin (1992) writes that it is impossible to understand what happens in an organisational (or in this case, institutional) culture without first understanding what is happening beyond the boundaries of the organisation. From this it is presumed that the environment surrounding an institution would affect the institution’s culture and therefore that national culture influences organisational (and institutional) culture. As stated by Higgins (2007), if culture is understood as the way that a society lives, then social institutions are surely part of that entire way of life.

That said, national and institutional cultures are only two variables that help explain the behaviour of individuals within institutions. Technology, power, strategy, size and political and economic events also play a role in affecting the behaviour of individuals (Francesco & Gold, 2005). In the case of universities, this occurs because they operate as complex social organisations that are dependent on their external environments (Sporn, 1996). This environment, together with the structure of a university, assists in
developing a distinctive academic culture that has unique attitudes, values and beliefs (Sporn, 1996).

The researcher believes that a country’s national and institutional cultures are intertwined and leans towards Hofstede et al.’s (2010, p. 418) opinion that institutions “cannot be created from scratch”, because they are rooted in the history and values of a country in which they have grown. The effect that institutional culture has on proactive coping will be discussed to follow.

4.4.1 Institutional culture’s effect on proactive coping
According to Folkman et al. (1991), coping processes are changeable and can thus be modified through counselling and education. If this is to be believed, then the researcher proposes that students who study in countries other than their home countries can be influenced by the institutional culture of the foreign university that they are studying at, provided that the foreign university has measures in place that enable students to learn to cope more proactively.

One of the purposes of education according to Mbigi (2005) is to provide individuals with the capacity to create what is good for themselves, humanity and the world. Consequently, the researcher believes that there are certain “best practices” that universities can demonstrate in order to create an environment that best stimulates the development and maintenance of proactive coping. One such environment would be a learning culture, as explained by Schein (2004), owing to the fact that three of the characteristics of a learning culture relate to proactive coping: namely, the assumption of proactivity; an orientation towards the future; and committing to cultural analysis for understanding and improving the world. Regarding proactivity, Schein (2004) states that learning cultures assume that the best way for individuals to behave in relationship to their environment is by being proactive problem solvers and learners. The researcher notes that this relates to the problem-focused function of coping, as explained in Section 2.4. Because the rate of change in environments is ever-increasing, learning becomes difficult if individuals passively accept circumstances (Schein, 2004). Furthermore,
leaders of learning cultures depend on others to generate solutions, which are more likely to be adopted by organisational members if they have been involved in the process of learning (Schein, 2004). The researcher comments that this reliance on social systems is a further aspect of proactive coping. Regarding a future-orientation, Schein (2004) notes that institutions should be able to think well enough in advance to be able to assess the consequences of different courses of action, while at the same time be thinking of the near future to determine whether solutions are working. This relates to the feedback and evaluation stage of proactive coping discussed in Section 2.6.5. Finally, a commitment to cultural analysis implies that a learning culture should understand the concept of culture and leaders should be willing and able to work with individuals from various cultures (Schein, 2004). In the same way, staff members and students alike at multicultural universities such as those under study must learn to work with one another despite their similarities and differences. The institutional culture of each university investigated in this study will now be presented.

4.4.2 Institutional culture of the universities to be studied

Now that the concept of institutional culture has been introduced and explained, it is necessary to examine the institutional cultures of the universities that will be focused on for this dissertation. As stated by Peterson and Spencer (1990), culture serves to emphasise the unique and distinct character of institutions in relation to other institutions and thus, this section aims to elaborate on what makes each of the universities under study distinctive. The three universities are Nelson Mandela Metropolitan University (NMMU) in George and Port Elizabeth, SA; University of Botswana (UB) in Gaborone, Botswana; and University of Namibia (UNAM) with ten campuses across Namibia, including the main campus in Windhoek.

University cultures are often taken for granted and, as a result, are difficult to objectively assess (Sporn, 1996) owing to their subconscious nature. As mentioned by Peterson and Spencer (1990), the primary methods of investigating culture are qualitative, examples being descriptions drawn from observation, open-ended interviews or examination of institutional records and
documents. Furthermore, listening to organisational stories or identifying the attitudes of university members can also be utilised to gather cultural information (Sporn, 1996). However, because the researcher has not visited the campuses of UB or UNAM, she is unable to conduct such in-depth institutional culture studies and thus cannot comment on the first three approaches towards describing institutional culture as explained in Section 4.4. The focus of these two institutions will, for this reason, be based on their mission statements and values as per the university websites, which according to Sporn (1996) are the basis for formulating university goals and strategies. Peterson and Spencer (1990, p. 12) do warn that because other institutional culture elements cannot be considered, this forces the researcher to make an interpretive “leap of faith” regarding the beliefs and values that guide the behaviour of their students. Consequently, the picture regarding their institutional cultures will be incomplete owing to the fact that institutional culture cannot be fully understood by limiting a study to one approach (Peterson & Spencer, 1990). This is because meaning is attached to the various cultural elements that were discussed in Section 4.4.

4.4.2.1 Nelson Mandela Metropolitan University

NMMU opened on 1 January 2005, the result of a merger between University of Port Elizabeth (UPE), PE Technikon and Vista University (NMMU, 2011a). NMMU’s vision is to be a “dynamic African university” that is known for its “leadership in generating cutting-edge knowledge for a sustainable future” (NMMU, 2011c). Furthermore, its mission is to provide a “diverse range of quality educational opportunities” that will contribute critically and constructively not only to regional sustainability, but also to national and global sustainability (NMMU, 2011c).

In line with the geospatial approach to institutional culture discussed in Section 4.4, the UPE campus was designed as a satellite campus, with UPE buildings being independent of other structures in Port Elizabeth and originally being built to separate the university from the public. The buildings of UPE were designed as “fortresses” that would protect Afrikaner knowledge, keeping academics in and other members of society out (Renard, 2011). The
NMMU North and South campuses in Summerstrand, Port Elizabeth are therefore accessible by one public entry point and this entry point is only accessible by one road, University Way. Effectively, this excludes the public from campus life as there is no need to enter University Way beyond wishing to enter the university grounds (Renard, 2011). Although NMMU’s strategy since the merger is vastly different to the purpose that UPE served, buildings are relatively permanent and thus the institutional culture of NMMU to some extent naturally reflects the structure of its buildings, which carry a different message to its vision and mission statements.

Despite this, NMMU aims to provide transformational leadership, developing graduates who are responsible global citizens that are able to reason critically and be innovative and adaptable (NMMU, 2011e). The environment of NMMU aspires to support a transformative institutional culture of research, innovation and scholarship that optimises the full potential of students, and it wants to be known for having an organisational culture that is caring, driven by its values and centred on its people (NMMU, 2011e). NMMU commits to promoting equality of opportunities and access to all students in the pursuit of lifelong learning (NMMU, 2011e). What is also important to note is NMMU’s educational purpose and philosophy (see NMMU, 2011e, p. 20). Here, it is stated that NMMU is committed to increasing the human potential of its students “in the full spectrum of its cognitive, economic, social, cultural, aesthetic and personal dimensions in the pursuit of democratic citizenship”.

NMMU’s set of values is important in understanding its institutional culture. According to NMMU (2011c), these six values include excellence, ubuntu, integrity, taking responsibility, respect for diversity and respect for the natural environment. NMMU’s value of ubuntu is worth highlighting, with NMMU (2011e, p. 20) explaining that this University respects the dignity of others, recognises mutual interdependence and promotes “compassionate and responsible citizenship”. It has been discussed in Section 3.3.2.1 that the concept of ubuntu implies that SA is a collectivistic country. Ubuntu can be linked to proactive coping because it forms part of social support, implying that individuals must live in connection with others if they are to cope in a
proactive manner (see Section 2.6.1.2). Furthermore, NMMU’s value of excellence explicates that they provide an affirming and supportive environment that enables all students to reach their full potential (NMMU, 2011e). This additionally implies that social support is available to all NMMU students.

Due to the fact that NMMU ensures that their values define their “institutional ethos and distinctive educational purpose and philosophy” (NMMU, 2011e), it can be assumed that the culture of NMMU would be ingrained in their students and NMMU’s values would be adopted by NMMU students. The researcher therefore hypothesises that NMMU students should be high in proactive coping because they should enjoy high levels of social support and will be encouraged to develop goals and reach their full potential.

4.4.2.2 University of Botswana

UB was founded in 1982 (UB, 2008a) and their vision is to be a “leading academic centre of excellence in Africa and the world” (UB, 2008c). This relates to the excellence value of NMMU as stated above. Furthermore, UB’s mission is to improve both the social and economic conditions of Botswana, while advancing UB as a “distinctively African university with a regional and international outlook” (UB, 2008c).

UB School of Graduate Studies (2011) provides insight into the second approach to institutional culture explained in Section 4.4, namely traditions, artefacts and symbols. It is discussed that UB’s colours, logo and corporate image represent aspects of the University. For example, the gold colour representing Social Sciences indicates interaction and a sense of well-being and comfort. This implies that students from this faculty would be taught to interact effectively with others and look after themselves and others. In UB’s logo, the fanning structure of the open book and the row-like structure of the sorghum² indicate development and growth through knowledge. Furthermore,

² Sorghum is a cereal grain and is the fifth most important cereal crop grown worldwide (U.S. Grains Council, 2010).
the heraldic nature of the shield links UB’s logo with the national coat of arms, thus bringing it in line with the national family (UB School of Graduate Studies, 2011).

It is also possible to draw links between some of UB’s plans of action and certain aspects of proactive coping. UB foresees itself providing excellence in its delivery of learning in order to produce talented, independent, self-directed, confident and professionally competent graduates (UB, 2008c). The researcher notes that to be confident in one’s abilities is part of the concept of self-efficacy [as discussed in Section 2.6.1.1(a)], because an individual will believe in his or her capabilities to perform effectively. Self-efficacy as previously mentioned is an internal resource required for one to cope proactively. UB’s creation of a holistic environment that provides social, cultural, learning and recreational opportunities to facilitate the full realisation of their students’ potential for personal and academic growth (UB, 2008c) will also assist them in producing self-confident graduates who are high in self-efficacy and optimism, the second internal proactive coping resource.

Furthermore, UB (2008c) explains that as a University, they wish to serve as a cultural and intellectual hub that makes use of Botswana’s “indigenous knowledge base”, promoting Botswana’s cultural and social heritage. They will also be a resource within their community for collaborations and new ideas. They plan on providing leadership that responds to, amongst others, Botswana’s cultural and social needs. In addition, “cultural authenticity” is one of their values and they aim to ensure that Botswana’s diverse indigenous values and cultural heritage forms an important part of both their organisational and academic institutional life (UB, 2008c). From this information, the researcher observes that UB is instilling the values of community involvement and appreciation in their students. This relates to the external social support resources that those who cope proactively require. UB evidently also wishes to reflect the values and traits of Botswana’s national culture (as explained in Section 3.3.2.2), which has already been stated as reflecting the resources necessary for proactive coping to be developed.
Finally, UB’s vision includes practising a proactive form of leadership and management that will enhance their learning, teaching and research environment (UB, 2008c). Thus, the researcher understands that UB places value on proactivity as a leadership and management quality.

From the above, it can thus be hypothesised that UB students should also demonstrate high levels of proactive coping.

**4.4.2.3 University of Namibia**

UNAM was established on 31 August 1992 [UNAM, n.d.(b)] with their vision being to “engage with society in the creation and dissemination of knowledge, through teaching, research and advisory services, and a commitment to lifelong learning” [UNAM, n.d.(c)]. They aim to become a centre of knowledge to serve the development of Namibia, ensuring that they are freely available in matters that are directly related to improving the quality of the lives of all in their country.

According to Countries and Their Cultures (2011), UNAM is the only university in Namibia and the largely foreign faculty is being replaced as qualified Namibian candidates become available. The applied sciences are emphasised over theoretical sciences, and a number of socio-economic research reports have been produced by UNAM’s Social Sciences Division.

UNAM [n.d.(c)] explain a number of principles that are guided by their mission. Various principles that can be related to proactive coping will be highlighted in this section. UNAM explicitly states that they aim to engage within the “cultural context of the Namibian people”, for example by serving to preserve and develop Namibian values and culture. Also, by indicating that they encourage continuous self-improvement, self-evaluation and constructive criticism, it can be assumed that UNAM students would develop higher levels of self-efficacy while studying at this institution. Furthermore, due to the fact that UNAM’s facilities, leadership and skills are accessible to all individuals regardless of race, gender, religion, economic status and so forth, it is presumed that students studying at UNAM would represent all diverse groups
from around Namibia. In addition, they aim to uphold educational programmes that are nationally relevant and a further operational principle is to develop UNAM as a “leading national institution” as well as a key contributor to building the country. This is a sign that they intend to uphold the cultural values of Namibia as a country and it can therefore be inferred that the cultural values of UNAM will be similar to those of Namibia.

From the above, it can be hypothesised that UNAM students, like those from NMMU and UB, should also demonstrate high levels of proactive coping. For this reason, the researcher cannot hypothesise as to which institutional culture will result in students making greater use of a proactive coping style.

What can be highlighted from the previous discussion is that based on the value and mission statements of the universities under study, these universities do not only value traditional “white” values as previously suggested by Higgins (2007). Instead, many African values such as ubuntu or Botho are highly significant in the management of these universities. This positively contradicts the literature because it illustrates the commitment of African universities’ to reflect the culture of their respective countries.

4.5 Conclusion
Snyder et al. (2011, p. 73) summarise the effect of culture on proactive coping by stating that it is vital for positive psychologists to “count culture as a major influence on the development and manifestation of human strengths and good living”. According to Schein (2004), any social unit has a shared history that would have evolved its culture. The strength of a particular culture is dependent on how long the unit has existed, how stable the unit’s membership is and the emotional intensity of the historical experiences shared (Schein, 2004). As stated by Peterson and Spencer (1990), values and beliefs might be widely communicated but until implicitly and unconsciously embedded within members of an institution, they will not guide the daily actions of members. Hence, the researcher believes that UB’s culture would be the strongest of the three universities, due to the fact that it
has existed longer (established in 1982) than UNAM (1992) or NMMU (2005). To prove this belief would, however, go beyond the scope of this dissertation.

To summarise the hypotheses based on the past three chapters, as relevant to this study’s university student sample, the following list is provided:

- **H₁**: Proactive coping is positively correlated with emotional support seeking (pp. 54-55).
- **H₂**: Proactive coping is positively correlated with instrumental support seeking (pp. 54-55).
- **H₃**: Women exhibit higher levels of instrumental support seeking than men (pp. 55, 75).
- **H₄**: Women exhibit higher levels of emotional support seeking than men (pp. 55, 75).
- **H₅**: Men exhibit higher levels of proactive coping than women (p. 75).
- **H₆**: International students demonstrate lower levels of proactive coping than students studying in their home countries (pp. 105-106).
- **H₇**: International students demonstrate lower levels of instrumental support seeking than students studying in their home countries (pp. 105-106).
- **H₈**: International students demonstrate lower levels of emotional support seeking than students studying in their home countries (pp. 105-106).
- **H₉**: South Africans exhibit higher levels of proactive coping than individuals from other Southern African countries (pp. 97-98).
- **H₁₀**: Southern African university students exhibit higher levels of proactive coping than other forms of coping (pp. 118, 120, 121).
- **H₁₁**: Southern Africans demonstrate higher levels of proactive coping than individuals from areas outside of Southern Africa (p. 91).
However, it should be noted that other variables will also be investigated, such as whether relationships occur between the subscales in the measuring instrument and whether institutional culture influences the use of a proactive coping style by students.

The following chapter of this dissertation will focus on the research methodology employed in this study.
CHAPTER FIVE

RESEARCH DESIGN / METHODOLOGY

5.1 Introduction

The aim of this study is to determine whether proactive coping differences occur between students from various Southern African countries and universities, in order to evaluate whether cultural differences occur for this construct. Empirical research was required in order to achieve this and the methodology for conducting this research is the focus of this Chapter. The study was conducted during a two year period, namely March 2010 until December 2011. Data collection occurred during a seven month time period, namely September 2010 until March 2011.

This chapter will discuss the research type and technique, the measuring instrument used, the sampling method, data collection and analysis methods, reliability and validity as well as ethical considerations. The sampling method will be explored in various subsections, namely the target population, control categories for the population, sampling frame and sampling technique.

5.2 Research type and technique

A qualitative literature study was conducted before the empirical objectives were addressed. Primary literature sources formed the theoretical basis for the research. The empirical study was quantitative in nature, with the aim being to adopt an empirical method utilising questionnaires to collect data. The questionnaire method can be defined as a structured questionnaire that was distributed electronically to a sample of a population, with the aim of gathering cross-cultural data. Although Schwarzer and Taubert (2002) state that it is difficult to satisfactorily measure coping due to it being determined by both personality and situational factors, these authors contend that theory-based psychometric scales can nonetheless assess important aspects of the coping process when administered repeatedly. The measuring instrument
utilised to assess proactive coping will be elaborated on in the following section.

5.3 **Measuring instrument**

The measuring instrument that was distributed to the sample in this study was the Proactive Coping Inventory (PCI) [Greenglass et al., 1999b], currently the only formal measure available to determine proactive coping levels (Roesch et al., 2009). The PCI is a multidimensional research instrument dealing with the reactions that individuals may have to various daily events or situations (Greenglass et al., 1999b). It measures different dimensions of a proactive coping approach and is useful for assessing the skills individuals possess in coping with distress, as well as the skills needed to enjoy greater life satisfaction and well-being (Greenglass & Fiksenbaum, 2005).

Greenglass (2002, pp. 44-45) explains the development of the PCI in detail. The first stage involved students and psychologists responding to three questions:

1. *Think back to problems you have had in the last six months. What specifically did you do to try to solve them? It may help to think specifically of one problem.*
2. *Did your efforts help?*
3. *Describe how you felt at the time.*

The responses to these questions generated 137 items with 18 subscales and five dimensions, representing a wide variety of behaviours and cognitions important for proactive coping (Greenglass, 2002). The five dimensions were proactive stress appraisal, proactive reflective coping, proactive resource management, proactive emotional coping and proactive goal-orientated coping action (Greenglass et al., 1999a). Schwarzer’s PCT was theoretically considered during this construction (Greenglass, 2002). The PCI in use today was then developed in the second stage by psychometrically analysing this first version of the PCI (Greenglass, 1998, in Greenglass et al., 1999a). The 137 item pool was tested using a sample of 252 Canadian students. It was validated firstly by using a sample of 144 Polish-Canadian adults, followed by a sample of 178 Canadian adults. The items were reduced through statistical
analysis and scale reduction techniques (including Pearson Product Moment Correlations, confirmatory factor analysis, principal component analysis and reliability testing) to produce a leaner set of coping scales that demonstrates good psychometric characteristics; that is, the PCI used currently (Greenglass et al., 1999a).

The PCI sees coping as occurring within a social context in which resources are abundant (Greenglass, 2002). It is acknowledged by the PCI that the efficiency of coping is heightened when cognitions, behaviours, emotions and attitudes are consistent within a specific framework (Greenglass et al., 1999a). In other words, the PCI combines cognitive, intentional, affective and social factors into a set of coping strategies that equip individuals to face challenges through the construction of action paths for personal development and goal promotion (Greenglass, 2002). In this way, the PCI was created with the aim of comprehensively and exhaustively evaluating “proactive cognition and behaviour as a positive facet of coping” (Greenglass et al., 1999a, p. 5). Thus, the items in the PCI implement a form of coping that is based on responsibility, vision and resourcefulness (Greenglass et al., 1999a). These coping cognitions and behaviours take place at any point in time and occur simultaneously, because the PCI is grounded on proactive coping being multidimensional, occurring as a process over time and being dependent on situational factors (Greenglass et al., 1999a; Greenglass, 2002).

According to Greenglass et al. (1999a) and Greenglass (2002), the PCI has three main features: it combines both planning and preventive strategies with self-regulatory, proactive goal management; it incorporates proactively attaining goals with identifying and utilising social resources; and it makes use of proactive emotional coping in order to self-regulate one’s accomplishment of goals.

The PCI is comprised of 52 items and it has been translated into 12 languages (Greenglass & Fiksenbaum, 2005). It uses an itemised rating scale, which provides respondents with a scale that has either a number or a brief description associated with every category (Malhotra, 2010).
Respondents are then required to choose the specified category that best describes the object being rated. The itemised rating scale that was used in the PCI was the Likert scale, which requires respondents to indicate their degree of agreement or disagreement with each of a series of statements about the stimulus objects (Malhotra, 2010). The PCI makes use of a four-item scale, with response categories being “Not at all true” (1), “Barely true” (2), “Somewhat true” (3) and “Completely true” (4) (Greenglass & Fiksenbaum, 2005). A copy of the PCI is included as Annexure A.

According to Greenglass (2002), after construction and testing, the PCI included seven subscales with the seventh subscale measuring avoidance coping. However, avoidance coping does not make use of proactive measures to decrease problems in advance and often results in wishful thinking and self-blame (Aspinwall & Taylor, 1997). Thus, because this form of coping measures a delay of coping and was negatively correlated with the Proactive Coping subscale (Greenglass et al., 1999a), it was omitted from the final PCI. The six remaining subscales in the PCI focus on positive coping aspects such as envisioning success, planning for the future, taking initiative and accumulating resources to strengthen coping attempts (Greenglass et al., 1999a). These subscales are presented below.

5.3.1 Proactive Coping subscale
This first subscale consists of fourteen items and looks at autonomous goal setting as well as the behaviour and cognitions associated with self-regulatory goal attainment (Greenglass et al., 1999a). It measures intentional and motivational aspects of goal setting that are determined by oneself, with individuals striving to improve their lives as opposed to reacting to past or anticipated problematic events (Greenglass et al., 1999a). Individuals scoring high on this subscale believe strongly in change, specifically change that results in improving themselves and their environments (Greenglass et al., 1999a). According to Schwarzer and Knoll (2009), the fourteen homogenous items form a unidimensional scale. Three items require reversal. The Proactive Attitude Scale and the General Perceived Self-Efficacy Scale were
drawn on as external criteria during the construction of this subscale (Greenglass, 2002).

5.3.2 Reflective Coping subscale
This subscale has eleven items and concerns contemplating and simulating a number of possible behavioural options through comparing their envisioned effectiveness and success. This is done by means of analysing resources and problems, brainstorming and generating action plans (Greenglass, 2002).

5.3.3 Strategic Planning subscale
This subscale, with four items, focuses on the process of creating an action schedule that is goal-orientated, in which larger tasks are divided into manageable sections (Greenglass et al., 1999a). Strategic planning involves a form of coping that depends on the individual’s own efforts to change a situation (Greenglass et al., 1999a).

5.3.4 Preventive Coping subscale
Involving ten items, this subscale looks at anticipating potential stressors and initiating preparing for these stressors before they develop fully (Greenglass, 2002). Preventive coping efforts are directed towards actual potential threats in the future, with anticipation, knowledge or experience being considered (Greenglass et al., 1999a).

5.3.5 Instrumental Support Seeking subscale
Obtaining advice, feedback and information from individuals who form part of a person’s social network when dealing with stressors is the focus of this eight-item subscale (Greenglass et al., 1999a).

5.3.6 Emotional Support Seeking subscale
Finally, this five item subscale concerns the regulation of temporary emotional distress through the disclosure of one’s feelings to others. It also involves seeking companionship from one’s social networks as well as evoking empathy (Greenglass, 2002). Greenglass et al. (1999a) state that emotional
support seeking entails regulating one’s emotions with the assistance of significant others.

Principal component analyses have confirmed the factorial validity and homogeneity of these subscales (Greenglass et al., 1999a). Validity of the PCI will be discussed in greater detail in Section 5.7.2 of this dissertation. According to Greenglass and Fiksenbaum (2005), the responses from these scales should be added to obtain a summed score for each scale. The ranges would be as follows:

Table 5.1: Range of scores for PCI subscales

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proactive Coping</td>
<td>14-56</td>
</tr>
<tr>
<td>Reflective Coping</td>
<td>11-44</td>
</tr>
<tr>
<td>Strategic Planning</td>
<td>4-16</td>
</tr>
<tr>
<td>Preventive Coping</td>
<td>10-40</td>
</tr>
<tr>
<td>Instrumental Support Seeking</td>
<td>8-32</td>
</tr>
<tr>
<td>Emotional Support Seeking</td>
<td>5-20</td>
</tr>
</tbody>
</table>

It is recommended that no cut-off scores are used, as the authors who developed the PCI do not endorse categorising respondents in this way (Greenglass & Fiksenbaum, 2005). According to Wolfaardt and Roodt (2008), cut-off scores compare a respondent’s performance to an external standard or criterion. These authors explain that this is necessary in settings where a large amount of individuals are being assessed, as cut-off scores determine who passes or fails a measure. Thus, the researcher notes that Greenglass and Fiksenbaum (2005) are implying that respondents cannot ‘pass’ or ‘fail’ the PCI and thus no cut-off scores are necessary. Researchers who make use of the PCI should rather establish groups based on “the empirical distributions of a particular reference population” (Greenglass & Fiksenbaum, 2005, p. 3). This implies that researchers will rather determine how a PCI
respondent has performed in relation to others, usually through the use of a norm group that indicates a respondent's standing in relation to that group (Wolfaardt & Roodt, 2008). However, the researcher notes that limited research has been conducted using the PCI in Southern Africa, resulting in a lack of appropriate reference or norm groups.

Apart from the above six subscales, for the purposes of this study a demographic section was also included. Four categories necessary for statistical purposes were included, namely age, gender, country of study and home country. Respondents who wished to enter for the lucky draw prize (see Section 5.5) had to complete the questionnaire in its entirety, including all demographic questions.

5.3.7 Criticisms of the PCI

Despite the above discussion and use of the PCI in this study, the researcher is critical of this measuring instrument. Schwarzer's PCT was said to be used as a theoretical basis for selection of the 137 items of the initial PCI, but the PCT merely differentiates between four dimensions of coping. It does not focus on proactive coping in isolation nor does it cover reflective coping, strategic planning, instrumental support seeking or emotional support seeking, which are subscales included in the PCI.

Although much information is provided on the reliability and validity of the six subscales in the PCI, it is only explained that Pearson Product Moment Correlations, confirmatory factor analysis, principal component analysis and reliability testing were used in the development of the subscales, not on how these subscales actually relate to proactive coping. For example, Schwarzer and Taubert (2002) state that a preventive coping subscale is included in the PCI but do not explain why this is the case. This is despite their previous explanations in their article regarding the fundamental differences between preventive and proactive coping. The researcher can only assume that preventive coping is included because it also places a great emphasis on the gathering of resources in advance of stressful events. The difference between the concepts is that preventive coping will assist individuals in mastering
uncertain future threats, challenges or risks, whereas proactive coping will enable individuals to master more certain, but challenging, goals. The Reflective Coping subscale is said to correlate with the Preventive Coping subscale as well as Internal Control because all involve contemplating future behavioural alternatives (Greenglass et al., 1999a), but Internal Control is not a subscale of the PCI so this does not hold relevance. These examples illustrate the inconsistencies in choice of subscales included in the PCI.

Being under the impression that all PCI subscales would relate to proactive coping as the name implies, the researcher was initially uncomfortable with current research on the PCI. For example, Schwarzer and Taubert (2002) cite research that made use of the PCI, but when analysing results, stated that the Proactive Coping subscale was correlated with various other constructs. They specify that “this attests to the fact that the PCI Proactive Coping subscale yields the desired patterns of associations with other variables” (Schwarzer & Taubert, 2002, p. 29). In Wu et al.’s (2008, p. 107) study, these authors made it clear that they only used the Proactive Coping subscale in order to measure individuals’ uses of proactive coping, terming it the “Proactive Coping Scale (PCS)”, a term also used by Greenglass, Fiksenbaum and Eaton (2006). The researcher questioned why there was a focus on only one subscale in the PCI when measuring proactive coping. What proved further confusing was that Lopes and Cunha (2008) made use of the Proactive Coping subscale in isolation when measuring proactive coping but referred to it as the “PCI scale”. Personal communication with Greenglass (8 June 2011), who co-developed the PCI, resulted in similar terminology – “PCI subscale” as opposed to “Proactive Coping subscale”. The researcher thus deduced that these terms refer to the Proactive Coping subscale and may be used interchangeably. The researcher questioned once again whether the obvious way to measure proactive coping was to use only the Proactive Coping subscale, as opposed to the entire PCI.

An initial explanation arose from Greenglass and Fiksenbaum (2005), who stated that depending on one’s research, all subscales or only one subscale can be used. The researcher found it unclear as to why the measure is
termed the PCI if only one subscale relates to proactive coping and can be used independently of the other subscales. An e-mail was thus sent to the developers of the PCI to query this. According to Schwarzer (personal communication, 8 June 2011), “the entire PCI is simply an assembly of different coping scale(s)”. This author explains that it is not possible to produce a summated score for the entire PCI. Instead, one needs to make use of the individual subscale sum scores. Greenglass (personal communication, 8 June 2011) agrees with this, explaining that only the individual subscale totals should be looked at and subscale totals should never be combined. She states that most researchers utilise the 14-item PCI subscale (that is, the Proactive Coping subscale) but other subscales such as the Preventive Coping subscale or the two Social Support Seeking subscales can also be considered. In this case, one would use only the total of scores in the particular subscale. Therefore, this leads one to assume that researchers such as Hambrick and McCord (2010) analysed portions of their results incorrectly, due to the fact that they summed the six PCI scales to yield an overall coping score.

Based on the abovementioned personal communication with Schwarzer and Greenglass, the researcher decided to use only the Proactive Coping subscale when comparing levels of proactive coping across nations and institutions. Further comparisons will additionally be made using the other five subscales. Because it is not possible to produce a summated score for the entire PCI, the individual subscale sum scores will be used instead. As stated by Hambrick and McCord (2010), these other five subscales of the PCI measure positive, adaptive coping strategies that correlate highly with proactive coping but in fact create distinct clusters, evidencing the multidimensional nature of proactive coping. However, the researcher still remains unclear as to why proactive coping is said to be multidimensional due to its positive correlations with the other five subscales in the PCI (Greenglass, 2002), but yet only the Proactive Coping subscale is used to measure proactive coping. An exploratory factor analysis will be performed to determine whether the Proactive Coping subscale is indeed a stand-alone factor.
Interestingly, Lopes and Cunha (2008) found that the Proactive Coping subscale consists of two distinct dimensions, namely proactive coping and passive coping, which indicates differential coping strategies. However, the items classified as passive coping were the three items of the Proactive Coping subscale that require reversal. The researcher believes that there is no need to classify these items as passive coping because once reversed, they relate to proactive coping. The intention of the reversed items in the Proactive Coping subscale was that they should not be taken at face value, because without reversal they do not fit into the proactive coping classification.

The PCI was used despite these limitations and perplexity, due to it being the only measure currently available to assess proactive coping. The instrument has also undergone extensive research concerning its reliability and validity (see Section 5.7) which implies that it is psychometrically sound. Roesch et al. (2009) anyhow state that it is difficult to conceptualise the way in which proactive coping can meaningfully be assessed due to its future-orientation, which implies that the anticipated stressors an individual is ‘coping’ with are not necessarily known. The PCI can therefore only be classified as a trait or dispositional measure of coping (Roesch et al., 2009). Furthermore, had the researcher developed her own instrument, the results of this study would not be comparable with the results of previous proactive coping studies.

The sampling method used to gather respondents for this study will now be presented.

5.4 Sampling method
This section will begin by clarifying the target population for the study, before discussing aspects of the sample. It will also explain the data collection process.

5.4.1 Target population
The target population can be defined in terms of elements, extent and sampling units. Firstly, the elements of this study were university students
studying in Botswana, Namibia and SA, accessed by means of an electronic questionnaire. The extent of the study was thus Botswana, Namibia and SA. The sampling units (where the elements of the study were found) were three universities in the above three countries, namely UB, UNAM and NMMU respectively. A sample was drawn from the entire student population of UB (total population of 14 706 students in 2009/2010) and NMMU (total student population of 25 000 students in 2010), but only from students in certain classes in the Department of Management Sciences at UNAM (approximately 13 000 students study at UNAM and 400 in this Department, but only about 200 students were reached in the classes that the questionnaire was sent to). This is due to a lack of response from higher authorities at UNAM, resulting in the researcher relying on a personal contact to send the questionnaire to his students.

The three countries mentioned above were chosen due to the fact that English is the primary language used in universities in these countries. For example, Botswana’s official language in education and commerce is English and English is also a prerequisite for entrance into further education (Magogwe & Oliver, 2007). It was thus decided that these three countries would be suitable for a cross-cultural study, due to the fact that the measuring instruments would not need to be translated into different African languages. The university students being researched in these countries study in English, implying that they will be able to comprehend the items in the questionnaire.

5.4.2 Control categories for the population
A number of control categories were established for the target population. Firstly, respondents had to be studying at UB, UNAM or NMMU. In addition, their home country had to be in Africa: the responses of international students from outside of Africa were not included in the analysis of data. Finally, respondents had to have diverse characteristics in terms of mixed genders and ages.
5.4.3 Sampling frame

A sampling frame represents all accessible members of a target population (Horn, 2009). The elements of this study, university students, were accessed through the three universities that were focused on. In order to organise this access, it was necessary to obtain university consent, and in certain cases, ethics approval at each university. At NMMU, university consent was implied when NMMU ethics clearance was granted. Ethics approval will be discussed in more detail in Section 5.8. In terms of UB and UNAM, the researcher contacted representatives from each university and e-mailed a University Consent document to each (see Annexure B). Dr Paul Ndebele, Assistant Director of Research Ethics at UB, informed the researcher that further ethics approval was required (see Section 5.8). However, Mr. Fanuel Dangarembizi, lecturer in the Department of Management Sciences at UNAM, immediately agreed to assist with the research without requiring ethics approval. Following this, the researcher arranged for the questionnaire to be distributed via e-mail to all students studying at UB, UNAM and NMMU.

5.4.4 Sampling technique

The researcher made use of non-probability sampling, due to the fact that no random selection of cases from the sampling frame was made (Horn, 2009). Purposeful non-probability sampling was selected because cases were related to the purpose of the study (Horn, 2009); namely, to investigate Southern African university students’ use of a proactive coping style. Specifically, the basis of the purposeful sample was self-selection, with samples of cases presenting themselves to be studied (Horn, 2009) by means of voluntarily choosing to complete the questionnaire online.

5.5 Data collection

An electronic questionnaire method was utilised due to the fact that data needed to be gathered in three different countries. Electronic distribution of questionnaires was thus the most convenient and cost effective manner of collecting data. The questionnaire was designed using the NMMU Web Survey tool, which allows NMMU users to design and analyse questionnaires online. The group e-mails that were sent stated the purpose of the research,
which served as the cover letter for the questionnaire. An example of the e-mail distributed is included as Annexure C. Students were invited to click on a Web link provided in the e-mail that would take them directly to the researcher’s questionnaire. NMMU generated this link so that respondents could complete the questionnaire online. The NMMU Web Survey tool, apart from aiding in the design of the questionnaire, also assisted in capturing the responses of those completing the questionnaire. This tool collected the responses in an electronic database, which was exported to a Microsoft Excel spreadsheet.

The researcher initially began collecting data in September 2010, during which time the questionnaire was sent to students at all three universities. In order to increase the number of responses, the researcher offered a cash prize of R500.00 (approximately 475 Botswana Pula / 500 Namibian Dollars) to one winner of a random lucky draw, to occur at the end of the data collection period. A total of 631 responses were received between September and November 2010. Owing to the fact that an overwhelming proportion of these respondents were students at NMMU, the researcher attempted in February 2011 to gain more responses from UB and UNAM. No response was received from the researcher’s second attempt to contact those in charge of research at UB. The researcher’s contact in Namibia agreed to send out the questionnaire again, but this resulted in only three more responses. Nonetheless, the researcher included these three additional UNAM responses when analysing the data. Because this study’s focus was only African university students (see Section 5.4.2), responses from students whose home countries were outside of Africa were eradicated. Together with incomplete responses which were removed, the final sample total was 622 respondents. This sample size was deemed sufficient for the purposes of this research.

5.6 Data analysis

Data processing and analysis was performed with the aid of descriptive and inferential statistical analysis. This was accomplished with the assistance of a statistician from the Unit for Statistical Consultation at NMMU. Microsoft Excel as well as the statistical package Statistica, version 10.0, were utilised for this
purpose. The computer programme Statistica is a “comprehensive, integrated data analysis, graphics, database management, and custom application development system featuring a wide selection of basic and advanced analytic procedures” (StatSoft, Inc., 2008).

5.6.1 Descriptive statistics

Descriptive statistics assist behavioural and social scientists in summarising and describing a collection of numbers from a research study in order to make them more understandable (Aron, Aron & Coups, 2008). The descriptive statistics for this investigation are presented in the form of frequency distribution tables as well as measures of central tendency and dispersion, in order to display trends observed in the data analysis.

5.6.2 Inferential statistics

Inferential statistics are the methods used by behavioural and social scientists to move from the results of a research study, to conclusions and inferences regarding applied procedures or theories (Aron et al., 2008). Probabilities are particularly important for inferential statistics (Aron et al., 2008).

It was not possible to measure the similarities and differences between proactive coping and other psychological or personality constructs as done in previous studies (Wu et al., 2008; Greenglass, 2002; and the like) due to the fact that other instruments were not utilised in this study. This is however included as a recommendation for future research in Section 8.3.4.

Item analysis was used in order to examine each item in the PCI, to investigate whether it “serves the purpose for which it was designed” (Foxcroft, 2008, p. 52). The specific statistics that are calculated evaluate the characteristics of each item and are used to guide item selection and decide how best to organise the measure’s items (Foxcroft, 2008). The coefficient alpha, or Cronbach’s alpha, was calculated in this regard and will be further elaborated on in Section 5.7.1 below.
Exploratory factor analysis was conducted to extract higher order factors from the six PCI factors. These six factors correlate with the subscales already discussed and are Proactive Coping (ProC), Reflective Coping (RefC), Strategic Planning (StrP), Preventive Coping (PreC), Instrumental Support Seeking (ISS) and Emotional Support Seeking (ESS). The PCI as a whole is indicated as Coping. This was done to confirm Schwarzer’s (personal communication, 8 June 2011) statement that the PCI as a whole is a collection of different coping scales. The factor analysis made use of a principal component extraction method, varimax rotation and latent root criterion with two factors. A scree plot was also utilised to determine the number of factors to emerge from the PCI.

Pearson Product Moment Correlations were calculated to determine the relationships between the six factors. The purpose of these correlations was to summarise the strength of association between two metric variables, by indicating the degree to which the variation in one variable is related to the variation in another variable (Malhotra, 2010).

To examine the differences between genders, age groups as well as local/international students with regard to mean factor scores, multivariate analysis of variance (MANOVA) was used. A multivariate statistical test involves more than one criterion or outcome variable (Aron et al., 2008). Thus, MANOVA techniques make use of two or more metric dependent variables to determine differences between groups (Malhotra, 2010). In addition to using MANOVA techniques, analysis of variance (ANOVA) was used to determine the statistical significance of differences among the bio- and demographical groups for each factor individually. Post-hoc Scheffé’s tests were used to determine the statistical significance of age group differences due to the fact that the individual variable of ‘age’ had more than two levels (18-22; 23-27; 28-32; 33+ years of age). On the other hand, two-sample independent t-tests were conducted to confirm any gender or local student differences, as these demographic variables had only two levels (male/female and international/local student). Cohen’s d statistic was calculated where
statistically significant differences were found, to determine practical significance.

ANOVA’s were also calculated to assess whether statistical differences occurred between students from certain countries for each factor (that is, the effect of national culture on factors in the PCI). Based on the number of international students who completed the questionnaire, it was decided to focus on five countries, namely Botswana, Namibia, South Africa, Zambia and Zimbabwe. The explanation regarding why these five countries were focused on will be provided in Section 6.2.4. Post-hoc Scheffé’s tests were again conducted where significant differences were identified. In the same way, ANOVA’s were calculated to assess the effect of institutional culture on factors in the PCI by determining whether statistical differences occurred between students from each university for each factor, with post-hoc Scheffé’s tests being conducted where significant differences were observed.

One sample t-tests for dependent means were calculated to determine whether Southern African university students demonstrated higher levels of proactive coping compared to the various other means of coping measured in the PCI. Cohen’s d statistic was calculated where significant differences were found, to determine whether results were practically significant.

One-sample matched pairs t-tests were performed to discover whether Southern Africans demonstrated higher levels of proactive coping than individuals in other parts of the world. Although numerous studies have been cited throughout this dissertation involving investigations into proactive coping, not all were used as part of this specific analysis. For example, a number of studies measured Proactive Coping on a five-point, not four-point, Likert scale, which meant that these results could not be compared to the current study’s results.

5.7 Reliability and validity of the study
The reliability and validity of the literature study for this dissertation was improved by choosing models from the literature that supported its objectives,
giving conceptual descriptions of the concepts that were relevant to this research, collecting literature through a standardised and systematic procedure and making use of the original works of the various theorists in question.

In terms of the empirical study, the reliability and validity was enhanced by using an instrument that has already been employed to measure the construct of proactive coping (see Section 5.3), which has undergone research for reliability and validity. According to Schwarzer and Taubert (2002), the PCI has satisfactory psychometric properties and has been tested using various samples.

Valid and reliable interpretation of the results will be made in Chapter Six by making use of statistical analysis supported by standardised techniques. The data was also obtained from a representative sample adequate to support practical significance, given the primarily exploratory and descriptive nature of the study.

5.7.1 Reliability
Reliability refers to how consistent or dependable a measure is in assessing a certain characteristic (Phillips & Gully, 2012). The coefficient alpha (Cronbach’s alpha) is calculated as a measure of internal consistency, which assesses “the reliability of a summated scale where several items are summed to form a total score” (Malhotra, 2010, p. 319). The coefficient alpha is the “average of all possible split-half coefficients resulting from different ways of splitting the scale items” (Malhotra, 2010, p. 319). The results from reliability testing for this study are included in Section 6.3 of this dissertation.

5.7.2 Validity
The validity of a measure indicates how well it assesses a particular construct and the degree to which specific predictions or conclusions can be made based on the observed scores from a measure (Phillips & Gully, 2012). Positively, there is increasing research indicating the PCI’s validity (Schwarzer
& Taubert, 2002). Two forms of validity to be discussed in the context of the PCI are content and construct validity.

Content validity is also known as face validity, and it evaluates how well the content of a scale represents the measurement task (Malhotra, 2010). An Industrial and Organisational Psychology professor deemed the PCI to have satisfactory face validity due to the questionnaire asking questions related to proactive coping. Furthermore, content validity was achieved due to the fact that there is a link between the items in the PCI and information in the literature.

According to Greenglass (2002), the Proactive Coping subscale will possess validity if it is consistent with the other five PCI subscales. Inter-correlations based on the Canadian and Polish-Canadian samples indicated that the Proactive Coping subscale indeed correlated positively and significantly with the other five subscales (with the exception of Instrumental Support Seeking, which was not significantly correlated with the Proactive Coping subscale in the Polish-Canadian sample). Reflective Coping was found to be strongly related to Preventive Coping and Strategic Planning, and Strategic Planning and Preventive Coping were moderately correlated with one another, indicating that both involve cognitively orientating oneself to prepare for anticipated situations in the future (Greenglass, 2002). The Instrumental Support Seeking and Emotional Support Seeking subscales were also found to be highly correlated, but sufficient discriminate validity was available to justify them being included as separate subscales (Greenglass et al., 1999a). Additionally, Greenglass et al. (1999a) state that these results were similar across both samples despite differences in demographics in the two samples (older versus younger respondents; students versus working adults). This further illustrates the validity of the PCI.

In order to evaluate construct validity of the PCI subscales, Greenglass et al. (1999a) explain that respondents in the Canadian and Polish-Canadian samples completed additional scales that measured coping styles, depression as well as attitudes related to coping such as a proactive attitude, general
perceived self-efficacy and internal control. Greenglass (2002) elaborates that the Brief COPE inventory was administered (including Active Coping, Denial, Use of Instrumental Support and Use of Emotional Support), as well as the Coping Inventory of Peacock and Wong (including Self-Blame and Internal Control). Internal control refers to the extent to which individuals take initiative in coping with stress (Greenglass, 2002). The relationship between the PCI subscales and these additional measures were then calculated (Greenglass, 2002), the results being as follows:

- The **Proactive Coping subscale** correlates positively with active coping, internal control, life satisfaction, self-efficacy, professional efficacy and perceptions of fair treatment at work (Greenglass & Fiksenbaum, 2005). It correlates negatively with job burnout, depression, self-blame, anger, emotional exhaustion, cynicism and denial. It can be concluded that proactive coping is inconsistent with less active and defeatist approaches to coping (Greenglass, 2002).

- The **Reflective Coping subscale** correlates moderately with internal control and active coping, implying that one purposefully accesses and processes information to select, construct and evaluate one’s actions (Greenglass & Fiksenbaum, 2005). It also correlates with positive reframing, acceptance, planning, a proactive attitude, self-efficacy and preventive coping (Greenglass et al., 1999a). Greenglass (2002) notes that from a time perspective, reflective coping precedes preventive and proactive coping, as well as strategic planning, and thus plays a role in supporting the other coping strategies.

- The **Strategic Planning subscale** has been found to correlate positively with self-efficacy, proactive attitudes, preventive coping, internal control, active coping, planning and positive reframing (Greenglass et al., 1999a). It correlates negatively with anger, cynicism and depression (Greenglass, 2002). Therefore, to the extent that individuals focus on one aspect of a stressful situation at a time and thus feel more in control, there will be less chance that they will feel cynicism and anger towards their jobs and others, resulting in lower levels of depression and frustration (Greenglass, 2002).
• The **Preventive Coping subscale** positively correlates with proactive attitudes and self-efficacy, as well as with acceptance, planning, active coping and internal control (Greenglass et al., 1999a). It was furthermore associated with less depression and burnout (that is, lower levels of emotional exhaustion and cynicism together with higher levels of professional efficacy) [Greenglass, 2002]. Therefore, emotionally demanding situations may be avoided or cut short through preventive coping measures (Greenglass, 2002).

• The **Instrumental Support Seeking subscale** has correlated positively with Emotional Support Seeking, indicating that the higher one is in this subscale, the more one will seek advice, assistance or information regarding what to do and the more he or she will look for empathy from others (Greenglass et al., 1999a). This subscale has also been found to correlate at times with self-efficacy, proactive attitudes, internal control, active coping, preventive coping, acceptance and positive reframing (Greenglass et al., 1999a).

• The **Emotional Support Seeking subscale** has correlated positively with a proactive attitude, self-efficacy, preventive coping, active coping, internal control, positive reframing and acceptance, as well as negatively with self-blame (Greenglass et al., 1999a). Levels of depression have also been found to be lower when an individual employs emotional support seeking with other preventive and active coping forms (Greenglass et al., 1999a). As with Instrumental Support Seeking, the more one makes use of Emotional Support Seeking, the more one will seek empathy from others and look for advice, assistance or information from others (Greenglass et al., 1999a).

Interestingly, Wu et al. (2008) also did research to determine the validity of the Proactive Coping subscale in a Taiwanese context and found that it had good internal reliability ($\alpha = 0.85$), as well as both factorial and construct validity.
5.8 Ethical considerations

Before research can be conducted, it is imperative that ethics approval be gained from participating institutions. The researcher was granted ethics approval from NMMU’s RTI Committee in August 2010. The ethics number provided was H10 BUS IPH 14. The researcher’s contact at UNAM did not request specific UNAM ethics approval, accepting the approval from NMMU as sufficient.

Research approval was additionally granted from the Office of the Deputy Vice Chancellor (Academic Affairs) at UB’S Office of Research and Development (ORD) (see approval letter included as Annexure D). Approval was granted on 26 September 2010, with approval number UB/IRB/1189 being provided. The researcher was informed that the study had been exempted from the Governmental Research permit requirements and data collection could thus proceed. The approval expired on 25 June 2011 but there was no need for renewal, due to the researcher completing the research with UB students in 2010.

In order to uphold UB’s approval requirements, a research report will be submitted to UB’s ORD on termination of the study. Feedback will also be provided in the form of a final research report to the other institutions that took part in this study.

To ensure that the research was conducted within an ethical framework, further ethical issues were taken into consideration. Firstly, the literature study that was conducted was fully referenced and was carried out with awareness of the severity and consequences of plagiarism. Participation in the research was voluntary and no individuals were forced or coerced to take part. The questionnaire did not contain sensitive questions that might have been offensive or harmful to respondents. This was ensured by obtaining NMMU ethics approval.

Participants were informed in the e-mail sent to them about the research topic and the fact that all information would only be used for research purposes. All
students were also informed in the e-mail that their anonymity would be maintained when completing the questionnaire, with all information being treated in a strictly confidential manner. The questionnaire for example did not require the respondents to provide their names. Respondents were offered the chance to provide their e-mail addresses, should they have wished to enter for the lucky draw prize. These e-mail addresses were kept separate from the PCI responses in the database.

The winner of the prize money, Vuyokazi Meke, was chosen by means of a random draw. Vuyokazi is a B.Tech Environmental Health student in the Department of Environmental Health and Social Development Professions on NMMU’s North Campus. She was contacted immediately after the draw and the money was deposited into her bank account.

The above considerations ensured that the moral obligation of the researcher to uphold the confidentiality of data was met.

5.9 **Conclusion**
This chapter attempted to describe all aspects of the research methodology that was employed in this study, including the research type and technique, measuring instrument, sampling method, data collection and analysis methods, reliability and validity as well as ethical considerations. The following chapter will discuss the results obtained from the research.
CHAPTER SIX

RESULTS

6.1 Introduction
This chapter discusses the results of the research conducted. Firstly, a discussion of the sample distribution and the measuring instrument’s reliability will be provided. Thereafter, an explanation of both the descriptive and inferential statistics will follow. Lastly, the outcomes of the hypotheses that were tested will be presented.

6.2 Distribution of the sample
The following section details how the sample for this study was distributed.

6.2.1 Gender distribution
Table 6.1 indicates that the sample comprised of 282 males and 340 females, with a total sample size of 622 respondents.

Table 6.1: Gender composition of sample

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number in sample</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>282</td>
<td>45.3%</td>
</tr>
<tr>
<td>Female</td>
<td>340</td>
<td>54.7%</td>
</tr>
<tr>
<td>Total</td>
<td>622</td>
<td>100%</td>
</tr>
</tbody>
</table>

6.2.2 Age distribution
From the figure below, it can be seen that the majority of the sample was 18 to 22 years of age (68 percent), followed by 23 to 27 years of age (24 percent). This is to be expected, due to the fact that most university students begin their studies immediately upon completion of high school. For example, students over the age of 23 at NMMU are in fact termed “mature students” (NMMU, 2011b).
Figure 6.1: Age distribution across sample (n=622)

6.2.3 University distribution (according to country of study)

Figure 6.2 shows that 80 percent of respondents study at NMMU in SA. This data was gained in the questionnaire by asking in which country the respondents studied. ‘Botswana’ implied UB; ‘Namibia’ implied UNAM; and ‘South Africa’ implied NMMU.

Figure 6.2: University distribution across sample (n=622)
6.2.4 Home country distribution

In terms of the country that each student originated from (his or her home country), twenty African countries were listed in the questionnaire (with space given should respondents have originated from a country not listed). In total, 18 African countries were represented by the respondents, as illustrated in Figure 6.3.

Clearly, there is limited use for such a varied distribution of countries. In many cases, only one or two respondents listed a country as their home country. Because of this result, the researcher’s statistician grouped the African countries into regions. Originally, the following regional distribution was used:
Table 6.2: Regional distribution of countries in study

<table>
<thead>
<tr>
<th>Region</th>
<th>Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>South Africa</td>
</tr>
<tr>
<td>Rest of Southern Africa</td>
<td>Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, Swaziland, Zambia and Zimbabwe</td>
</tr>
<tr>
<td>East Africa</td>
<td>Burundi, Ethiopia, Kenya, Mauritius, Rwanda, Seychelles, Tanzania and Uganda</td>
</tr>
<tr>
<td>Central Africa</td>
<td>Cameroon and Democratic Republic of Congo</td>
</tr>
<tr>
<td>West Africa</td>
<td>Ghana, Nigeria and Sierra Leone</td>
</tr>
<tr>
<td>North Africa</td>
<td>Sudan</td>
</tr>
</tbody>
</table>

No responses were received listing Sudan as a home country, resulting in North Africa being eradicated as a region. However, the following table clearly shows the low responses for the last three regions listed, indicating that this classification still resulted in a largely unequal distribution.

Table 6.3: Regional distribution (home country) across sample

<table>
<thead>
<tr>
<th>Region</th>
<th>Number in sample</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>442</td>
<td>71.1%</td>
</tr>
<tr>
<td>Rest of Southern Africa</td>
<td>165</td>
<td>26.5%</td>
</tr>
<tr>
<td>East Africa</td>
<td>9</td>
<td>1.4%</td>
</tr>
<tr>
<td>Central Africa</td>
<td>2</td>
<td>0.3%</td>
</tr>
<tr>
<td>West Africa</td>
<td>4</td>
<td>0.6%</td>
</tr>
<tr>
<td>Total</td>
<td>622</td>
<td>100%</td>
</tr>
</tbody>
</table>
Due to this finding, it was decided that only the countries included in the “Southern Africa” region as defined in Section 1.5.3 of this dissertation would be focused on when analysing findings relevant to students who originated in Southern African countries. The countries in the Southern African region include Angola, Botswana, the Democratic Republic of Congo (DRC), Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, SA, Swaziland, Tanzania, Zambia and Zimbabwe. No responses were received from DRC or Madagascar, resulting in twelve countries being represented. This is portrayed in tabular format in Table 6.4.

Table 6.4: Home country distribution across Southern Africa region

<table>
<thead>
<tr>
<th>Country</th>
<th>Number in sample</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angola</td>
<td>1</td>
<td>0.2%</td>
</tr>
<tr>
<td>Botswana</td>
<td>97</td>
<td>15.6%</td>
</tr>
<tr>
<td>Lesotho</td>
<td>4</td>
<td>0.7%</td>
</tr>
<tr>
<td>Malawi</td>
<td>3</td>
<td>0.5%</td>
</tr>
<tr>
<td>Mauritius</td>
<td>2</td>
<td>0.3%</td>
</tr>
<tr>
<td>Mozambique</td>
<td>1</td>
<td>0.2%</td>
</tr>
<tr>
<td>Namibia</td>
<td>19</td>
<td>3.1%</td>
</tr>
<tr>
<td>South Africa</td>
<td>442</td>
<td>71.3%</td>
</tr>
<tr>
<td>Swaziland</td>
<td>1</td>
<td>0.2%</td>
</tr>
<tr>
<td>Tanzania</td>
<td>2</td>
<td>0.3%</td>
</tr>
<tr>
<td>Zambia</td>
<td>11</td>
<td>1.8%</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>28</td>
<td>4.6%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>611</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

It is once again clear from this table, however, that various countries are underrepresented, thus preventing extrapolation to their populations. For this reason, it was decided to focus only on five countries, namely Botswana,
Namibia, South Africa, Zambia and Zimbabwe, as a higher number of respondents were gained from these countries. Although Namibia and Zambia had relatively poor response rates (19 and 11 respondents, respectively), the statistician for this study concluded that it was still appropriate to include these responses. The lack of a balanced sample in terms of home country will nonetheless be included as a limitation in Section 8.2. According to this classification, 25 responses from the overall sample were eradicated for the purpose of data analysis specifically relating to students’ home countries, resulting in a slightly reduced sample size of 597 respondents for certain analyses. Figure 6.4 indicates these frequency distributions.

![Home country distribution across revised sample (n=597)](image)

Figure 6.4: Home country distribution across revised sample (n=597)

For most of the data analysis in this Chapter, however, hypotheses concerned all students studying at a Southern African university. These analyses therefore made use of the original 622 respondents.

6.2.5 Local and international student distribution

Figure 6.5 illustrates the number of students classified as local students compared to those classified as international students (that is, studying at a university in a country different to their home country).
Furthermore, Table 6.5 shows the distribution of local students across the various African regions covered by the respondents in this study. It can be seen that the vast majority of South Africans study in this home country (99.5 percent), while those from the rest of Southern Africa are more equally distributed between studying abroad versus studying in their home countries.

Table 6.5: Local student distribution across African regions

<table>
<thead>
<tr>
<th>Region</th>
<th>Local Student?</th>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Africa</td>
<td>440 99.5%</td>
<td>2</td>
<td>0.5%</td>
<td>442</td>
</tr>
<tr>
<td>Rest of Southern Africa</td>
<td>101 59.8%</td>
<td>68</td>
<td>40.2%</td>
<td>169</td>
</tr>
<tr>
<td>East Africa</td>
<td>0 0.0%</td>
<td>5</td>
<td>100.0%</td>
<td>5</td>
</tr>
<tr>
<td>Central Africa</td>
<td>0 0.0%</td>
<td>2</td>
<td>100.0%</td>
<td>2</td>
</tr>
<tr>
<td>West Africa</td>
<td>0 0.0%</td>
<td>4</td>
<td>100.0%</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>541 87.0%</td>
<td>81</td>
<td>13.0%</td>
<td>622</td>
</tr>
</tbody>
</table>
6.3 **Reliability of PCI subscales**

According to Greenglass (2002), Cronbach’s alpha values have previously been calculated for each PCI subscale, from which it was deduced that the PCI has high internal consistency. However, this same conclusion is only valid if high Cronbach’s alphas are obtained in this study. Thus, these values were calculated to determine the internal consistency of the subscales (that is, the reliability of the summated scale scores). Table 6.6 indicates this study’s Cronbach’s alpha values not only for each subscale, but also for the entire PCI (this was calculated based on the statistician’s recommendation, despite Schwarzer and Greenglass’s comments that the PCI as a whole should not be investigated). The terms used to represent each subscale are included in brackets, as are Cronbach’s alpha values from previous research.

As can be seen in Table 6.6, all subscales had Cronbach’s alpha values above the suggested 0.60 criterion for satisfactory internal consistency (Malhotra, 2010), suggesting their reliability. Furthermore, with the exception of the Proactive Coping subscale, all of the Cronbach’s alpha values for this study are above the values for previous studies. This indicates that there is a higher level of internal consistency in the various subscales based on the current sample than in previous research.
Table 6.6: Cronbach’s alpha values for each subscale of the PCI

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Cronbach’s alpha: present study</th>
<th>Cronbach’s alpha: previous studies³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proactive Coping</td>
<td>0.81</td>
<td>0.85 &amp; 0.80</td>
</tr>
<tr>
<td>Reflective Coping</td>
<td>0.82</td>
<td>0.79 &amp; 0.80</td>
</tr>
<tr>
<td>Strategic Planning</td>
<td>0.75</td>
<td>0.71 &amp; 0.71</td>
</tr>
<tr>
<td>Preventive Coping</td>
<td>0.87</td>
<td>0.83 &amp; 0.79</td>
</tr>
<tr>
<td>Instrumental Support Seeking</td>
<td>0.88</td>
<td>0.85 &amp; 0.84</td>
</tr>
<tr>
<td>Emotional Support Seeking</td>
<td>0.82</td>
<td>0.73 &amp; 0.64</td>
</tr>
<tr>
<td>PCI (Coping)</td>
<td>0.80</td>
<td></td>
</tr>
</tbody>
</table>

Apart from Cronbach’s alpha values, each PCI subscale has been shown to have “good item-total correlations and acceptable skewness as an indicator of symmetry around the mean” (Greenglass & Fiksenbaum, 2005, p. 3).

6.4 Descriptive statistics
This section details the descriptive statistics relevant to this study. Table 6.7 illustrates the mean, standard deviation, minimum and maximum scores and first/third quartiles for each subscale, whereas Table 6.8 displays the actual distribution of scores for each subscale. The distribution of scores is classified according to four categories, namely low (1.00 to 1.75), fairly low (1.75 to 2.50), fairly high (2.50 to 3.25) and high (3.25 to 4.00).

³ The first Cronbach’s alpha values listed refer to research using Canadian university students; the second values refer to research using Polish-Canadian adults (Greenglass et al., 1999a).
What is evident from Table 6.7 is that all means were reasonably high, bearing in mind that the Likert scale scores ranged from one to four. This is confirmed in Table 6.8, in which it can clearly be seen that responses fell in the higher categories (scores of between 2.50 and 4.00), more than the lower categories of responses (between 1.00 and 2.50). Proactive Coping had the highest mean at 3.33, followed closely by Reflective Coping with a mean of 3.23. This is confirmed in Table 6.8, which reveals that 66 percent of respondents responded with a Proactive Coping score above 3.25, the highest category, and 62 percent of respondents indicated a score above 3.25 for Reflective Coping. However, Strategic Planning and Preventive Coping had the lowest means (3.15), with the mean for Emotional Support Seeking...
being only slightly higher at 3.16. This implies that respondents felt that they cope in a manner that is both more proactive and reflective than preventive. They also make use of strategic planning and emotional support seeking to a lesser extent than proactive or reflective coping.

The standard deviation for Emotional Support Seeking in Table 6.7 was highest at 0.69, indicating that responses were the most dispersed around the mean. This is also evident by noticing the scores for Quartiles 1 and 3 (2.80 and 3.80 respectively) for this subscale, the distribution of which is wider than the other subscales. The standard deviation for Proactive Coping is lowest at 0.40, which demonstrates that responses were more clustered around the mean. This implies that respondents did not vary as much in the way that they perceive themselves to cope proactively compared to the other subscales.

Table 6.9 provides the descriptive statistics for those students who originated from five particular Southern African countries, as explained in Section 6.2.4. As can be seen from this table, the descriptive statistics for the entire PCI (“Coping”) are also included.

Table 6.9: Descriptive statistics of Southern Africans

<table>
<thead>
<tr>
<th></th>
<th>ProC</th>
<th>RefC</th>
<th>StrP</th>
<th>PreC</th>
<th>ISS</th>
<th>ESS</th>
<th>Coping</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>597</td>
<td>3.34</td>
<td>0.40</td>
<td>3.32</td>
<td>0.45</td>
<td>3.16</td>
<td>0.60</td>
</tr>
<tr>
<td>Bot.</td>
<td>97</td>
<td>3.41</td>
<td>0.42</td>
<td>3.45</td>
<td>0.48</td>
<td>3.26</td>
<td>0.63</td>
</tr>
<tr>
<td>Nam.</td>
<td>19</td>
<td>3.48</td>
<td>0.42</td>
<td>3.50</td>
<td>0.43</td>
<td>3.36</td>
<td>0.50</td>
</tr>
<tr>
<td>SA</td>
<td>442</td>
<td>3.31</td>
<td>0.40</td>
<td>3.28</td>
<td>0.44</td>
<td>3.13</td>
<td>0.60</td>
</tr>
<tr>
<td>Zam.</td>
<td>11</td>
<td>3.22</td>
<td>0.29</td>
<td>3.30</td>
<td>0.46</td>
<td>2.98</td>
<td>0.33</td>
</tr>
<tr>
<td>Zim.</td>
<td>28</td>
<td>3.43</td>
<td>0.32</td>
<td>3.35</td>
<td>0.41</td>
<td>3.16</td>
<td>0.62</td>
</tr>
</tbody>
</table>

What can be gleaned from this table is that Namibians had the highest mean for Proactive Coping (3.48), Reflective Coping (3.50), Strategic Planning (3.36) and Preventive Coping (3.29). Zambians made the most use of...
Instrumental Support Seeking (3.74) whereas Batswana made the most use of Emotional Support Seeking (3.38). In general, all of the investigated Southern Africans made use of Instrumental Support Seeking to a greater extent than Emotional Support Seeking, based on the mean values. Scores for Proactive Coping were generally more clustered around the mean, evident from their lower standard deviations, whereas scores for Emotional Support Seeking were generally more dispersed from around the mean, evident from their higher standard deviation scores.

In terms of results per university studied, Table 6.10 provides the descriptive statistics for the three universities. All 622 responses were included, as explained previously. It can be deduced that NMMU students’ mean scores across all factors were less than the other two universities investigated. UNAM students indicated the highest responses for all forms of coping except Emotional Support Seeking, with UB students having the highest mean score for this form of coping. UB’s scores for Emotional Support Seeking also showed the highest standard deviation, indicating low amounts of clustering around the mean.

Table 6.10: Descriptive statistics of university students

<table>
<thead>
<tr>
<th></th>
<th>ProC</th>
<th>RefC</th>
<th>StrP</th>
<th>PreC</th>
<th>ISS</th>
<th>ESS</th>
<th>Coping</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>M</td>
<td>S.D.</td>
<td>M</td>
<td>S.D.</td>
<td>M</td>
<td>S.D.</td>
</tr>
<tr>
<td>Total</td>
<td>622</td>
<td>3.33</td>
<td>0.40</td>
<td>3.32</td>
<td>0.44</td>
<td>3.15</td>
<td>0.59</td>
</tr>
<tr>
<td>UB</td>
<td>88</td>
<td>3.40</td>
<td>0.43</td>
<td>3.45</td>
<td>0.48</td>
<td>3.25</td>
<td>0.63</td>
</tr>
<tr>
<td>UNAM</td>
<td>38</td>
<td>3.44</td>
<td>0.37</td>
<td>3.47</td>
<td>0.36</td>
<td>3.26</td>
<td>0.50</td>
</tr>
<tr>
<td>NMMU</td>
<td>496</td>
<td>3.31</td>
<td>0.39</td>
<td>3.28</td>
<td>0.44</td>
<td>3.13</td>
<td>0.59</td>
</tr>
</tbody>
</table>

6.5 **Inferential statistics**

It is critical to conduct inferential analyses, as they assist researchers to make conclusions regarding the application of procedures and theories (Aron et al., 2008). The inferential statistics calculated for this study’s data will now be discussed.
6.5.1 Exploratory factor analysis

Exploratory factor analysis was conducted with the aim of discovering whether the six PCI factors could be combined into one or more second-order factors. Tables 6.11, 6.12 and 6.13 indicate the results of this analysis, with eigenvalues being calculated to determine the number of distinct second-order factors. Eigenvalues represent the “total variance explained by each factor” (Malhotra, 2010, p. 638). The sum of the eigenvalues is equal to the number of variables (in this instance, six variables).

Table 6.11 indicates that there are in fact two distinct factors in the PCI. This is according to Kaiser’s rule, which states that there are as many significant or reliable factors as there are eigenvalues greater than 1.0 (Darlington, n.d.). That is, only eigenvalues that are at least equal to 1.0 should be retained. As can be seen in Table 6.11, two eigenvalues are greater than the 1.0 cut off and there are thus two significant factors (that is, two factors or ‘principal components’ should be retained).

Table 6.11: Exploratory factor analysis eigenvalues and cumulative percentage variance explained for PCI subscales

<table>
<thead>
<tr>
<th>Eigenvalue</th>
<th>Cumulative % variance explained</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3.11</td>
</tr>
<tr>
<td>2</td>
<td>1.24</td>
</tr>
<tr>
<td>3</td>
<td>0.51</td>
</tr>
<tr>
<td>4</td>
<td>0.42</td>
</tr>
<tr>
<td>5</td>
<td>0.40</td>
</tr>
<tr>
<td>6</td>
<td>0.32</td>
</tr>
</tbody>
</table>

This is further confirmed by making use of factor loadings in Tables 6.12 and 6.13. To elaborate, two structure possibilities can be deduced from the eigenvalues in the table above: a one- or two-factor structure. The first structure possibility is seen in row 1 of Table 6.11, namely for there to be one
factor in the PCI. In this regard, Table 6.12 reports the factor loadings when an unrotated procedure is used to extract a single factor structure (rotation is not possible for a single factor structure). A factor loading of 0.30 or better is significant for samples greater than \( n = 350 \) (Hair, Black, Babin & Anderson, 2010); thus, it can be deduced that all factor loadings according to Table 6.12 were significant. Whilst a one-factor structure can for this reason be deemed appropriate, only 52 percent of the variance of the first-order factors is explained by this model, less than the recommended target of 60 percent.

Table 6.12: Factor Loadings (Unrotated) for one-factor structure

<table>
<thead>
<tr>
<th>Factor - 1</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ProC</td>
<td>.727</td>
</tr>
<tr>
<td>RefC</td>
<td>.804</td>
</tr>
<tr>
<td>StrP</td>
<td>.777</td>
</tr>
<tr>
<td>PreC</td>
<td>.775</td>
</tr>
<tr>
<td>ISS</td>
<td>.598</td>
</tr>
<tr>
<td>ESS</td>
<td>.614</td>
</tr>
<tr>
<td>% variance explained</td>
<td>52%</td>
</tr>
</tbody>
</table>

However, as can be seen in Table 6.13, two distinct factors emerge when Varimax rotation is used. The marked loadings are significant, being greater than 0.30. Factor 1 is highly correlated with Proactive Coping, Reflective Coping, Strategic Planning and Preventive Coping, while Factor 2 is highly related with the two forms of Support Seeking (Instrumental and Emotional).
Table 6.13: Factor Loadings (Varimax) for two-factor structure

<table>
<thead>
<tr>
<th></th>
<th>Factor - 1</th>
<th>Factor - 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>ProC</td>
<td>.790</td>
<td>.106</td>
</tr>
<tr>
<td>RefC</td>
<td>.804</td>
<td>.229</td>
</tr>
<tr>
<td>StrP</td>
<td>.775</td>
<td>.225</td>
</tr>
<tr>
<td>PreC</td>
<td>.821</td>
<td>.146</td>
</tr>
<tr>
<td>ISS</td>
<td>.142</td>
<td>.906</td>
</tr>
<tr>
<td>ESS</td>
<td>.166</td>
<td>.897</td>
</tr>
</tbody>
</table>

% variance explained: 43% 29% 73% (total)

Displayed as a figure showing the factor loadings for Factor 1 versus Factor 2 after Varimax rotation, as depicted in Figure 6.6, it becomes evident that these two factors are highly distinct. These findings are valuable because they indicate that the PCI is actually comprised of two, not six, distinct factors. Furthermore, as seen in Tables 6.11 to 6.13, a two-factor structure explains a greater total percentage variance: 73 percent compared with only 52 percent by a one-factor structure.

Figure 6.6: Factor loadings for Factor 1 versus Factor 2
However, despite the above findings, when Cattell’s scree test was conducted to plot the eigenvalues in a simple line plot, a different result emerged. As can be seen in Figure 6.7, the scree plot shows that there may be three factors; that is, the curve straightens out to the right of the plot after three eigenvalues. This indicates the maximum number of factors to extract (Hair et al., 2010).

![Scree Test – plot of eigenvalues](image)

Figure 6.7: Scree Test – plot of eigenvalues

When two such alternate findings are shown, StatSoft, Inc. (2011) recommends examining to what extent each is “interpretable”, stating that a researcher should choose the solution “that makes the best ‘sense’ ”. For this reason, the researcher will remain with the result of the latent root criterion and Kaiser’s rule. That is, there are two factors based on the eigenvalues of Table 6.11. The cutoff value is 1.0 for the eigenvalue and for this reason the eigenvalue for the third factor in the scree analysis will not be retained as it is well below 1.0. The two-factor solution in Table 6.13 also had highly significant loadings on the factors they relate to. In addition to the statistical evidence supporting a two-factor structure, the researcher also notes that this structure makes sense in terms of theory, as will be explained in the following two paragraphs.
The researcher has termed the first second-order factor, comprising Proactive Coping, Reflective Coping, Strategic Planning and Preventive Coping, as “Future-Oriented Coping” (FOC). This choice of term is substantiated by the theoretical explanations of each subscale discussed previously, because all four subscales consist of items relating to coping in a future-oriented way. For example, Proactive Coping relates to setting goals and envisioning successfully overcoming challenges; Reflective Coping involves envisioning the success of possible behavioral options; Strategic Planning entails creating goal-orientated action plans; and Preventive Coping is occupied by anticipating and preparing for future potential stressors (Greenglass et al., 1999a; Greenglass, 2002).

The other second-order factor has been termed “Support Seeking” (SS) by the researcher, and is comprised of Instrumental Support Seeking and Emotional Support Seeking. This choice of term is also backed up by theory, due to the fact that both entail an individual looking for external support, either in the form of information and feedback (Instrumental Support) or companionship and empathy (Emotional Support) [Greenglass et al., 1999a; Greenglass, 2002].

Due to this result, these two second-order factors will be included in the data analysis that follows in this Chapter. That is, the results from the remaining inferential statistics will concern not only the six original subscales of the PCI, but also the two second-order factors (also termed ‘subscales’), mentioned above.

Based on this finding, Cronbach’s coefficient alpha values were calculated for these two subscales. This is shown in Table 6.14 below. As can be seen, both new subscales had Cronbach’s alpha values above the suggested 0.60 criterion for satisfactory internal consistency (Malhotra, 2010), suggesting their reliability. However, when the two subscales were combined as a single coping scale, the Cronbach’s alpha value was below 0.60. It was thus decided to drop the single factor approach (that is, the PCI in total) from further analysis.

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Table 6.1: Cronbach’s alpha values for FOC and SS

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Cronbach’s alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOC</td>
<td>0.82</td>
</tr>
<tr>
<td>SS</td>
<td>0.80</td>
</tr>
<tr>
<td>Coping – Total</td>
<td>0.52</td>
</tr>
</tbody>
</table>

Descriptive statistics were calculated for the two new subscales FOC and SS, as shown in Tables 6.15 and 6.16.

Table 6.15: Descriptive statistics of FOC and SS

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>S.D.</th>
<th>Min.</th>
<th>Quartile 1</th>
<th>Median</th>
<th>Quartile 3</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOC</td>
<td>3.24</td>
<td>0.41</td>
<td>1.00</td>
<td>3.00</td>
<td>3.29</td>
<td>3.52</td>
<td>3.98</td>
</tr>
<tr>
<td>SS</td>
<td>3.20</td>
<td>0.59</td>
<td>1.00</td>
<td>2.86</td>
<td>3.29</td>
<td>3.65</td>
<td>4.00</td>
</tr>
</tbody>
</table>

Table 6.16: Distribution of scores for FOC and SS

<table>
<thead>
<tr>
<th></th>
<th>[1.00 to 1.75)</th>
<th>[1.75 to 2.50)</th>
<th>[2.50 to 3.25)</th>
<th>[3.25 to 4.00]</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOC</td>
<td>2</td>
<td>0.3%</td>
<td>28</td>
<td>4.5%</td>
</tr>
<tr>
<td>SS</td>
<td>21</td>
<td>3.4%</td>
<td>49</td>
<td>7.9%</td>
</tr>
</tbody>
</table>

These tables indicate that FOC responses were generally higher on average than those for SS (according to the mean values indicated in Table 6.15 and the high number of responses in the 3.25 to 4.00 category in Table 6.16). FOC responses were more clustered around the mean (standard deviation of 0.41) than responses for SS.

The following section will deal with the remaining inferential statistics, taking the factor analysis findings into account.
6.5.2 Pearson Product Moment Correlations

Table 6.17 displays the Pearson Product Moment Correlations that were calculated to determine the relationships between the six subscales, as well as the two second-order factors. In order for a relationship to be statistically significant for \( n = 622 \), the correlation coefficient must be greater than 0.079. Practical significance occurs when the correlation coefficient is greater or equal to 0.30.

Table 6.17: Correlation coefficients for the PCI subscales

<table>
<thead>
<tr>
<th></th>
<th>ProC</th>
<th>RefC</th>
<th>StrP</th>
<th>PreC</th>
<th>ISS</th>
<th>ESS</th>
<th>FOC</th>
<th>SS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ProC</td>
<td></td>
<td>.558</td>
<td>.488</td>
<td>.544</td>
<td>.223</td>
<td>.250</td>
<td>.759</td>
<td>.259</td>
</tr>
<tr>
<td>RefC</td>
<td>.558</td>
<td></td>
<td>.584</td>
<td>.586</td>
<td>.323</td>
<td>.312</td>
<td>.821</td>
<td>.346</td>
</tr>
<tr>
<td>StrP</td>
<td>.488</td>
<td>.584</td>
<td></td>
<td>.577</td>
<td>.299</td>
<td>.312</td>
<td>.839</td>
<td>.334</td>
</tr>
<tr>
<td>PreC</td>
<td>.544</td>
<td>.586</td>
<td>.577</td>
<td></td>
<td>.250</td>
<td>.281</td>
<td>.841</td>
<td>.291</td>
</tr>
<tr>
<td>ISS</td>
<td>.223</td>
<td>.323</td>
<td>.299</td>
<td>.250</td>
<td></td>
<td>.676</td>
<td>.337</td>
<td>.902</td>
</tr>
<tr>
<td>ESS</td>
<td>.250</td>
<td>.312</td>
<td>.312</td>
<td>.281</td>
<td>.676</td>
<td></td>
<td>.355</td>
<td>.928</td>
</tr>
<tr>
<td>FOC</td>
<td>.759</td>
<td>.821</td>
<td>.839</td>
<td>.841</td>
<td>.337</td>
<td>.355</td>
<td></td>
<td>.378</td>
</tr>
<tr>
<td>SS</td>
<td>.259</td>
<td>.346</td>
<td>.334</td>
<td>.291</td>
<td>.902</td>
<td>.928</td>
<td>.378</td>
<td></td>
</tr>
</tbody>
</table>

It is evident from this table that the relationships between all subscales are statistically significant. In particular, the correlations highlighted in red are practically significant. Furthermore, it can be noted that all of the correlations in the table above are positive. This implies that high scores in one factor result in high scores in the other factors. For example, students who cope proactively are also more likely to cope in a preventive manner, and this correlation is moreover practically significant.

6.5.3 MANOVA and ANOVA results

To examine differences occurring across ages, genders and local students for factor profiles, MANOVA techniques were used. These test whether the between-group differences and the interactions among biographical variables
are significant. Table 6.18 summarises the results of a MANOVA with full factorial design that was conducted.

Table 6.18: MANOVA results for the PCI subscale profile according to age, gender and locality (n=622)

<table>
<thead>
<tr>
<th></th>
<th>F</th>
<th>D.F.</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>0.87</td>
<td>18; 1700.37</td>
<td>.611</td>
</tr>
<tr>
<td>Gender</td>
<td>0.64</td>
<td>6; 601.00</td>
<td>.696</td>
</tr>
<tr>
<td>LocalStudent</td>
<td>0.61</td>
<td>6; 601.00</td>
<td>.720</td>
</tr>
<tr>
<td>Age*Gender</td>
<td>0.92</td>
<td>18; 1700.37</td>
<td>.558</td>
</tr>
<tr>
<td>Age*LocalStudent</td>
<td>0.57</td>
<td>18; 1700.37</td>
<td>.923</td>
</tr>
<tr>
<td>Gender*LocalStudent</td>
<td>0.42</td>
<td>6; 601.00</td>
<td>.866</td>
</tr>
<tr>
<td>Age<em>Gender</em>LocalStudent</td>
<td>0.40</td>
<td>18; 1700.37</td>
<td>.988</td>
</tr>
</tbody>
</table>

From this table it can be deduced that no significant differences occur in this regard, as the p-values shown are not smaller than the significance level of 0.05. It can thus be concluded that the demographic variables were not significantly related to the factors.

In terms of analysing the results in Table 6.18 per factor, Table 6.19 provides the ANOVA results for each factor, accounting for age, gender and locality. To control for the overall Type I error rate due to the fact that multiple comparisons are being made (series of separate tests were performed), a new critical value was calculated by dividing the alpha level by the number of statistical tests performed (Hair et al., 2010). The Bonferroni adjusted p-value is thus \( \alpha / n = 0.05 / 8 = 0.006 \). It can be seen from this table that all p-values were above this significance level of 0.006 and the results are therefore not significant. The results for this table are in any case not reportable, due to the fact that the results in Table 6.18 were not statistically significant. The researcher has nonetheless reported on these findings because a number of hypotheses relate to Table 6.19.
Table 6.19: ANOVA results

<table>
<thead>
<tr>
<th></th>
<th>D.F.</th>
<th>F</th>
<th>p</th>
<th>F</th>
<th>p</th>
<th>F</th>
<th>p</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ProC</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>3; 606</td>
<td>2.44</td>
<td>.064</td>
<td>1.14</td>
<td>.333</td>
<td>2.22</td>
<td>.085</td>
<td>1.94</td>
<td>.121</td>
</tr>
<tr>
<td>Gender</td>
<td>1; 606</td>
<td>0.49</td>
<td>.486</td>
<td>0.02</td>
<td>.882</td>
<td>0.68</td>
<td>.410</td>
<td>0.19</td>
<td>.662</td>
</tr>
<tr>
<td>LocalStudent</td>
<td>1; 606</td>
<td>1.00</td>
<td>.318</td>
<td>0.60</td>
<td>.440</td>
<td>0.26</td>
<td>.610</td>
<td>0.31</td>
<td>.578</td>
</tr>
<tr>
<td>Age*Gender</td>
<td>3; 606</td>
<td>1.22</td>
<td>.301</td>
<td>0.88</td>
<td>.452</td>
<td>2.06</td>
<td>.104</td>
<td>0.41</td>
<td>.749</td>
</tr>
<tr>
<td>Age*LocalStudent</td>
<td>3; 606</td>
<td>0.62</td>
<td>.604</td>
<td>0.60</td>
<td>.612</td>
<td>0.51</td>
<td>.673</td>
<td>0.42</td>
<td>.737</td>
</tr>
<tr>
<td>Gender*LocalStudent</td>
<td>1; 606</td>
<td>0.20</td>
<td>.656</td>
<td>0.83</td>
<td>.363</td>
<td>0.26</td>
<td>.613</td>
<td>0.06</td>
<td>.807</td>
</tr>
<tr>
<td>Age<em>Gender</em>LocalStudent</td>
<td>3; 606</td>
<td>0.78</td>
<td>.507</td>
<td>0.46</td>
<td>.711</td>
<td>0.34</td>
<td>.797</td>
<td>0.22</td>
<td>.882</td>
</tr>
<tr>
<td><strong>RefC</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>StrP</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PreC</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>D.F.</th>
<th>F</th>
<th>p</th>
<th>F</th>
<th>p</th>
<th>F</th>
<th>p</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ISS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>3; 606</td>
<td>0.89</td>
<td>.448</td>
<td>1.28</td>
<td>.282</td>
<td>2.68</td>
<td>.046</td>
<td>1.22</td>
<td>.300</td>
</tr>
<tr>
<td>Gender</td>
<td>1; 606</td>
<td>0.14</td>
<td>.712</td>
<td>1.13</td>
<td>.289</td>
<td>0.13</td>
<td>.714</td>
<td>0.65</td>
<td>.421</td>
</tr>
<tr>
<td>LocalStudent</td>
<td>1; 606</td>
<td>2.19</td>
<td>.139</td>
<td>0.15</td>
<td>.699</td>
<td>0.69</td>
<td>.405</td>
<td>0.94</td>
<td>.333</td>
</tr>
<tr>
<td>Age*Gender</td>
<td>3; 606</td>
<td>1.90</td>
<td>.129</td>
<td>0.89</td>
<td>.447</td>
<td>1.32</td>
<td>.266</td>
<td>1.51</td>
<td>.210</td>
</tr>
<tr>
<td>Age*LocalStudent</td>
<td>3; 606</td>
<td>0.42</td>
<td>.739</td>
<td>1.18</td>
<td>.316</td>
<td>0.67</td>
<td>.573</td>
<td>0.66</td>
<td>.576</td>
</tr>
<tr>
<td>Gender*LocalStudent</td>
<td>1; 606</td>
<td>0.05</td>
<td>.817</td>
<td>0.01</td>
<td>.929</td>
<td>0.17</td>
<td>.683</td>
<td>0.00</td>
<td>.949</td>
</tr>
<tr>
<td>Age<em>Gender</em>LocalStudent</td>
<td>3; 606</td>
<td>0.49</td>
<td>.686</td>
<td>0.28</td>
<td>.838</td>
<td>0.44</td>
<td>.727</td>
<td>0.38</td>
<td>.770</td>
</tr>
<tr>
<td><strong>ESS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>FOC</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6.5.4 Relationship between age and PCI subscales / second-order factors

ANOVA’s were calculated to assess differences across age categories for each factor. Table 6.20 indicates the relationship between age and the PCI subscales, as well as age and the two second-order factors. It can be seen that both p-values were lower than the significance level of 0.05. Table 6.21 displays more detail, indicating that there was a statistically significant relationship between age and Proactive Coping, Strategic Planning, Instrumental Support Seeking and Future-Oriented Coping (p < 0.05).
Table 6.20: MANOVA results for PCI subscales and second-order factors according to the age of students

<table>
<thead>
<tr>
<th></th>
<th>F</th>
<th>D.F.</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCI subscales (ProC to ESS)</td>
<td>1.82</td>
<td>18; 1734.31</td>
<td>.019</td>
</tr>
<tr>
<td>PCI second-order factors (FOC &amp; SS)</td>
<td>2.24</td>
<td>6; 1234</td>
<td>.038</td>
</tr>
</tbody>
</table>

Table 6.21: Univariate ANOVA results for PCI subscales and second-order factors according to the age of students (D.F. = 3; 618)

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ProC</td>
<td>RefC</td>
<td>StrP</td>
<td>PreC</td>
<td></td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>p</td>
<td>F</td>
<td>p</td>
<td>F</td>
</tr>
<tr>
<td></td>
<td>3.71</td>
<td>.011</td>
<td>2.10</td>
<td>.098</td>
<td>3.16</td>
</tr>
<tr>
<td></td>
<td>3.17</td>
<td>.024</td>
<td>0.47</td>
<td>.702</td>
<td>3.85</td>
</tr>
</tbody>
</table>

Scheffé’s tests were conducted where ANOVA identified significant differences for Proactive Coping, Strategic Planning, Instrumental Support Seeking and Future-Oriented Coping. Table 6.22 indicates the Scheffé’s test for Proactive Coping, with Table 6.23 indicating the relevant mean, standard deviation and Cohen’s d statistic. Annexure E provides these tables for the remaining factors mentioned.

From Table 6.22 it can be inferred that statistically significant differences occur between the 18 to 22 year age group and 33+ year age group for Proactive Coping, as well as between the 23 to 27 year age group and 33+ year age group (p < 0.05).
Table 6.22: Scheffé’s test; variable ProC according to age

<table>
<thead>
<tr>
<th>Age</th>
<th>18-22</th>
<th>23-27</th>
<th>28-32</th>
<th>33+</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M=3.32</td>
<td>M=3.31</td>
<td>M=3.38</td>
<td>M=3.57</td>
</tr>
<tr>
<td>18-22</td>
<td>.994</td>
<td>.948</td>
<td>.948</td>
<td>.016</td>
</tr>
<tr>
<td>23-27</td>
<td>.994</td>
<td>.923</td>
<td>.923</td>
<td>.018</td>
</tr>
<tr>
<td>28-32</td>
<td>.948</td>
<td>.923</td>
<td>.415</td>
<td>.415</td>
</tr>
<tr>
<td>33+</td>
<td>.016</td>
<td>.018</td>
<td>.415</td>
<td>.415</td>
</tr>
</tbody>
</table>

These differences have moderate practical significance as shown in Table 6.23 below, with Cohen’s d statistic below the diagonal line in the interval of $.50 < |d| < .80.

Table 6.23: Descriptive statistics and Cohen’s d: ProC

<table>
<thead>
<tr>
<th>Age</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>Above Diagonal: Mean Differences</th>
<th>Below Diagonal: Cohen's d</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-22</td>
<td>421</td>
<td>3.32</td>
<td>0.40</td>
<td>0.01</td>
<td>-0.05</td>
</tr>
<tr>
<td>23-27</td>
<td>151</td>
<td>3.31</td>
<td>0.40</td>
<td>n.a.</td>
<td>0.06</td>
</tr>
<tr>
<td>28-32</td>
<td>21</td>
<td>3.38</td>
<td>0.39</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>33+</td>
<td>29</td>
<td>3.57</td>
<td>0.37</td>
<td><strong>0.62</strong></td>
<td><strong>0.65</strong></td>
</tr>
</tbody>
</table>

6.5.5 Relationship between national culture and PCI subscales / second-order factors

According to MANOVA results, there were significant \([F = 2.26, \text{d.f.} = (24; 2049), \ p < .0005]\) relationships between national culture and the PCI subscales and second-order factors, taking five home countries into account (as explained previously).

Table 6.24 indicates the ANOVA p-values for each PCI subscale as well as both Future-Oriented Coping and Support Seeking, Strategic Planning and
Preventive Coping were the only subscales not showing a statistically significant difference between countries (with \( p > 0.05 \)).

Table 6.24: Univariate ANOVA Results: PCI subscales and second-order factors according to home country (D.F. = 4; 592)

<table>
<thead>
<tr>
<th>ProC</th>
<th>RefC</th>
<th>StrP</th>
<th>PreC</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>p</td>
<td>F</td>
<td>p</td>
</tr>
<tr>
<td>2.41</td>
<td>.049</td>
<td>3.72</td>
<td>.005</td>
</tr>
<tr>
<td>ISS</td>
<td></td>
<td>ESS</td>
<td></td>
</tr>
<tr>
<td>5.72</td>
<td>.000</td>
<td>3.26</td>
<td>.012</td>
</tr>
</tbody>
</table>

Scheffé’s test was again calculated for those subscales and second-order factors with significant differences. Table 6.25 illustrates that no statistically significant relationships occur for Proactive Coping between any of the countries highlighted (\( p > .05 \)).

Table 6.25: Scheffé’s test; variable ProC according to home country

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Botswana</td>
<td></td>
<td>.964</td>
<td>.362</td>
<td>.705</td>
<td>.999</td>
</tr>
<tr>
<td>Namibia</td>
<td>.964</td>
<td></td>
<td>.507</td>
<td>.551</td>
<td>.996</td>
</tr>
<tr>
<td>South Africa</td>
<td>.362</td>
<td>.507</td>
<td></td>
<td>.964</td>
<td>.673</td>
</tr>
<tr>
<td>Zambia</td>
<td>.705</td>
<td>.551</td>
<td>.964</td>
<td></td>
<td>.692</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>.999</td>
<td>.996</td>
<td>.673</td>
<td>.692</td>
<td></td>
</tr>
</tbody>
</table>

Tables providing results of the remaining Scheffé’s tests for Reflective Coping, Instrumental Support Seeking, Emotional Support Seeking, Future-
Oriented Coping and Support Seeking are provided in Annexure F. The results are summarised in Table 6.26, indicating Scheffé’s p values in red. Cohen’s d values are also provided. These indicate that a small practically significant difference is evident between students whose home countries are Botswana and South Africa for Reflective Coping, both Instrumental and Emotional Support Seeking as well as the second-order factor Support Seeking (.20 < |d| < .50). A large practical significance is apparent between South Africans and Zambians for Instrumental Support Seeking (d > .80).

Table 6.26: Summary of Scheffé’s tests and Cohen’s d values

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>Mean Difference</th>
<th>Scheffé p</th>
<th>Cohen's d</th>
</tr>
</thead>
<tbody>
<tr>
<td>RefC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Botswana</td>
<td>97</td>
<td>3.45</td>
<td>0.48</td>
<td>0.17</td>
<td>.022</td>
<td>0.37</td>
</tr>
<tr>
<td>South Africa</td>
<td>442</td>
<td>3.28</td>
<td>0.44</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Botswana</td>
<td>97</td>
<td>3.39</td>
<td>0.58</td>
<td>0.23</td>
<td>.023</td>
<td>0.38</td>
</tr>
<tr>
<td>South Africa</td>
<td>442</td>
<td>3.17</td>
<td>0.61</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Africa</td>
<td>442</td>
<td>3.17</td>
<td>0.61</td>
<td>0.57</td>
<td>.041</td>
<td>1.18</td>
</tr>
<tr>
<td>Zambia</td>
<td>11</td>
<td>3.74</td>
<td>0.36</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ESS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Botswana</td>
<td>97</td>
<td>3.38</td>
<td>0.69</td>
<td>0.25</td>
<td>.034</td>
<td>0.36</td>
</tr>
<tr>
<td>South Africa</td>
<td>442</td>
<td>3.13</td>
<td>0.69</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Botswana</td>
<td>97</td>
<td>3.34</td>
<td>0.47</td>
<td>0.12</td>
<td>.012</td>
<td>0.29</td>
</tr>
<tr>
<td>South Africa</td>
<td>442</td>
<td>3.22</td>
<td>0.40</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6.5.6 Relationship between institutional culture and PCI subscales / second-order factors

According to MANOVA results, significant [F = 2.851, d.f. = (12; 1228), p < .0005] relationships occurred between institutional culture and the PCI subscales and second-order factors, taking the three universities into account.
Table 6.27 indicates the ANOVA p-values for each PCI subscale as well as both Future-Oriented Coping and Support Seeking. Strategic Planning and Preventive Coping were once again the only subscales not showing a statistically significant difference, this time between universities (due to $p > 0.05$).

Table 6.27: Univariate ANOVA Results: PCI subscales and second-order factors according to university (D.F. = 2; 619)

<table>
<thead>
<tr>
<th></th>
<th>ProC</th>
<th>RefC</th>
<th>StrP</th>
<th>PreC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>p</td>
<td>F</td>
<td>p</td>
</tr>
<tr>
<td>F</td>
<td>3.44</td>
<td>.033</td>
<td>8.02</td>
<td>.000</td>
</tr>
<tr>
<td>F</td>
<td>2.24</td>
<td>.108</td>
<td>1.19</td>
<td>.304</td>
</tr>
<tr>
<td>ISS</td>
<td>8.44</td>
<td>.000</td>
<td>5.37</td>
<td>.005</td>
</tr>
<tr>
<td>ESS</td>
<td>4.58</td>
<td>.011</td>
<td>7.24</td>
<td>.001</td>
</tr>
</tbody>
</table>

Regarding Scheffé’s tests that were calculated for those subscales and second-order factors with significant differences, Table 6.28 illustrates that no statistically significant relationships occur for Proactive Coping between any of the universities ($p > .05$).

Table 6.28: Scheffé’s test; variable ProC according to university

<table>
<thead>
<tr>
<th>University</th>
<th>UB</th>
<th>UNAM</th>
<th>NMMU</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M=3.4042</td>
<td>M=3.4850</td>
<td>M=3.4436</td>
</tr>
<tr>
<td>UB</td>
<td></td>
<td>.877</td>
<td>.148</td>
</tr>
<tr>
<td>UNAM</td>
<td>.877</td>
<td></td>
<td>.154</td>
</tr>
<tr>
<td>NMMU</td>
<td>.148</td>
<td>.154</td>
<td></td>
</tr>
</tbody>
</table>

Annexure G displays the remaining Scheffé’s tests that were calculated. These results are summarised in Table 6.29, which indicates Scheffé’s $p$ values in red as well as Cohen’s $d$ values. From this table it can be seen that
A small practically significant difference is evident between students studying at UB and NMMU as well as UNAM and NMMU for Reflective Coping, and between students studying at UNAM and NMMU for the second-order factor Support Seeking (.20 < |d| < .50). A small practically significant difference also occurred between UB and NMMU students for Emotional Support Seeking, as well as the second-order factors Future-Oriented Coping and Support Seeking. A medium practical significance is apparent between students from UNAM and NMMU for Instrumental Support Seeking (.50 < |d| < .80).

Table 6.29: Summary of Scheffé’s tests and Cohen’s d values

<table>
<thead>
<tr>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>Mean Difference</th>
<th>Scheffé p</th>
<th>Cohen’s d</th>
</tr>
</thead>
<tbody>
<tr>
<td>RefC UB</td>
<td>88</td>
<td>3.45</td>
<td>0.17</td>
<td>.004</td>
<td>0.37</td>
</tr>
<tr>
<td>NMMU</td>
<td>496</td>
<td>3.28</td>
<td>0.17</td>
<td>.004</td>
<td>0.37</td>
</tr>
<tr>
<td>RefC UNAM</td>
<td>38</td>
<td>3.47</td>
<td>0.19</td>
<td>.037</td>
<td>0.47</td>
</tr>
<tr>
<td>NMMU</td>
<td>496</td>
<td>3.28</td>
<td>0.19</td>
<td>.037</td>
<td>0.47</td>
</tr>
<tr>
<td>ISS UNAM</td>
<td>38</td>
<td>3.54</td>
<td>0.35</td>
<td>.002</td>
<td>0.63</td>
</tr>
<tr>
<td>NMMU</td>
<td>496</td>
<td>3.19</td>
<td>0.35</td>
<td>.002</td>
<td>0.63</td>
</tr>
<tr>
<td>ESS UB</td>
<td>88</td>
<td>3.36</td>
<td>0.25</td>
<td>.008</td>
<td>0.35</td>
</tr>
<tr>
<td>NMMU</td>
<td>496</td>
<td>3.12</td>
<td>0.25</td>
<td>.008</td>
<td>0.35</td>
</tr>
<tr>
<td>FOC UB</td>
<td>88</td>
<td>3.33</td>
<td>0.11</td>
<td>.049</td>
<td>0.27</td>
</tr>
<tr>
<td>NMMU</td>
<td>496</td>
<td>3.22</td>
<td>0.11</td>
<td>.049</td>
<td>0.27</td>
</tr>
<tr>
<td>SS UB</td>
<td>88</td>
<td>3.36</td>
<td>0.20</td>
<td>.010</td>
<td>0.34</td>
</tr>
<tr>
<td>NMMU</td>
<td>496</td>
<td>3.15</td>
<td>0.20</td>
<td>.010</td>
<td>0.34</td>
</tr>
<tr>
<td>SS UNAM</td>
<td>38</td>
<td>3.41</td>
<td>0.25</td>
<td>.035</td>
<td>0.46</td>
</tr>
<tr>
<td>NMMU</td>
<td>496</td>
<td>3.15</td>
<td>0.25</td>
<td>.035</td>
<td>0.46</td>
</tr>
</tbody>
</table>
6.5.7 t-Tests

To identify gender differences for scores relating to the six subscales and two second-order factors, a two-sample independent t-test was used in addition to the already discussed MANOVA techniques. This is shown in Table 6.30 below. As can be seen from the table, there is a statistically significant difference between genders for Preventive Coping, Emotional Support Seeking and Support Seeking ($p < .05$). A small practically significant difference between genders is evident for Emotional Support Seeking ($0.20 < |d| < 0.50$), but no practical significance is apparent for Preventive Coping or Support Seeking ($d < 0.20$).

Table 6.30: t-Tests according to gender

<table>
<thead>
<tr>
<th></th>
<th>Male (n = 282)</th>
<th>Female (n = 340)</th>
<th>Mean Difference</th>
<th>t-value</th>
<th>df</th>
<th>p</th>
<th>Cohen's d</th>
</tr>
</thead>
<tbody>
<tr>
<td>ProC</td>
<td>3.36</td>
<td>3.31</td>
<td>0.05</td>
<td>1.48</td>
<td>620</td>
<td>.139</td>
<td>n.a.</td>
</tr>
<tr>
<td>RefC</td>
<td>3.35</td>
<td>3.29</td>
<td>0.06</td>
<td>1.79</td>
<td>620</td>
<td>.074</td>
<td>n.a.</td>
</tr>
<tr>
<td>StrP</td>
<td>3.16</td>
<td>3.15</td>
<td>0.00</td>
<td>0.03</td>
<td>620</td>
<td>.976</td>
<td>n.a.</td>
</tr>
<tr>
<td>PreC</td>
<td>3.21</td>
<td>3.11</td>
<td>0.10</td>
<td>2.26</td>
<td>620</td>
<td>.024</td>
<td>0.18</td>
</tr>
<tr>
<td>ISS</td>
<td>3.23</td>
<td>3.24</td>
<td>-0.01</td>
<td>-0.18</td>
<td>620</td>
<td>.855</td>
<td>n.a.</td>
</tr>
<tr>
<td>ESS</td>
<td>3.06</td>
<td>3.25</td>
<td>-0.19</td>
<td>-3.42</td>
<td>620</td>
<td>.001</td>
<td>-0.28</td>
</tr>
<tr>
<td>FOC</td>
<td>3.27</td>
<td>3.22</td>
<td>0.05</td>
<td>1.62</td>
<td>620</td>
<td>.105</td>
<td>n.a.</td>
</tr>
<tr>
<td>SS</td>
<td>3.14</td>
<td>3.24</td>
<td>-0.10</td>
<td>-2.09</td>
<td>620</td>
<td>.037</td>
<td>-0.17</td>
</tr>
</tbody>
</table>

For PCI subscales profile: Hotelling $T^2=34.7105$ $F(6,615)=5.7384$ $p<.00001$

For PCI 2nd-order factors profile: Hotelling $T^2=11.2944$ $F(2,619)=5.6381$ $p<.00374$

A similar t-test was conducted to test differences between local and international students. The results are reflected in Table 6.31 below. From this table it can be seen that a statistically significant difference occurred between
local versus international students for Instrumental Support Seeking (p < .05).
This also showed a small practical significance (.20 < |d| < .50).

Table 6.31: t-Tests according to locality

<table>
<thead>
<tr>
<th></th>
<th>Local (n = 541)</th>
<th>International (n = 81)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>ProC</td>
<td>3.33</td>
<td>0.41</td>
</tr>
<tr>
<td>RefC</td>
<td>3.32</td>
<td>0.45</td>
</tr>
<tr>
<td>StrP</td>
<td>3.16</td>
<td>0.60</td>
</tr>
<tr>
<td>PreC</td>
<td>3.15</td>
<td>0.55</td>
</tr>
<tr>
<td>ISS</td>
<td>3.20</td>
<td>0.61</td>
</tr>
<tr>
<td>ESS</td>
<td>3.17</td>
<td>0.70</td>
</tr>
<tr>
<td>FOC</td>
<td>3.24</td>
<td>0.41</td>
</tr>
<tr>
<td>SS</td>
<td>3.19</td>
<td>0.60</td>
</tr>
</tbody>
</table>

For PCI subscales profile: Hotelling $T^2$=29.8649 F(6,615)=4.9373 p<.00006
For PCI 2nd-order factors profile: Hotelling $T^2$=.974653 F(2,619)=.48654 p<.61498

As indicated in Table 6.32, t-tests were also used to assess differences in students’ use of various coping methods. Marked differences are significant at p < .05000. From this table it can be inferred that there was a statistically significant difference between Proactive Coping and Strategic Planning, Preventive Coping, Instrumental Support Seeking and Emotional Support Seeking. Furthermore, a small practically significant difference was evident between Proactive Coping and Strategic Planning, Preventive Coping and Emotional Support Seeking (.20 < |d| < .50).
The following table provides the results of one-sample t-tests that were conducted to compare this study's proactive coping results with the results of similar proactive coping studies conducted worldwide. It was the researcher's intention to compare the present study's results with those of Wu et al.'s (2008) Chinese sample, but these authors measured proactive coping on a five-point Likert scale. Because the present study made use of a four-point Likert scale, as suggested by the PCI developers, the results cannot be compared with those of the Chinese sample. Four other studies were therefore used. The first column for this analysis in Table 6.33 represents the comparison of this study's results with 182 undergraduate women with trauma histories. This mean was gained from Vernon et al. (2009), whose summed Proactive Coping subscale score of 42.83 was divided by 14 (number of items in this subscale) to gain a mean of 3.06. The second and third columns indicate the mean values of the Canadian and Polish-Canadian samples mentioned earlier, from Greenglass et al. (1999a). Once again, the summed Proactive Coping subscale scores of 42.61 and 39.87 respectively from Greenglass et al. (1999a) were divided by 14 to gain means of 3.04 and 2.85 respectively. The fourth column shows the results from Adebayo et al.'s (2008) study of Nigerian non-traditional students. Their summed Proactive Coping subscale score of 35.46 can be expressed as a mean of 2.53.
Table 6.33: One-sample t-Tests for Dependent Samples – Proactive Coping

<table>
<thead>
<tr>
<th>Hypotheses:</th>
<th>Undergrad women</th>
<th>Canadian students</th>
<th>Polish-Canadian sample</th>
<th>Nigerian students</th>
</tr>
</thead>
<tbody>
<tr>
<td>$H_0$: $m = 3.06$</td>
<td>$H_0$: $m = 3.04$</td>
<td>$H_0$: $m = 2.85$</td>
<td>$H_0$: $m = 2.53$</td>
<td></td>
</tr>
<tr>
<td>$H_1$: $m \neq 3.06$</td>
<td>$H_1$: $m \neq 3.04$</td>
<td>$H_1$: $m \neq 2.85$</td>
<td>$H_1$: $m \neq 2.53$</td>
<td></td>
</tr>
<tr>
<td>a</td>
<td>.05 significance level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>n</td>
<td>622</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>3.33</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>0.40</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d.f.</td>
<td>621</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>t</td>
<td>16.97</td>
<td>18.26</td>
<td>30.53</td>
<td>50.27</td>
</tr>
<tr>
<td>p (two-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>Cohen’s d</td>
<td>0.68 (moderate)</td>
<td>0.73 (moderate)</td>
<td>1.22 (large)</td>
<td>2.02 (large)</td>
</tr>
</tbody>
</table>

It can be inferred from Table 6.33 that all p values were statistically significant, as all were less than the 0.05 significance level. Furthermore, there is a moderate practical significance between this study’s Proactive Coping scores and both Vernon et al.’s (2009) study and the Canadian sample. Furthermore, a large practically significance difference exists between the Proactive Coping scores of this study and both the Polish-Canadian and Nigerian samples. This indicates that Southern African university students cope more proactively than undergraduate female students who possess trauma histories, than Canadian students and Polish-Canadian adults/students, as well as Nigerian non-traditional students.

### 6.6 Hypothesis testing

Each hypothesis will now be tested, using the above findings.
6.6.1 Hypothesis 1
H₁ stated that proactive coping would be positively correlated with emotional support seeking. Table 6.17 indicates that there is a positive relationship between Proactive Coping and Emotional Support Seeking. This relationship is statistically significant, due to the correlation coefficient value of 0.250 being greater than the significance threshold value of 0.079. Although this relationship is not practically significant (r < .30), support is nonetheless provided for H₁. This hypothesis is thus accepted.

6.6.2 Hypothesis 2
H₂ stated that proactive coping would be positively correlated with instrumental support seeking. According to Table 6.17, a positive relationship occurs between Proactive Coping and Instrumental Support Seeking (r = 0.223), which is statistically significant (r > .079). This relationship is once again not practically significant (r < .30), but support is nonetheless provided for H₂ and it is thus accepted.

6.6.3 Hypothesis 3
H₃ stated that women would exhibit higher levels of instrumental support seeking than men. Table 6.19 indicates that no relationship occurred between gender and Instrumental Support Seeking because the p-value of 0.712 is greater than the significance level of 0.05. This finding was confirmed in Table 6.30, due to the fact that the p-value for Instrumental Support Seeking (0.855) was once again greater than the significance level of 0.05. H₃ is thus rejected.

6.6.4 Hypothesis 4
H₄ stated that women would exhibit higher levels of emotional support seeking than men. According to Table 6.19, no relationship occurred between gender and Emotional Support Seeking (p = 0.289, which is greater than the significance level of 0.05). However, Table 6.30 shows a different outcome, with the p-value for Emotional Support Seeking (0.001) being lower than the significance level of 0.05. Cohen’s d-value (-0.28) indicates a small practically significant difference. Judgement will thus be withheld, as there is evidence partially in support of and partially in conflict with this hypothesis.
6.6.5 Hypothesis 5
H_5 stated that men would exhibit higher levels of proactive coping than women. Table 6.19 indicates that no relationship occurred between gender and Proactive Coping because the p-value of 0.486 is higher than the 0.05 significance level. This finding was confirmed in Table 6.30, with the Proactive Coping p-value (0.139) being greater than the significance level of 0.05. H_5 is thus rejected.

6.6.6 Hypothesis 6
H_6 stated that international students would demonstrate lower levels of proactive coping than students studying in their home countries. However, Table 6.19 indicates that no relationship occurred between local student status and Proactive Coping, with the p-value of 0.318 being higher than the significance level of 0.05. This finding was confirmed in Table 6.31, due to the fact that the Proactive Coping p-value (0.812) is higher than the significance level of 0.05. H_6 is thus rejected.

6.6.7 Hypothesis 7
H_7 stated that international students would demonstrate lower levels of instrumental support seeking than students studying in their home countries. According to Table 6.19, no relationship occurred between local student status and Instrumental Support Seeking (p = 0.139, greater than the 0.05 significance level). However, Table 6.31 shows that the p-value for Instrumental Support Seeking (0.002) is less than the significance level of 0.05, with Cohen’s d-value (-0.42) indicating a small practically significant difference. Judgement will thus be withheld, as there is evidence partially in support of and partially in conflict with this hypothesis.

6.6.8 Hypothesis 8
H_8 stated that international students would demonstrate lower levels of emotional support seeking than students studying in their home countries. Table 6.19 indicates that no relationship occurred between local student status and Emotional Support Seeking because the p-value of 0.699 is higher than the significance level of 0.05. This finding was confirmed in Table 6.31,
because the p-value for Emotional Support Seeking (0.296) is greater than the significance level of 0.05. H₈ is thus rejected.

6.6.9 Hypothesis 9
H₉ stated that South African students would exhibit higher levels of proactive coping than students from other Southern African countries. According to Table 6.24, the p-value for Proactive Coping (0.049) was lower than the significance level of 0.05, indicating that statistically significant differences did occur for this factor according to home country. However, upon further investigation with Scheffé testing shown in Table 6.25, it could be seen that no statistically significant differences for Proactive Coping occurred between the five countries investigated. H₉ is thus rejected, implying that the results of this study do not support the hypothesis that national culture is related to university students’ use of a proactive coping style.

6.6.10 Hypothesis 10
H₁₀ stated that Southern African university students would exhibit higher levels of proactive coping than other forms of coping. Table 6.32 indicates that the p-values for all subscales (< 0.0005) except for Reflective Coping (0.328) were lower than the significance level of 0.05, indicating that statistically significant differences did occur between Proactive Coping and Strategic Planning, Preventive Coping, Instrumental Support Seeking and Emotional Support Seeking. Furthermore, small practically significant differences were evident between Proactive Coping and Strategic Planning (d = 0.34), Preventive Coping (d = 0.39) and Emotional Support Seeking (d = 0.25), due to the fact that these Cohen’s d-values fell between 0.20 and 0.50. H₁₀ is thus partially accepted, with Southern African university students exhibiting higher levels of proactive coping than four other types of coping measured by the PCI.

6.6.11 Hypothesis 11
H₁₁ stated that Southern Africans would demonstrate higher levels of proactive coping than individuals from areas outside of Southern Africa. According to Table 6.33, the p-values (< 0.0005) obtained for the comparisons
with the various studies were less than the significance level of 0.05, indicating that these differences are statistically significant. Cohen's d-values of 0.68 and 0.73 further indicate moderate practically significant differences, and Cohen’s d-values of 1.22 and 2.02 indicate large practically significant differences. The direction can be inferred from the means, with this study's mean of 3.33 being higher than the four means of 3.06, 3.04, 2.85 and 2.53 respectively. H_{11} is thus accepted, with this study’s Southern African university student sample demonstrating higher levels of proactive coping than university students in the USA, Nigeria and Canada.

6.7 **Conclusion**

In summary, it has been shown that hypotheses one, two and eleven can be fully accepted, with hypothesis ten being partially accepted. Hypotheses three, five, six, eight and nine were rejected. Furthermore, results for hypotheses four and seven are inconclusive, resulting in judgement regarding the acceptance of these hypotheses being withheld.

This chapter has highlighted the results and findings from the investigation. It has shown that in certain cases, the results have been inconclusive in allowing the researcher to accept or reject the hypotheses set for this study. However, the results have nonetheless provided valuable insight into the correlations between the various factors. The following chapter will discuss the results of this study in more detail.
CHAPTEr SEVEN

IMPLICATIONS AND RECOMMENDATIONS FOR UNIVERSITIES AND ORGANISATIONS

7.1 Introduction
The preceding chapters have outlined the relevant theory, methodology and results related to this investigation. This chapter will continue by providing a discussion both of the hypotheses and other meaningful results. It will also include implications that can be derived and recommendations that can be made, based on the findings, for universities and organisations. Due to the fact that the management of universities refers to the chancellor, vice-chancellor and senior administration staff (Shonhiwa, 2006), it is to this group of managers that the recommendations to follow will be aimed. As stated by Mbigi (2005), it is the duty of leadership to watch over the culture of institutions.

7.2 Discussion of results
The following discussion will focus primarily on the results of the various hypotheses, but will also highlight interesting results that became evident within the broader results, such as the number of factors in the PCI that emerged from exploratory factor analysis, age-related coping differences, and whether institutional culture has an effect on the various coping styles that were measured.

7.2.1 Conceptualisation of the PCI
As was discussed in Section 6.5.1, a major result of this study was the finding that the PCI is in fact comprised of two distinct coping scales and not six. The researcher termed these two subscales, “Future-Oriented Coping” and “Support Seeking”. Thus, although personal communication with Schwarzer (2011) implied that the PCI is a collection of six different coping scales, these
results clearly indicate otherwise. A two-factor structure suggests strong redundancy among certain PCI factors and thus to an extent contradicts the original conceptualisation of the PCI (Roesch et al., 2009).

This result can be compared to another study that also explored the dimensionality of the PCI. Roesch et al. (2009) investigated whether the PCI was comprised of three, five or seven factors. This was done by means of confirmatory factor analysis, using a sample of 709 undergraduate students. It is important to note that these authors included the Avoidance Coping subscale, which, as already explained in Section 5.3, was omitted for the purpose of the researcher’s current study. It was found by Roesch et al. (2008) that a three-factor model best fitted the data. The three independent factors were named Logical Analysis/Problem Solving (comprising of Proactive, Preventive and Reflective Coping as well as Strategic Planning); Social Support (comprising of Instrumental and Emotional Support Seeking); and Avoidance (comprising only of theAvoidance Coping subscale, which at no point was found to correlate in a statistically significant and positive manner with the other subscales of the PCI). This finding agrees with the finding of the current study, because if the Avoidance Coping subscale is removed from Roesch et al.’s (2009) analysis because of the above-mentioned lack of statistical support, then their result would be the same as this study’s results in terms of which subscales are grouped together and extracted as second-order factors by means of factor analysis. This therefore lends support to the contention that the PCI is comprised of two subscales.

Roesch et al. (2009) explains that Greenglass et al. (1999) might not have found a two-factor structure due to the demographic differences of these samples, namely Canadian students and Polish immigrants in Greenglass et al.’s (1999) study versus multiethnic Americans in Roesch et al.’s (2009) study. However, the latter sample is not demographically similar to the current study’s sample comprised of Southern African university students, yet the same two-factor structure was found (once Avoidance Coping was removed).
Although the researcher has named the two subscales differently to Roesch et al. (2009), the subscales are essentially the same: Individuals who score highly on Support Seeking [or ‘Social Support’ according to Roesch et al. (2009)] would cope by means of companionship (emotional support seeking) and advice/guidance (instrumental support seeking) [Roesch et al., 2009]. Individuals who make use of Future-Oriented Coping [or ‘Logical Analysis/Problem Solving’ according to Roesch et al. (2009)] would cope by means of goal setting and autonomy (proactive coping), preparatory behaviours prior to stressful situations (preventive coping), contemplation (reflective coping) as well as the development of goal-oriented schedules (strategic planning), which all encompass a positive psychological coping profile [Roesch et al., 2009].

The term Future-Oriented Coping has indeed been used by other authors, such as Hu and Gan (2011) who explain the concept as comprising of both proactive and preventive coping. Furthermore, an entire special issue of Motivation and Emotion was dedicated to future-oriented coping in 2005, with Aspinwall (2005, p. 205) stating that “the future-oriented thoughts of particular interest are those involving the value of a particular goal, the likely effects of continued persistence in one’s efforts to meet that goal, and individual differences in orientation to success and failure”. It is clear that this explanation of future-oriented coping involves the employment of proactive coping, due to its emphasis on goal attainment. To be future-oriented means that an individual believes that he or she has specific goals that can be met and devotes time to thinking of the future (Aspinwall, 2005). The area of future-oriented coping should be given a greater focus in research, with the same author stating that factors remaining under-researched include cultural differences in the nature and amount of future-oriented thinking as well as how future-oriented thoughts relate to coping efforts.

7.2.2 PCI correlations

External social support is a resource that assists an individual to cope proactively, as discussed in literature. For this reason, it was hypothesised that proactive coping would be positively correlated both to emotional support
seeking and instrumental support seeking, as these were the two forms of support seeking measured in the PCI. However, the hypothesis relating to instrumental support seeking was formulated despite a lack of literature relating specifically to the relationship between proactive coping and instrumental support seeking. For example, instrumental support seeking was not specifically mentioned by Greenglass (2002) as one that serves as an external resource for proactive copers – only informational support seeking was highlighted by this author. Informational and instrumental support seeking do differ, with informational support involving an individual being provided with information that will assist him or her in coping with the problem, whereas instrumental support seeking involves an individual receiving direct help during times of need (Greenhaus, Callanan & Godshalk, 2010). Despite a lack of literature linking proactive coping with instrumental support seeking in particular, both Hypotheses 1 and 2 were accepted, with a positive, statistically significant relationship occurring between the Proactive Coping subscale and both the Emotional and Instrumental Support Seeking subscales. Indeed, social support itself has been termed a form of coping (Greenhaus et al., 2010).

This relationship between proactive coping and support seeking correlates with literature in terms of how useful social support is when coping with stress. For example, according to Sarason, Pierce & Sarason’s developmental model of social support (1990, in Cassidy, 1999), the amount of support that one perceives as being available will moderate the relationship between how accepted one feels in one’s environment and one’s ability to cope. Emotional support in the form of love, trust or empathy from others (Greenhaus et al., 2010) can specifically assist individuals to cope proactively because the process of talking about one’s problems with an attentive friend can result in him or her providing advice or encouragement. The individual may feel more motivated to once again face up to challenges in his or her future. Furthermore, Greenglass and Fiksenbaum (2009) found social support to be a significant predictor of proactive coping.
It has already been mentioned in Section 5.7.2 that according to previous research, the Proactive Coping subscale correlates positively with the other five subscales. In this study, the Proactive Coping subscale was furthermore found to have a positive, practically significant relationship with the Reflective Coping, Strategic Planning and Preventive Coping subscales. This is also in line with theory. For example, Roesch et al. (2009) state that based on the conceptualisation of the PCI subscales, the subscales should be highly correlated. This also further confirms the validity of the PCI. A noteworthy correlation to be highlighted includes the strong correlation between Instrumental and Emotional Support Seeking (.676), although as previously mentioned, Greenglass et al. (1999a) state that there is sufficient discriminate validity available to justify the two Support Seeking subscales being included as separate subscales.

7.2.3 Gender differences
Interestingly, it was found that women do not exhibit higher levels of instrumental support seeking than men, with Hypothesis 3 being rejected. Judgement was moreover withheld for Hypothesis 4, with inconclusive evidence concerning whether women make greater use of emotional support seeking than men. Both these results go against previous findings, with Greenglass (2002) discovering that women scored significantly higher on both the Emotional and Instrumental Support Seeking subscales of the PCI. Literature does indeed state that women have been found to make use of co-worker support to cope more effectively with job stress, and in general are more likely than men to make use of their social resources and seek advice from others when solving problems (Greenglass, 2002). Furthermore, the same author asserts that women are socialised to be more communally orientated, with collaborative relationships being emphasised.

Due to inconclusive evidence for Hypothesis 4, more research is required to definitively ascertain whether women employ emotional support seeking more often than men to cope, through connecting emotionally with others, feeling cared for by others during challenging times, confiding their feelings in others when needing to talk and building up close relationships. However, it is
positive that this study found that men use instrumental social support to cope as much as women do, because it implies that men make use of advice and feedback from others during trying times and also identify individuals who can assist them in finding solutions to problems as well as seek the perspectives of others when faced with problems. This type of support seeking can most certainly prove beneficial to men when needing to make decisions relating to overcoming stressors, visualising success in the future and setting goals for one’s life.

Men were also shown not to make use of proactive coping to a greater extent than women, with Hypothesis 5 being rejected. Although this does correlate with findings by Greenglass (2002), Uskul and Greenglass (2005), Adebayo et al. (2008) and Meiring (2010), who did not observe significant gender differences across the Proactive Coping subscale, it does go against the researcher’s initial assumptions based on literature. It was suggested by the researcher that men would cope in a manner that is more proactive than women because they are more dominant, independent and competitive (Lott, 2010). However, this assumption has been disproved. This finding is constructive though, as it confirms previous findings (see authors mentioned above) that women as much as men cope by proactively ‘taking charge’ of situations, working around or through obstacles and turning stressful situations into positive experiences.

The only other statistically significant gender difference evident from the t-tests conducted was for the Preventive Coping subscale, indicating that men cope in a manner that is more preventive than women. However, this finding was not confirmed with the ANOVA results. More research is thus needed to determine whether men do indeed prepare in advance for future eventualities, plan strategies in advance to overcome stressors and think ahead of the best possible outcomes. It has been previously stated in literature that females make use of a wider range of coping strategies than males do (Cicognani, 2011), but that findings regarding gender differences in proactivity, planning and future orientation have generally been inconsistent (Aspinwall, 2005).
Thus, further research should be conducted into the relationship between gender and the various coping styles measured by the PCI.

### 7.2.4 Locality differences

Positively, it can be noted that both Hypotheses 6 and 8 were rejected, indicating that international students do not demonstrate lower levels of proactive coping or emotional support seeking than those students who are studying in their home countries. The fact that these hypotheses could not be accepted is an encouraging result, as it suggests that students studying in a foreign country are not coping to a lesser extent than students who live and study in the same country as their birth. To elaborate in terms of proactive coping, these findings indicate that when students move to a different country to pursue tertiary educational studies, they are either already equipped with the proactive coping resources necessary to face challenges ‘head on’ or are subsequently equipped by their university’s educational system to take initiative in solving problems and envision themselves succeeding in university activities. Assuming that universities do play a role in shaping the behaviour of their students, the researcher believes that this result holds important implications for universities to act as positive socialising systems. This shall be expanded on in Section 7.3 of this Chapter.

In terms of emotional support seeking, the fact that international students are making use of this form of support is encouraging. This finding implies that whether students study in their home city or country and are surrounded by family and friends who are readily available to provide love or care or, alternatively, they have moved to a new country filled with an unfamiliar sea of faces, makes no difference concerning whether they will rely on social support to assist them emotionally. This either means that international students find no difficulty in forming close friendships upon arrival in the new country or that they maintain close relationships with their friends and family back home, who they can call on for support in times of distress. It could also imply that universities once again are proving beneficial in providing external formal support structures that foreign students can rely on whilst studying, whether in terms of motivation in studying for examinations, advice concerning medical
emergencies, or counseling services for students whose homesickness is affecting their studies. Whatever the challenge to be overcome, this finding suggests that international students make as much use of emotional social support as local students do.

Judgement was withheld for Hypothesis 7, because there was evidence partially in support of and partially in conflict with the hypothesis. This implies that no conclusive evidence could confirm whether locality of students played a role in their use of instrumental support seeking. What is interesting about this finding is the direction of the means in Table 6.31: while it was hypothesised that international students would demonstrate lower levels of instrumental support seeking than their local peers, the t-tests revealed that international students actually made use of instrumental support seeking more than local students. Thus, whether this support occurs in the form of assistance in finding a new place to stay, feedback on how students are performing academically, or advice on how to access books for the completion of assignments, it is proposed that international students in fact make use of this support to a greater extent than local students. Despite this being against initial expectations, the researcher suggests that this might occur because international students are initially overwhelmed with the many new realities that they are faced with upon arriving in a new country to study. Thus, they make a more conscious effort to seek out help from formal or informal university structures or other social support bases to assist them in adjusting to university life and coping with the challenges they face. However, because the results of this study in this regard are inconclusive, these comments are supposition based on partial evidence. For this reason, more research is required to shed greater light on these differences.

Interestingly, no other significant locality differences occurred for any of the other PCI subscales, further implying that international students do not use any specific coping strategies to a greater or lesser extent than local students.
7.2.5 Age differences

Although no hypotheses were put forth concerning coping differences across ages, the researcher feels it necessary to highlight certain observations according to this demographic variable. Despite the fact that Table 6.19 indicated no significant differences in coping strategies when accounting for age, Table 6.21 did suggest significant differences for three subscales and one second-order factor according to the age of students. However, when investigated further through the use of Scheffé’s tests, statistically significant differences were only found for Proactive Coping and the second-order factor Future-Oriented Coping.

Regarding Proactive Coping, a practically significant difference that was moderate in size was evident between the age groups of 18 to 22 and 33+ years of age, as well as between the age groups of 23 to 27 and 33+ years of age (see Tables 6.22 and 6.23). In both cases, the mean for the 33+ year age group was higher than the mean for the other two age groups. This suggests that older students make use of proactive coping to a greater extent than younger students. The researcher suggests that this could be due to the fact that older students might have had more experience in setting goals and overcoming obstacles in the past, and might have realised that they are able to harness the positive effects of change on their personal well-being. Younger students, on the other hand, might be more apprehensive of the challenges that university life brings and might be less equipped to deal with these challenges, whether due to having less well-established support systems compared to their older counterparts, or because their levels of self-efficacy and optimism are not as high as those who have experienced more of life. These assumptions, however, require empirical investigation to be validated.

A statistically significant difference was found for Future-Oriented Coping between the age groups of 18 to 22 and 33+ years of age, with the older students once again showing a higher mean. However, this difference was not found to be practically significant (see Tables E.5 and E.6 in Annexure E). This result nonetheless indicates that students over the age of 33 do employ
future-oriented coping to a greater degree than students who have recently left high school, perhaps implying that more mature students plan, dream, visualise, aspire and hope to a greater extent than younger students. This is in line with literature, which mentions that the function or content of future-oriented thinking may change as individuals pass through major developmental transitions, one such transition being aging (Aspinwall, 2005).

The fact that no statistically significant age differences were found for any of the other PCI subscales correlates with literature; for example, Costa Jr, Zonderman and McCrae (1991) found that in several studies, no consistent age difference patterns appeared for various different coping mechanisms. More recently, Whitty (2003) found no age differences regarding the effectiveness of coping strategies that individuals utilise.

The fact that no statistically significant differences were found between ages for either of the Support Seeking scales is consistent with literature. For example, in Antonucci’s (1991) study, the number of individuals in older people’s support networks was not significantly different to the number in younger peoples. Furthermore, the structural characteristics of social relations remained relatively stable over time, with the social networks of respondents of various ages (spanning over 50 years) differing very little. Younger individuals have been found to enjoy support as well as enjoy participating in groups in order to be a source of support to others (Cohler, 1991).

7.2.6 National culture
One of the primary aims of this research has been to explore whether proactive coping differences occur between Southern African countries and Southern African universities – that is, to investigate the effect of national and institutional culture on whether Southern African university students make use of a proactive coping style. For this reason, Hypothesis 9 related to whether South African students would exhibit higher levels of proactive coping than students from other Southern African countries (in other words, the effect of national culture).
However, it is important to highlight that a limitation of this study to be mentioned in Section 8.2 is that culture is not the only explanation of behavior. Other factors can affect the behaviour of individuals as well, such as age, gender and locality, as already discussed. However, it is still debatable whether the results found across home countries in this study actually reflect differences in national culture, as the measuring instruments used did not directly measure cultural differences (for example, questions relating to cultural values, individualism versus collectivism, and so forth were not included). Instead, it was assumed by the researcher that each respondent would display the cultural values of his or her home country, which is not necessarily the case.

Bearing the above in mind, the fact that this hypothesis was rejected implies that national culture does not play a role in university students’ use of a proactive coping style, because no statistically significant differences were found between the five countries investigated. It should be mentioned though that the results of this research cannot be generalised to the broader populations of Namibia and Zambia, and therefore Southern Africa in general, due to the small number of respondents from these two countries (19 and 11 respondents respectively). This will be included as a limitation in Section 8.2 of this dissertation.

It is unclear whether the above result is indeed related to the levels of self-efficacy amongst individuals from the various countries, which led the researcher to propose the original hypothesis. That is, it cannot be proved whether levels of proactive coping amongst individuals from various countries are affected due to the fact that their self-efficacy levels differ, as self-efficacy was not measured in the PCI.

It is important to note that the researcher’s hypothesis that South Africans would cope more proactively than individuals from other African countries was not based on conclusive research, due to the lack of research on proactive coping in Africa. Thus, this finding adds to the current body of knowledge relating to this topic. The researcher proposes that this finding suggests that
students from the various Southern African countries under study all cope in a manner similar to one another, perhaps indicating that there exists one overall African proactive coping culture. That is, as suggested in Section 3.3.2.4, perhaps there are few differences between African countries when focusing on this particular coping style. For example, Africans in general are optimistic and also value social support systems and collectivism. This could explain why the mean values for students from all five Southern African countries were above 3.2 out of a possible 4.0 (see Table 6.25), indicating that they all perceive themselves as coping in a very proactive manner.

This does not, however, fit with Chun, Moos and Cronkite’s (2006) research, which states that because individuals from collectivistic cultures have a greater tendency to possess an external locus of control, attribute stressful events to bad luck and appraise stressors as threatening, they are more likely to make use of avoidance-focused coping strategies. This is in contrast to those countries with an individualistic orientation, as these individuals would be more active in their approach to coping due to a tendency to appraise stressors as challenging (Chun et al., 2006). Thus, although literature emphasises that the culture of African countries is collectivistic in nature, these results suggest that when it comes to proactive coping, all of the Southern African countries under investigation and not just South Africa could be classified as being individualistic and thus, Westernised.

The result of the hypothesis above suggests that national culture does not play a role in affecting the way in which individuals cope proactively. However, results concerning the impact of national culture on other PCI subscales portray a different picture in Table 6.26, with practically significant differences occurring for three other subscales and one second-order factor, namely Reflective Coping, both Support Seeking subscales, as well as the second-order factor Support Seeking. This puts forward that national culture does affect the manner in which individuals cope when using certain other coping styles. Most of the differences occurred between Botswana and South Africa, although the researcher notes that this could be due to the small sample sizes from the other countries under investigation. Regardless, the findings suggest
that students whose home countries are either South Africa or Botswana will employ different coping styles. Particularly, small practically significant differences occurred between students from these two countries for Reflective Coping, Instrumental Support Seeking, Emotional Support Seeking, and Support Seeking as a separate factor. In each case, students from Botswana scored higher on these subscales, indicating that they employ these coping styles more than the South African students. In a similar manner, students from Zambia scored higher than South African students for Instrumental Support Seeking, and this difference held a large practical significance.

Numerous points can be highlighted from the above findings. Firstly, it is evident that students from Botswana cope in a manner that is more reflective, suggesting that they contemplate numerous behavioural options by evaluating and envisioning which will be successful. They would do so through analysing the resources available to them, brainstorming ideas and formulating plans of action (Greenglass, 2002). Students with Botswana as a home country also rely more on social support when coping, whether this relates to emotional or instrumental support. Assuming that Botswana is more collectivistic in nature than South Africa, due to the fact that South Africa is presumably more Westernised and thus more individualistic than other African countries (as previously mentioned in Section 3.4.1 and discussed in Section 3.3.2.1), then this finding correlates with this assumption. A country that is more collectivistic in nature would produce individuals who behave based on a concern for others, with group norms directing the behaviour of individuals (Shiraev & Levy, 2004). Therefore, the fact that Botswana students, coming from a collectivistic country that places emphasis on Botho philosophy (see Section 3.3.2.2), have been shown to focus more on social support seeking as a coping style is consistent with the national values of their home country.

7.2.7 Institutional culture

As with national culture discussed above, the researcher wished to discover whether institutional culture, in terms of university culture, had an effect on whether Southern African students’ made use of a proactive coping style. No
hypotheses were set in this regard, due to literature suggesting that all three institutional cultures would affect proactive coping in a positive manner.

As with national culture, it was once again found that there were no statistically significant differences for proactive coping, this time between any of the universities under study. Thus, not only does national culture not play a role in affecting whether university students make use of a proactive coping style, but neither does institutional culture. This implies that regardless of whether a Southern African student attends university at NMMU, UB or UNAM, they will employ a proactive coping style. This can be inferred from the mean values for each university sample, as each mean was above 3.4 out of a possible 4.0 (as seen in Table 6.28), once again indicating that students across all three universities cope in a highly proactive manner. It can be deduced from this result that because the students under study make use of proactive coping, they perceive themselves to draw on self-regulatory goal attainment and see stressful situations rather as challenges, not risks to be managed. This is in line with what the researcher proposed in Sections 4.4.2.1, 4.4.2.2 and 4.4.2.3, as it was assumed that the values of each university under study would result in students making use of a proactive style of coping.

The researcher notes that as with national culture, however, it can be debated whether these results are directly due to institutional culture or whether the same limitation is relevant; that is, because institutional culture was not actually measured in the study, these results may not necessarily reflect institutional culture per se.

Despite this, the researcher positively suggests that this could mean that all three universities under study are effectively encouraging students to cope in such a manner, whether formally or informally, as was already inferred from the values of these institutions. It should be acknowledged that in reality, these universities are probably not actively promoting the use of a proactive style of coping, because this coping style has not been extensively researched in Southern Africa. The management of the universities under
study are probably not even aware that this coping style exists. Thus, it seems that university students are coping proactively without actively realising this, or without having been ‘trained’ to do so. The researcher will make recommendations to universities in this regard in Section 7.3 in this Chapter.

It can be highlighted from the results in Table 6.29 that various differences between universities and other coping styles did in fact occur, as was the case with national culture. Small or medium practically significant differences occurred between students at NMMU and both UB and UNAM. For example, UB students made use of future-oriented coping more than NMMU students, with a small practically significant difference being evident. Thus, when looking together at proactive, preventive and reflective coping as well as strategic planning, UB students scored significantly higher than NMMU students. Students at UB as well as UNAM also coped more reflectively than students at NMMU, as is indicated by the direction of the means. This suggests that students studying at NMMU attempt to a lesser degree to overcome problems by first considering all of the alternatives or envisioning themselves succeeding at the task, and might not devise action plans in advance of embarking on challenges.

In terms of social support, it was found that both UB and UNAM students make use of support seeking (second-order factor) more than NMMU students; UNAM students rely more on instrumental support seeking than NMMU students; and UB students lean on emotional support from others more than NMMU students. This could suggest that UB and UNAM emphasise collectivistic values to an even greater extent than NMMU does, despite the fact that ‘ubuntu’ is a value that NMMU promotes. This is a similar result to that of national culture, with other Southern African countries displaying higher results for support seeking than South African-born students. These results thus further emphasise the fact that South Africa, and the South African institution under study (NMMU), are more individualistic than other Southern African countries or institutions. Further research is required in this regard though, to conclusively determine whether this can be
generalised to the population or whether this result should be isolated to this research study only.

7.2.8 Southern African students' levels of proactive coping

The last two hypotheses related to the way in which Southern African students (that is, the entire sample) cope proactively. Hypothesis 10 stated that Southern African university students would exhibit higher levels of proactive coping than the other forms of coping measured in the PCI. This hypothesis was partially accepted, as it was shown in Table 6.32 that the students in this study's sample made use of proactive coping to a greater extent than four other types of coping measured by the PCI. Specifically, proactive coping was employed more than strategic planning, preventive coping and both emotional and instrumental support seeking, with only the latter not showing practical significance. This result thus confirms that Southern African university students would sooner cope by means of goal setting, personal quality management and taking responsibility for the outcomes of stressful events (proactive coping), as opposed to breaking down tasks into manageable sections (strategic planning), thinking ahead and being well-prepared for stressful situations (preventive coping) or seeking out others to obtain advice or empathy (instrumental and emotional support seeking).

Hypothesis 11 was accepted, which confirmed that Southern Africans make use of proactive coping to a greater extent than individuals outside of the Southern Africa region. In particular, the Southern African students in this sample were more likely to employ a proactive coping style than undergraduate women with trauma histories in the USA, Canadian students, Polish-Canadian adults/students, as well as Nigerian non-traditional students. As already mentioned in Section 7.2.6, this goes against the writings of Chun et al. (2006), due to the fact that collectivistic Southern Africans should cope in a manner that is more avoidant, as compared to those from more individualised countries (such as the USA or Canada) where individuals would more likely cope actively. This result thus either implies that Southern Africa has become more individualised, or it suggests that, as hypothesised, the reliance of Africans on social support systems and, to a lesser extent,
optimism would result in them being more prone to cope proactively. The researcher does note, however, that the high scores given by Southern Africans for the Proactive Coping subscale could be due to socially desirable answers, or the fact that individuals are more likely to predict positive outcomes for themselves (see Aspinwall, 2005). It would therefore be useful for more cross-cultural comparisons to be made as research in the field of proactive coping grows.

7.3 **Implications and recommendations for universities**

To highlight certain results relating to the use of proactive coping in Southern Africa, it can be summarised that Southern African university students are coping in a manner that is more proactive than preventive, and make use of a proactive coping style to a greater extent than strategic planning. Furthermore, students who cope proactively are more likely to seek instrumental or emotional support from others. Yet, they cope proactively to a greater extent than they make use of instrumental or emotional support seeking. The study’s results do not indicate that a student’s home country or university play a role in affecting his or her use of a proactive coping style. Additionally, international students do not struggle more than local students to cope proactively, nor do they rely more on social support for assistance in daily challenges. A number of implications for universities concerning proactive coping can be gathered from these results, as well as recommendations for university management.

The fact that Southern African university students, regardless of whether they are local or international students, are employing proactive coping to such a large extent is an extremely encouraging finding. It suggests that the universities under study may well be succeeding at being positive socialising systems. However, universities can play a more formal and active role in ensuring that their students continue to make use of such a coping style. For example, students can be assisted to change the meaning of stressful situations if universities offer counselling services, present programmes on time management, burnout and Type A behaviour, and run student social support groups (Greenhaus et al., 2010). Gan et al. (2010) further suggest
that proactive coping programmes be integrated into the mental health education for students entering university, due to its correlation with successful adjustment to university life. They propose coping strategy and peer relationship workshops during university orientation so that students become aware of proactive coping’s use in enhancing personal growth and dealing with stressors. Students should also be assisted in preparing a variety of skills that will allow them to deal with various university challenges, as well as be shown how to develop their personal resources that will assist them in overcoming academic challenges such as examinations (Gan et al., 2010). Indeed, according to Reuter and Schwarzer (2009), proactive coping is initiated when challenges or visions, as well as perceived potential for mastery or growth, exist.

According to Snyder et al. (2011), a more intentional focus on ensuring that universities are developed into positive socialising systems through integrating the development of human strengths may enhance the value that students and society gain from tertiary education. For example, self-efficacy is a major resource that students need to possess in order to effectively cope proactively. As stated by Bandura (1997, p. 184), “those who enter adulthood poorly equipped with skills and plagued by nagging doubts about their capabilities find many aspects of their adult life aversive, full of hardships, and depressing”. Students who do not possess self-efficacy will question whether they are capable of completing tasks effectively and will make poor use of their skills (Eisenberger et al., 2005). This will thus decrease their performance at university. These authors also mention that students with low levels of self-efficacy may request adult intervention before attempting to improve the quality of their work, because they have no strategies to assist them in retrieving, processing or making use of information. However, by instructing students in developing strategies to improve their levels of self-efficacy, they will be in a position whereby they can improve the way that they use their abilities (Eisenberger et al., 2005). The researcher notes that they would consequently be more equipped to cope proactively. Students must be equipped with the knowledge and resources to grow personally and reach their goals. As stated by Tomlinson (in Eisenberger et al., 2005, p. vi), “to
ensure each learner’s access to personal excellence, we must come to understand how to meet each learner as he or she comes to us, and help that learner grow as far and as fast as possible”.

Universities would benefit from adhering to the guidelines set by Snyder et al. (2011, pp. 385-415) for “positive schooling”, which entails an approach to education that emphasises a foundation of trust, care and respect for diversity, in which educators develop tailor-made goals for students that promote learning and then work with them to grow their plans and motivation in order to reach their goals. The researcher highlights that such strategies by universities would further enhance students’ uses of a proactive coping style, because goal-setting and self-regulatory goal attainment are aspects of proactive coping. ‘Positive schooling’ would also involve instilling hope in students and would thereby contribute to society at large (Snyder et al., 2011).

Social support is an important resource necessary for individuals to cope proactively. Due to the fact that it was found that proactive coping increases when individuals seek both emotional and instrumental support, it can be recommended that universities make support services available to students so that they can receive assistance when dealing with potential stressors or receive help in formulating goals or overcoming challenges. This is confirmed by Greenglass et al. (2006), who state that if the numbers of support providers are increased (ensuring that both the emotional and instrumental support needs of individuals are met), then there should also be an increase in the number of proactive coping strategies that are exhibited by individuals. Social network building can be used as an effective proactive coping strategy, as these networks can serve to accompany and protect students throughout their time at university, especially when difficulties emerge (Reuter & Schwarzer, 2009).

The researcher proposes that universities should focus on developing student centres where students can seek advice, receive counseling and be provided with a listening ear for their problems. An example of a social support service
suggested by Hu and Gan (2011) would be career counsellors at universities, who can instruct students to forecast future stressful events, recognise that they are challenges, make the necessary preparations and then actively make use of constructive behaviour. Universities should make this social support available to both male and female students without the occurrence of bias or gender preconceptions, due to the fact that gender differences in the use of social support seeking were not confirmed in this study. Male students should therefore not be ostracised for wishing to make use of social support services offered by universities.

Universities such as those under study hold the additional responsibility of caring for their international students, who have to adjust not only to the jump from high school to tertiary education, but in many cases also cope with living away from their families and friends and build up new social support systems. The researcher recalls when a student came to the office; timid, nervous and unable to communicate her needs effectively. Upon gentle probing it was discovered that this student is an international student living away from her home country, but had that month been diagnosed with HIV/AIDS. She felt unable to tell her new university friends due to fear of marginalisation or stigmatisation and did not wish to break the news to her parents and family telephonically. Due to having to keep this heartbreaking information to herself, her studies were suffering and she was not coping with university life. However, thanks to her university’s Student Counselling Centre, she has been able to receive assistance and therapy at no additional cost, which has resulted in an increase in her motivation levels and ability to cope with the challenges she is facing. This illustrates the vital importance of universities creating social support systems for their students to cope with life’s daily trials. As stated by Louw and Viviers (2010), individualised consideration will encourage individuals into higher levels of perceived social support.

Positively, it can be noted that the universities under study are already making such support services available to students. For example, part of the mission of UB’s Student Affairs Division is to “enhance personal and pastoral support for students, including provision of appropriate counseling, guidance and
recreational and social facilities” as well as to enhance the emotional well-being of students and provide an environment that builds social community (UB, 2008b). Furthermore, NMMU’s Student Counselling, Career and Development Centre strives to “connect with students in a personal way, that assists them to develop to their full potential” (NMMU, 2011d). They also specify that part of their mission is a preventive focus, through assisting students to effectively meet both their educational and life goals. It is clear, therefore, that these universities are providing the necessary assistance to help students cope proactively.

According to Reuter and Schwarzer (2009, p. 508), “stress in organisations is related to their culture and leadership, organisational structures, and developments”. Furthermore, leaders can embed beliefs, assumptions and values through, among others, what they pay attention to and control regularly; how they allocate resources; and what they deliberately teach, coach and role model (Schein, 2004). Thus, in the context of proactive coping and social support, the management of the universities under study should ensure that they allocate resources in terms of funds and staff members to assist students to handle stress, set goals and overcomes challenges, as well as provide services that students can turn to for emotional and instrumental support. This will ensure that they create a culture that proactively transforms stressed students into healthy students (as suggested by Reuter & Schwarzer, 2009).

University leadership should also take a deliberate stance on encouraging students to make use of the social support systems offered. Furthermore, communication from the top down is vital if universities are to let students and staff know that they are building a culture that supports personal growth and development of students. This is because as stated by Tierney (1988), individuals come to believe in their institutions through the way in which they communicate and interact with one another. Thus, universities can assist by making use of inspirational motivation, which according to Louw and Viviers (2010) will likely enhance the self-efficacy of followers as well as provide mental stimulation, both important to increase positive university outcomes.
such as heightened academic performance. As stated by Shonhiwa (2006), it is not helpful if goals are not communicated effectively, because individuals may not achieve anything if they have not been informed of what can be achieved. Therefore, the vision and mission statements formulated by university management must be communicated effectively to the students of the university. In addition, these statements cannot remain as mere words on a university’s website: they need to be implemented in practice through the actions of the leaders of the university; the programmes that are run; the words and actions of the academic staff; and so forth.

It is thus, above all, the responsibility of university management to create environments in which students can excel and learn to the best of their abilities. For example, NMMU has explicitly stated in their value of “Taking Responsibility” that they assume full responsibility for the achievement of both personal and institutional goals, also providing an environment that encourages students to take responsibility for their own endeavours (NMMU, 2011e). This acknowledges that they hold themselves accountable for ensuring students reach their full potential. The researcher thus recommends that they take the results of this study seriously if they wish for students to be able to handle stress and cope in a more proactive manner, and consequently reap the benefits of students doing so.

7.4 **Implications and recommendations for organisations**

Individuals spend large amounts of time at work and occupational stress is thus an important research area (Greenglass, 2002), because organisational stress is related not only to individuals’ health, satisfaction and career goals, but also to social relationships and organisational success (Reuter & Schwarzer, 2009). However, if one’s attempts to cope with this stress are unsuccessful, adverse consequences will be the result (Reuter & Schwarzer, 2009). For example, job performance and satisfaction may decline, burnout symptoms could emerge and accidents may take place (Reuter & Schwarzer, 2009). Additionally, these authors explain that social relationships at work may become tenser when one is stressed and there will be a greater chance
that one’s health may deteriorate, resulting in substance abuse, sleep problems or high blood pressure.

In order to cope with the business challenges of the 21st-Century, a new type of employee is required that engages in future-oriented behaviour, is flexible and responsive, and is a self-starter (Belschak & Den Hartog, 2010). Such proactive behaviour can be identified in individuals who employ a proactive coping style, and as has been shown in this study’s results, individuals from Southern African universities actively make use of this coping style. As already mentioned in Chapter One, a common source of recruiting new employees are such universities, in the form of graduates and interns (Phillips & Gully, 2012). Thus, the researcher notes that it would be beneficial for organisations to hire students from the universities under study if they wish to obtain employees who are future-oriented and will positively influence their work environments. This is because it has been found that proactive behaviour, when displayed by employees, is related to both personal and organisational positive outcomes (Crant, 2000).

Proactive coping specifically has been proven as an effective work-related stress coping strategy to deal with, for example, burnout (see Schwarzer & Taubert, 2002). Burnout is explained by Greenglass (2002) as a situation of emotional exhaustion that results from being involved in long-term work situations that take their toll on an individual emotionally. This author states that it consists of three dimensions, namely emotional exhaustion, cynicism and lower levels of professional efficacy. Proactive copers can deal with burnout because they possess personal resources such as being personally capable (self-efficacious), optimistic and healthy, thus being less susceptible to occupational stress (Greenglass, 2002) and better able to cope with work overload. This implies that if individuals accumulate resources that will assist in their personal development and growth, they will be less likely to burnout from an overload of stress, clearly a positive implication for organisations. As stated by Reuter and Schwarzer (2009), successful adjustment to work stress depends not only on the nature of the stressful situation but also on one’s available resources.
According to Kovacs (2007), employing successful coping strategies can improve both productivity and performance at work as well as health and well-being. The same author asserts that if an individual displays proactivity at work, he or she will strive for career improvement and will build up resources that will assist him or her in improving the quality of his or her performance. Such resources include additional skills, training, education or human capital, the accumulation of which will result in individuals preempting negative events and using these resources to proactively cope with the stressful situations (Kovacs, 2007).

Additionally, Greenglass (2002) cites research stating that if individuals make use of coping behaviours and strategies that emphasise problem-solving or mastery of situations, then positive outcomes and decreased distress are likely to occur. Proactive coping contributes to feelings of professional efficacy, indicating that those who cope proactively have higher senses of competence and professional accomplishment (Greenglass, 2002). Proactive coping has also been shown to mediate the effect of organisational support on positive effect (Greenglass, 2006). This author states that organisational support leads to greater levels of proactive coping, which in turn results in employees experiencing a greater zest for life, higher energy levels, fuller concentration spans and more pleasurable work engagement. Greater levels of proactive coping are also related to higher levels of vigour and self-regulation, which in turn leads to more independent functioning (Greenglass, 2006). This has important implications for organisations, as it demonstrates that if organisations provide support to their employees in the form of supportive social systems, then employees will subsequently cope more effectively with work-related stress and for this reason, display positive workplace behaviours. An organisation that employs human resources who are able to cope proactively will further benefit in terms of the increased wellness of their employees.

For this reason, organisations should wish to hire employees who cope proactively and should therefore recruit employees who actively employ such coping styles. Organisations should, for this reason, focus on recruiting
individuals from the universities under study, as they actively demonstrate such a coping style.

7.5 **Conclusion**

This chapter began by discussing the results stemming from this research, in order to provide the reader with a clear picture of the findings of the study. The discussion focused not only on correlations between the various PCI subscales, but also on gender, locality and age differences for the PCI subscales. The discussion then centred on whether national and institutional culture played a role in whether Southern African university students' make use of a proactive coping style, and looked at differences between this study's results and global proactive coping research. The chapter thereafter provided implications and recommendations not only for universities, but also for organisations who wish to employ students from universities.

To conclude this dissertation, the following chapter will deal with limitations of the study as well as recommendations for future research.
8.1 Introduction
The preceding chapters have outlined the relevant theory, methodology, results and discussion related to this investigation. The final chapter of this dissertation will therefore conclude the investigation by discussing the study’s limitations as well as possible areas for future research in the field of proactive coping.

8.2 Limitations of the study
One limitation of making cross-cultural comparisons, as done in this study, relates to the concept of homogeneity. If comparisons across cultures are to be taken seriously, then it is assumed that the culture in each country is homogenous. As explained by Usunier and Lee (2009), homogeneity implies that little diversity exists in a given country. SA, for example, is a culturally varied country and thus much diversity exists, suggesting little homogeneity. SA has many subcultures, implying groups that have different ethnic backgrounds, religions or languages that are different from the majority of the population (Francesco & Gold, 2005). The SA government has indeed recognised this diversity, such as by making 11 languages official. It is thus not probable that SA or any of the other countries under study are in fact culturally homogenous. Questions relating to culture were furthermore not directly asked in the questionnaire and for this reason, assumptions about the culture of respondents needed to be made. It must, therefore, be questioned as to whether one can make inferences about proactive coping cross-culturally if so much diversity within Southern African countries exists. The same can be said of universities, which according to Sporn (1996) have subcultures that arise from, for example, hierarchical positioning such as academics versus administrators. This author states that the beliefs and
values of subcultures can vary greatly, which results in difficulties of members to be motivated by belonging to the university and working in a way that is goal-oriented. However, subcultures have the potential to be unified if high levels of university identification are generated (Sporn, 1996). Thus, although it is probable that there was a lack of homogeneity across the cultures under study, it is hoped that national or university identification would have reduced these differences.

On the other hand, “cultural determinism” proposes that all behaviour is produced by culture, thus ignoring the effects of political, technological, economic and biological factors on individual behaviour (Francesco & Gold, 2005). However, this implies that culture comprehensively explains all behaviour, which is inaccurate due to the fact that industrialisation and other related variables also contribute to the behaviour of individuals but are distinct from culture (Francesco & Gold, 2005). Additionally, as mentioned by Greenglass (2002), it must be remembered that there are individual differences in how individuals cope with stress. Thus, a further limitation of this study is that culture is not the only explanation of behaviour. Although these results provide insight into how proactive coping is affected by national and institutional culture, it must be acknowledged that other factors can affect the behaviour of individuals too.

A further limitation of this study is that the sample was not balanced in terms of the various countries under study, which prevented reliable comparisons from being made. Specifically, the sample sizes for Namibia and Zambia were very small, thus preventing extrapolation to the wider populations of these countries. For this reason, although certain results were analysed based on data gathered from five different Southern African countries, sufficient sample sizes were only really gained from South Africa and Botswana. It is hoped that a greater response rate from other Southern African countries is gained in future research, so that reliable comparisons can be made.

The comments above highlight an unfortunate consequence of relying on individuals from other countries or universities in assisting researchers in
distributing questionnaires. The researcher gained a small number of responses from Namibia due to difficulties in gaining access to the entire student population of UNAM. In a similar manner, the researcher had originally hoped to have the questionnaire distributed to students from the University of Mauritius, but despite numerous emails to the Department of Management in the Faculty of Law and Management, nothing materialised in this regard. These questionnaire distribution difficulties reflect another limitation of this study.

The researcher acknowledges that other demographic variables should have been included in the questionnaire. Specifically, it would have been interesting to determine the level of study of the respondents; that is, whether they were in their first, second or third year of study and so on. It would be assumed that postgraduate students or those who have studied at one university for more than two years would have had more time to adapt to the institution’s culture than newer students. Comparing the relationship between length of study and proactive coping therefore indicates a limitation of this study as well as an area for future research.

Despite much research having been conducted on the PCI, the researcher questions whether it is the most appropriate instrument with which to measure proactive coping. Criticisms of the PCI were already discussed in Section 5.3.7 of this dissertation, even though Greenglass (2002, p. 58) concludes that the PCI “offers many possibilities for testing hypotheses relevant to increasing our understanding of the process of coping”. The researcher found it unclear why the measure is termed the Proactive Coping Inventory if only one subscale relates to proactive coping and can be used independently of the other subscales. Thus, different proactive coping instruments are proposed by the researcher, which will be discussed as recommendations in Section 8.3.1.

Proactive coping is by no means the only way of dealing with stress. According to Schlebusch (2000), due to the fact that stress is inevitable and cannot be avoided, individuals must learn to cope with stress through taking
control of situations in their lives, such as through changing one’s perceptions that produce stress. An individual’s thoughts can affect his or her emotions and behaviour either negatively or positively, but this can be improved by making use of cognitive restructuring (Schlebusch, 2000). Furthermore, this author explains that emotions link with one’s perception of a situation and can become unrestrained, in turn affecting behaviour and one’s response to stress. The researcher brings up the topic of perception, thoughts and emotions to highlight that there are many issues taking place within an individual that affect how stressed he or she feels at a particular moment. Thus, although it seems useful in theory to build up resources to be better equipped to cope with stress, in reality it is unlikely that an individual will never to be affected by stress at all. For example, certain situations might be perceived as being more stressful than others, perhaps making an individual doubt his or her capabilities to handle it (lowers levels of self-efficacy); negative thoughts might overwhelm an individual resulting in lower levels of optimism and thus less resistance to stress; and one’s emotions might run wild when certain events take place, often resulting in one not being willing to listen to the advice of one’s friends and family (that is, an individual might have a positive support structure but is not always willing to accept their help). According to Schlebusch (2000), when thoughts, perceptions and emotions fall out of a person’s control, powerlessness and thus an inability to cope occurs. Although individuals often cannot change or control what happens to them, what can be changed are the thoughts and feelings surrounding the stress and how it affects them (Schlebusch, 2000). Hence,

*The key to effective stress control is to change your perception, which affects how you think about the stress: that way your feelings, behaviour and your response to stress can change.*

Schlebusch (2000, pp. 114-115)

To conclude, although proactive coping suggests a different way of coping that could perhaps work to reduce stress in general in people’s lives, it must be remembered that no one can accurately predict how each individual will react to stressful situations because every person is different in the way he or she perceives, thinks and feels about situations. Thus, it is recommended that
while individuals focus on increasing the use of resources discussed in this dissertation, university students and employees should at the same time still be taught generic stress management techniques that will prepare them to cope when highly stressful situations arise for which they are not fully prepared. The discussion of such techniques is beyond the scope of this study, but the researcher recommends Schlebusch (2000) and Lehrer, Woolfolk and Sime (2007) for more discussion on suggested stress management techniques, such as avoiding overloading, spending time on things of importance, avoiding interruptions and procrastination, keeping a diary, being assertive, developing a problem-solving mode of thinking and developing a wellness programme at work (Schlebusch, 2000) as well as exercise therapy, yoga, cognitive therapy and abbreviated progressive relaxation training (Lehrer et al., 2007).

8.3 Recommendations for future research
A number of recommendations for future research can be made at the close of this study.

8.3.1 Future research using the PCI
One of this study’s important findings concerned the dimensionality of the PCI, with it being found that the PCI is comprised of two, not six, subscales. The researcher thus recommends that further research is conducted using the PCI to confirm this result using other samples within Southern Africa, as similar findings have been found by Roesch et al. (2009) outside of Southern Africa. The fact that the PCI is comprised of two subscales also indicates that it is possible that the PCI does not accurately measure proactive coping and instead measures Future-Oriented Coping. For this reason, the Proactive Coping subscale of the PCI might not be the best instrument to use to measure proactive coping.

Thus, because of this finding and also due to the PCI criticisms already discussed previously in this dissertation, the researcher proposes that a more focused proactive coping instrument be developed that includes subscales that measure self-efficacy and optimism, together with the PCI’s current
Proactive Coping, Instrumental Support Seeking and Emotional Support Seeking subscales. This is because the internal and external resources necessary for proactive coping would then be measured, in addition to general proactive coping-related items. The researcher suggests using items from the General Perceived Self-Efficacy Scale (GSE) to measure self-efficacy (Schwarzer & Jerusalem, 1995), together with the revised version of the Life Orientation Test (LOT-R) to measure optimism (LOT-R is comprised of six coded items, with the negative items being reversed so that all six items measure optimism), as mentioned by Lopes and Cunha (2008). As stated by Folkman and Moskowitz (2004), there is a need for measures to be developed that evaluate distinctly future-oriented coping methods, in order to learn how individuals manage to reduce any potential negative effects of future situations as well as maximise opportunities for their benefit.

Alternatively, the researcher observes that the Proactive Competence Scale (PCS) developed by Bode et al. (2007) is a new and promising proactive coping measure. It is based on the five stages of proactive coping, as explained by Aspinwall and Taylor (1997) in Section 2.6 of this dissertation. A four-point Likert scale is used to measure 21 items relating to whether respondents possess relevant proactive coping abilities. Four factors emerged from principal component analysis, namely Realistic Goal Setting, Use of Feedback, Future Appraisal and Use of Resources, all of which showed good reliability (Bode et al., 2007). Hence, this views proactive coping as a set of competencies as opposed to a relatively stable behavioural preference or disposition. The researcher therefore recommends that future research in Southern Africa makes use either of this measure, or the revised PCI explained above. The use of such measures could also be used in conjunction with a semi-structured interview, to capture those elements that might not be captured in a single, standardised checklist of coping responses (Ouwehand, de Ridder & Bensing, 2006).

8.3.2 Training individuals to cope proactively

Hofstede and Hofstede (2005) explain that certain patterns of behavior are learned in early childhood, when individuals are most prone to absorbing new
information. For example, self-efficacy has been described as a learned pattern of human thinking rather than being genetically endowed, and learned optimism has its roots in the external environment (Snyder et al., 2011). Furthermore, children are exposed in early childhood to individuals who influence their skill development regarding anticipating and coping with stress (Bandura, 1986, in Aspinwall & Taylor, 1997). The researcher notes that individuals will therefore differ in the degree to which they learn and practice proactive coping skills, as this depends on the personal environment in which they were brought up. This is confirmed by Aspinwall and Taylor (1997), who state that certain aspects of proactive coping behaviours are taught primarily in one’s family unit, for example, organisational skills or health practices such as exercising. Coping traits and dispositions, however, are not easily modified due to the fact that they are relatively enduring and stable characteristics of an individual, especially when the interventions used to change these traits are brief in nature (Folkman et al., 1991). Yet, coping processes are more easily able to be changed, such as through counseling, education and psychotherapy (Folkman et al., 1991). Can an individual then be taught to improve his or her proactive coping processes, and if so, at what stages in his or her life would this type of training be most effective?

It is known that proactive coping behaviours can be taught at school level. Schools may influence the development of proactive coping skills as they teach students how to plan and enact activities, gather and organise information and finish projects by due dates (Aspinwall & Taylor, 1997). This increases learners’ time management and organisational skills, as well as their ability to use support networks. However, Aspinwall and Taylor (1997) also propose that other environments that develop proactive coping skills can be created. Characteristics of such environments might include opportunities for reflection, an emphasis on personal responsibility and control, as well as chances to practice skills that assist individuals to cope proactively (Aspinwall & Taylor, 1997). Crant (2000) also mentions that environmental change may play a role in proactive behaviour. Thus, the researcher notes that if organisations create environments in which proactive coping is encouraged,
they might find that the attitudes and behaviours of their employees might be altered as a result.

This is supported by Greenglass (2002), who mentions that it is possible to develop both social and individual programmes at an organisational level that aim to prevent individuals from developing burnout, which will enhance their quality of life. Such programmes would focus on positive skill development (such as self-determination and coping), as well as both professional and personal enhancement [Greenglass, 2002]. Teaching individuals to manage work-related stress through proactive coping measures would reduce distress and increase feelings of professional competence (Greenglass, 2002). Indeed, Folkman and Moskowitz (2004) note that future-oriented coping (including anticipatory, preventive and proactive coping) should be included in psycho-educational or cognitive-behavioural interventions. These comments suggest that proactive coping could be taught through training interventions with adults, thus showing potential to improve employee behaviours. In an organisational context, such training should be in line with an individual’s cultural background as well as with his or her individual experiences, implying that managers should recognise intracultural variations (Earley, 1994).

From the above, the researcher suggests that an interesting area for future study would be to investigate whether it is possible to train adults to be more proactive in the way they cope with stress. Indeed, Adebayo et al. (2008, p. 452) have stated that there is a need to “teach appropriate strategies to promote the use of self-regulatory skills (proactive coping) among occupants of multiple roles”. Furthermore, Hu and Gan (2011) mention that proactive coping can be taught, learned and shaped in given situations. Initial results in this regard are promising. Bode et al. (2007) have tested a brief educational programme that was based on PCT, in which 158 men and women between the ages of 50 and 75 took part in a four-session group intervention. Questionnaire data was gathered at the start of the programme, after completion, as well as three months after the intervention. It was found that the programme significantly increased proactive coping competencies, which remained stable three months post-intervention. No negative side effects such
as worrying or negative mood were evident. Those participants who formulated personal goals in concrete terms were found to benefit the most from the intervention. It was concluded that brief educational programmes can improve competencies that assist future-orientated self-regulation in middle- to late-adulthood (Bode et al., 2007).

It is proposed by the researcher that similar interventions be tested in different demographic samples, specifically in Southern Africa, to determine whether such educational programmes would prove useful in increasing the use of proactive coping. These interventions would assist individuals in developing proactive coping strategies that follow on from realistically perceiving future events (Davis & Asliturk, 2011).

8.3.3 Proactive coping and its relationship to other sources of culture

In Chapter Three, the various sources of culture were displayed in Figure 3.2. This particular study looked at the relationship between proactive coping and three of these mentioned sources of culture; namely nationality, education (general) and sex. It would be beneficial to add to the current body of proactive coping knowledge by exploring the relationship between proactive coping and ethnic group, corporate/organisational culture, language, religion or profession (specialised education), to name a few. Ethnic groups are of specific interest in Africa, due to the many ‘cross-border’ cultures present in particular in Southern African countries. According to the U.S. Department of State: Bureau of African Affairs (2010), who list information relating to all of the world’s countries, examples of the largest ethnic groups found in the countries in this study include the Tswana group in Botswana (79% of population), Ovambo group in Namibia (50% of population), black African in SA (79%) and Shona group in Zimbabwe (71% of population). English is an official language in all four of these countries, as is Christianity the predominant religion. In all four countries, though, many other languages are spoken (such as Setswana, Afrikaans, isiXhosa, Shona, Ndebele or Oshivambo) and religions include traditional African/indigenous beliefs as well as Islam, Judaism and Hinduism.
It can be hypothesised that differences in proactive coping will occur between individuals in each of the sources of culture mentioned above. Although individuals may live in the boundary of one particular country, this does not mean that they are free of the influence of other cultural factors. Individuals internalise the way that they perceive their society to be organised. This perception of organisation is reflected in the view they have of themselves relative to others in their culture: individuals within a society respond subconsciously and positively to their membership in the society (Usunier & Lee, 2009). Thus, proactive coping should be investigated from the viewpoint of the various cultural groups to which individuals belong.

8.3.4 Proactive coping and its relationship to other constructs

It has been mentioned in this dissertation that numerous studies have investigated the relationship between proactive coping and various other related or relevant psychological or personality constructs, including self-efficacy, optimism, depression, self-blame, denial, life satisfaction, general well-being, anxiety, agreeableness and so forth. The researcher did not empirically investigate any such correlations in this study, but notes that research on the correlation between proactive coping and such constructs is lacking in Africa (just as research on proactive coping is lacking in general). For this reason, it can be recommended that in future studies, other scales such as the GSE, LOT-R, the Brief COPE coping inventory consisting of 28 items (Carver, 1997) and the General Burnout Questionnaire (Schaufeli, Leiter, Maslach & Jackson, 1996, in Greenglass, 2002) are distributed to respondents in order to broaden proactive coping research in Africa. This will assist in examining what unique coping strategies are best used in Southern African countries, as well as to investigate the characteristics of these constructs together with proactive coping in uniquely less-Westernised societies.

The researcher suggests that such research could result in the design of an empirically-tested model to illustrate the proactive coping process. This is due to the fact that the process model of stress and coping shown in Figure 2.5 and the theoretical model shown in Figure 2.7 are overlapping and have
seemingly not been empirically tested. This represents an area for future research.

8.3.5 Long-term measurement of proactive coping
Coping is process-orientated (see Section 2.4) and thus coping responses change over time. An interesting observation from Schwarzer and Taubert (2002) that follows on from this is that dynamic data should be collected that accounts for these changes, according to situations and responses to resources. The measurement of personal growth, proactive behaviours, positive reappraisals and positive emotions during stress adaptations should for this reason not continue to be measured using psychometric scales, whereby hypothetical situations or recollections of past events are required (Schwarzer & Taubert, 2002). Instead, possibilities are for computerised simultaneous assessment under real-life conditions to take place, or for a longitudinal measurement approach to be utilised as a form of continuous measurement (Schwarzer & Taubert, 2002). The researcher believes that such longitudinal research is imperative to add to the current body of coping research.

8.3.6 The relationship between proactive coping and proactive leadership
According to Schwarzer and Taubert (2002), both proactive and preventive coping reflect the mastery of future challenges and threats, both of which are approaches that demonstrate the innovative aspects of positive coping. Furthermore, these authors introduce the concept of “proactive leadership”, evidenced by preliminary research with German schoolteachers. It was found that when compared to reactive teachers, teachers high in proactive coping spent more time with their students, were more idealistic and judged their students on intra-individual changes as opposed to making social comparisons. This implies that they display more professional engagement. According to the study, they also experience less job burnout and perceive more challenges and less losses and threats. Thus, although actual empirical evidence on proactive leadership per se was not supplied by these authors, the teacher findings suggest that there are beneficial effects of proactive coping when individuals are in charge of others in a leadership context.
Specifically, Schwarzer and Taubert (2002) explain proactive leadership as a belief in the abundant potential of changes that can be made to improve an individual and his or her environment. It thus represents a personality characteristic with implications for action and motivation (Schwarzer & Taubert, 2002). When proactive leadership is used, goals are aligned with the leader’s vision and resources are mobilised to achieve a self-imposed, long-term mission (Schwarzer & Taubert, 2002). According to these authors, proactive leaders believe that sufficient resources exist to support the accomplishment of goals; take responsibility for their own growth and improvement; focus on solutions for problems, instead of focusing on who caused the problems; plan their paths of action according to their own values; have a vision; and create meaning in life through making every effort to achieve ambitious goals.

Hence, the researcher proposes that an interesting area for future research is a research study on the relationship between proactive coping and proactive leadership, to empirically deduce whether individuals in leadership positions who exhibit high levels of proactive coping do in fact exhibit the behaviours mentioned above.

8.3.7 The relationship between proactive coping, positive psychology and Positive Psychological Capital

The importance of optimism on proactive coping should encourage practitioners to de-emphasise the interventions aimed at changing negative expectancies, and to reinvigorate the work of the positive ones.


As early as 1990, it was written that “in an era of growing institutional competition for students and funding, an institutional image reflecting a positive culture and climate on a few key dimensions is often sought” (Peterson & Spencer, 1990, p. 5). According to the researcher, individuals who cope proactively might play an integral role in developing this positive
culture. Due to the fact that proactive coping emphasises the improvement of one's quality of life, it is seen as including elements of positive psychology (Greenglass, 2002). Indeed, as has already been mentioned in Section 2.5.4.1, proactive coping is a positive psychological construct (Roesch et al., 2009) that has its place in 21st-Century positive psychology (Snyder et al., 2011). According to Luthans and Youssef (2004, p. 151), positive psychology “redirects focus away from an almost singular emphasis on healing mental illnesses and pathologies, and toward psychology’s two forgotten missions: making people’s lives more productive and worthwhile, and actualizing human potential”. Positive psychology is emphasised by proactive coping because it decreases burnout and increases levels of professional competence through control coping and self-efficacy (Greenglass, 2002). Proactive coping makes use of a positive motivational approach, because proactive copers perceive situations as stimulating and challenging as opposed to risky and threatening (Greenglass, 2002). This is in agreement with Ruiselová and Prokopčáková (2010), who state that proactive coping is characterised by proactive motivation. Indeed, this form of coping integrates a positive approach to dealing with stress, because by focusing on improving the quality of one’s life, it incorporates components of positive psychology (Greenglass, 2002).

It is clear, therefore, that proactive coping is situated in the realm of positive psychology. However, to take this further, the researcher believes that a relationship exists between proactive coping and what Luthans and Youssef (2004) have termed “Positive Psychological Capital” (PPC). As can be seen in Figure 8.1 below, PPC is comprised of self-efficacy/confidence, hope, optimism and resiliency. These dimensions are also known as positive organisational behaviour (POB) capacities, with POB applying positively-oriented psychological capacities and human strengths to the organisational context (Luthans & Youssef, 2004). These POB capacities are collectively referred to as PPC.
The researcher notes that both self-efficacy and optimism from this model have already been mentioned as resources necessary for proactive coping to occur. As stated by Greenglass et al. (2006), proactive coping correlates with positive constructs such as a positive self-concept and optimism. Thus, do PPC dimensions such as self-efficacy and optimism actually lead to an individual making greater use of proactive coping? Alternatively, should proactive coping be included as a POB capacity? The benefits that proactive coping holds for organisations have already been discussed. Goal setting and goal pursuit, life improvement, personal growth and self-regulation are all emphasised when individuals place a greater emphasis on proactive coping (Schwarzer, 2011, in Snyder et al., 2011), and individuals who are employing
such strategies will certainly prove beneficial within the organisational context. For this reason, the researcher suggests that research be conducted into whether proactive coping could be included as a PPC dimension, or alternatively whether the PPC dimensions lead to individuals making greater use of a proactive coping style.

### 8.4 Conclusion

Proactivity is a complex phenomenon that has been found to have multiple causes and both personal and organisational outcomes, with individual differences and contextual factors playing a role in whether one engages in proactive behaviours (Crant, 2000). This dissertation focused specifically on proactive coping amongst Southern African university students. This focus was chosen because the general approach to coping has changed from reactive to proactive, due to the focus of coping shifting from a temporary reaction after a stressful event, to a future-orientated approach in which individuals are able to take preparatory steps to cope with anticipated stressors (Greenglass et al., 1999a). In this regard, proactive copers take action when they perceive that stressful events may take place, as opposed to passively reacting to a negative situation (Wu et al., 2008). Proactive coping thus involves initiating behaviour and perceiving risks as challenges, not threats (Greenglass, 2002), with proactive copers experiencing productive arousal and energy as opposed to strain (Reuter & Schwarzer, 2009).

The findings from this study are therefore of importance as they contribute to the body of empirically tested proactive coping knowledge, which has been expanding in terms of research conducted worldwide. A large multiethnic sample was used for this study, unlike previous studies (see Greenglass et al., 1999; Wu et al., 2008). The study was also one of the first of its kind to be conducted in a Southern African context. The results held important implications for university management in Southern Africa, and organisations hiring employees from universities would also benefit from taking note of these findings.
This investigation has therefore provided interesting and valuable insight into whether students from Southern Africa make use of a proactive coping style and whether this use of proactive coping is influenced by national and institutional culture. Not only has the study contributed to literature on proactive coping in Southern Africa, but it has also provided insight into an important research area, namely the use of proactive coping in a university context. Because some of the results were inconclusive, more research is required to fully explore this topic. Altogether, however, the researcher has gained meaningful knowledge through conducting this investigation, with the results providing a glimpse into how university students cope with stress. As summarised by Aspinwall (2005, p. 218),

A continued focus on the specific processes involved in linking current states to desired future states is likely to prove fruitful, both in terms of advancing our understanding of the processes involved and also in terms of developing applications designed to help people reach their goals.
Reference List


Greenglass, E.R. (2011). Personal communication, Professor of Psychology. York University, Ontario, Canada. 8 June.


Schwarzer, R. (2011). Personal communication, Professor of Psychology. Freie Universität, Berlin, Germany. 8 June.


University Students' Proactive Coping Levels

Page: 1 2 3 4

This research study investigates the proactive coping levels of students at tertiary institutions in southern African countries. To stand a chance to win the cash prize of ZAR 500, please complete all sections of the questionnaire. You will be prompted to enter your e-mail address on the last page.

1. Proactive coping subscale

Please indicate a response for all questions.

1.1 * I am a 'take charge' person.
1.2 * I try to let things work out on their own.
1.3 * After attaining a goal, I look for another, more challenging one.
1.4 * I like challenges and beating the odds.
1.5 * I visualise my dreams and try to achieve them.
1.6 * Despite numerous setbacks, I usually succeed in getting what I want.
1.7 * I try to pinpoint what I need to succeed.
1.8 * I always try to find a way to work around obstacles; nothing really stops me.
1.9 * I often see myself failing so I don't get my hopes up too high.
1.10 * When I apply for a position, I imagine myself filling it.
1.11 * I turn obstacles into positive experiences.
1.12 * If someone tells me I can't do something, you can be sure I will do it.
1.13 * When I experience a problem, I take the initiative in resolving it.
1.14 * When I have a problem, I usually see myself in a no-win situation.

2. Reflective coping subscale

Please indicate a response for all questions.

2.1 * I imagine myself solving difficult problems.

2.2 * Rather than acting impulsively, I usually think of various ways to solve a problem.

2.3 * In my mind I go through many different scenarios in order to prepare myself for different outcomes.

2.4 * I tackle a problem by thinking about realistic alternatives.

2.5 * When I have a problem with my co-workers, friends, or family, I imagine beforehand how I will deal with them successfully.

2.6 * Before tackling a difficult task I imagine success scenarios.

2.7 * I take action only after thinking carefully about a problem.

2.8 * I imagine myself solving a difficult problem before I actually have to face it.

2.9 * I address a problem from various angles until I find the appropriate action.

2.10 * When there are serious misunderstandings with co-workers, family members or friends, I practice before how I will deal with them.

2.11 * I think about every possible outcome to a problem before tackling it.
3. Strategic planning subscale

Please indicate a response for all questions.

3.1 * I often find ways to break down difficult problems into manageable components.

3.2 * I make a plan and follow it.

3.3 * I break down a problem into smaller parts and do one part at a time.

3.4 * I make lists and try to focus on the most important things first.

4. Preventative coping subscale

Please indicate a response for all questions.

4.1 * I plan for future eventualities.

4.2 * Rather than spending every cent I make, I like to save for a rainy day.

4.3 * I prepare for adverse events.

4.4 * Before disaster strikes I am well-prepared for its consequences.

4.5 * I plan my strategies to change a situation before I act.

4.6 * I develop my job skills to protect myself against unemployment.

4.7 * I make sure my family is well taken care of to protect them from adversity in the future.

4.8 * I think ahead to avoid
dangerous situations.

4.9 * I plan strategies for what I hope will be the best possible outcome.

4.10 * I try to manage my money well in order to avoid being destitute in old age.
University Students' Proactive Coping Levels

Page: 1 2 3 4

5. Instrumental support seeking subscale
Please indicate a response for all questions.

5.1 * When solving my own problems, other people's advice can be helpful.
   - Not at all true  - Barely true  - Somewhat true  - Completely true

5.2 * I try to talk and explain my stress in order to get feedback from my friends.
   - Not at all true  - Barely true  - Somewhat true  - Completely true

5.3 * Information I get from others has often helped me deal with my problems.
   - Not at all true  - Barely true  - Somewhat true  - Completely true

5.4 * I can usually identify people who can help me develop my own solutions to problems.
   - Not at all true  - Barely true  - Somewhat true  - Completely true

5.5 * I ask others what they would do in my situation.
   - Not at all true  - Barely true  - Somewhat true  - Completely true

5.6 * Talking to others can be really useful because it provides another perspective on the problem.
   - Not at all true  - Barely true  - Somewhat true  - Completely true

5.7 * Before getting messed up with a problem I'll call a friend to talk about it.
   - Not at all true  - Barely true  - Somewhat true  - Completely true

5.8 * When I am in trouble I can usually work out something with the help of others.
   - Not at all true  - Barely true  - Somewhat true  - Completely true

6. Emotional support seeking subscale
Please indicate a response for all questions.

6.1 * If I am depressed I know who I can call to help me feel better.
   - Not at all true  - Barely true  - Somewhat true  - Completely true

6.2 * Others help me feel cared for.
   - Not at all true  - Barely true  - Somewhat true  - Completely true
6.3 * I know who can be counted on when the chips are down.

6.4 * When I'm depressed I get out and talk to others.

6.5 * I confide my feelings in others to build up and maintain close relationships.
University Students' Proactive Coping Levels

Page:  1  2  3  4

7. Demographics

The following demographic variables will only be used for statistical purposes.

7.1 Age
*  
- 18-22
- 23-27
- 28-32
- 33+

7.2 Gender
*  
- Male
- Female

7.3 Country
* STUDYING in
- Botswana
- Namibia
- South Africa
- Mauritius

7.4 HOME country
- Angola
- Botswana
- Cameroon
- Democratic Republic of Congo
- Ethiopia
- Ghana
- Kenya
- Malawi
- Mauritius
- Namibia
- Rwanda
- Seychelles
- Sierra Leone
- South Africa
- Sudan
- Tanzania
- Uganda
- Zambia
- Zimbabwe
- Other

7.5 If 'Other', please specify:

7.6 If you wish to stand a chance to win the R500 (475 Botswana Pula; 500 Namibian Dollars) cash prize, please enter your email address:
A CROSS-CULTURAL INVESTIGATION INTO SOUTHERN AFRICAN UNIVERSITY STUDENTS’ PROACTIVE COPING LEVELS

Project Information Statement/Letter of Invitation to Universities

My name is Michelle Paddey and I am a Masters student at Nelson Mandela Metropolitan University (NMMU). I am conducting research on proactive coping under the supervision of Prof R.J. Snelgar (H.O.D., Department of Industrial and Organisational Psychology, NMMU). The RTI Committee has given approval to this research project and it thus meets the requirements of NMMU’s Research Ethics Committee (Human). The Ethics Clearance number granted by NMMU is H10 BUS IPH 14. I invite you to consider taking part in this research.

Aims of the Research
This research aims to:
- investigate the proactive coping levels of Southern African university students
- form a cross-cultural comparison between students from various African countries in order to evaluate whether national cultural differences occur for this construct
- form a cross-cultural comparison between students from three Southern African universities in order to evaluate whether institutional cultural differences occur for this construct

Significance of the Research Project
The research is significant because it will contribute to the body of knowledge on proactive coping by providing both national and institutional cross-cultural data on this construct.

Benefits of the Research to Universities
1. Dissemination of results to Southern African universities.
2. Recommendations on how to increase the levels of proactive coping in students, to assist them to self-regulate their actions, formulate goals, strive to achieve these goals and proactively manage future challenges.
Research Plan and Method
The Proactive Coping Inventory [PCI] (Greenglass, Schwarzer & Taubert, 1999), which has been used globally to measure proactive coping levels, will be utilised in this study. The PCI will be administered electronically to students from University of Botswana (UB), University of Namibia (UNam) and Nelson Mandela Metropolitan University (NMMU). Students from each university will be invited to complete the 52 items of the PCI in an e-mail containing an electronic link to the questionnaire. Only those who consent will participate: by completing the questionnaire, they will by implication be consenting to the study. Because the questionnaire is distributed, completed and captured electronically, no representatives from UB, UNam or NMMU are required to assist in data collection. All information collected will be treated in the strictest confidence and neither the universities partaking nor individual students will be identifiable in any reports that are written. Participants may withdraw from the study at any time without penalty. The role of the universities is voluntary and they may decide to withdraw their participation at any time without penalty. The data collected is not deemed to be of a sensitive nature and completing the questionnaire will not influence students in a negative manner. If a student requires support as a result of their participation in the questionnaire, steps can be taken to accommodate this.

University Involvement
Once I have received your consent to approach students to participate in the study, I will
- electronically send through a copy of the questionnaire
- obtain informed consent from participants.

Further information
Attached for your information is a copy of the e-mail that will be sent to participants containing the link to the questionnaire.

Invitation to Participate
If you would like your university to participate in this research, please complete and return the attached form.

Thank you for taking the time to peruse this information.

Michelle Paddey
Researcher
NMMU
+27-41-504-4675

Prof R.J. Snelgar
Supervisor
NMMU
+27-41-504-2364
A CROSS-CULTURAL INVESTIGATION INTO SOUTHERN AFRICAN UNIVERSITY
STUDENTS’ PROACTIVE COPING LEVELS

University Consent Form

I give consent for you to approach students at (UB / UNam / NMMU) to participate in the above-explained research project.

I have read the Project Information Statement explaining the purpose of the research project and understand that:

- The role of the university is voluntary.
- I may decide to withdraw the university's participation at any time without penalty.
- Students will be invited to participate and permission will be sought from them.
- Only students who consent will participate in the project.
- All information obtained will be treated in the strictest confidence.
- The students’ names will not be used and individual students will not be identifiable in any written reports about the study.
- The university will not be identifiable in any written reports about the study.
- Participants may withdraw from the study at any time without penalty.
- A report of the findings will be made available to the university.
- I may seek further information on the project from Michelle Paddey on +27-41-504-4675.

__________________________________________
Name

__________________________________________
Signature

__________________________________________
Date

Please return via one of the following methods:

Post to: Department of Industrial and Organisational Psychology
Nelson Mandela Metropolitan University
Room 0618 (A)
Main Building
Summerstrand South Campus
Port Elizabeth, South Africa
6031

Fax to: +27-41-504-2098
E-mail to: michelle.paddey@nmmu.ac.za
Dear Student,

You are invited to participate in a study to determine the proactive coping levels of students at tertiary institutions in Southern African countries. Proactive coping equips individuals to prepare in general for stressful events, which in an organisational context directly reduces negative outcomes such as depression, emotional exhaustion, cynicism, anger and absenteeism. Because many organisations source their employees from tertiary educational institutions, it is necessary to investigate whether students exhibit proactive coping behaviours, and are ready to enter the world of work equipped with the necessary proactive coping skills to succeed in the workplace.

By taking 10 minutes to complete the questionnaire, you stand a chance to win ZAR 500 in cash!

To take part, you will complete an electronic questionnaire to gather your responses. Please note that participation is completely voluntary and you may exit the questionnaire at any stage. All data obtained will be treated in a strictly confidential manner and will only be used for the purposes of the research. Feedback will be provided to all participants when the final research report is compiled. This study’s NMMU Ethics Clearance number is H10 BUS IPH 14.

Please click on the following link to complete the questionnaire:

http://www.nmmu.ac.za/websurvey/q.asp?sid=265&k=ukuamwpkom

Should you have any queries, please feel free to contact me.

Kind regards,

Michelle Paddey
Nelson Mandela Metropolitan University
Port Elizabeth, South Africa
michelle.paddey@nmmu.ac.za
+27-41-504-4675
Ref: UBR/RES/IRB/1189  26 September 2010

Ms Michelle Paddey
Nelson Mandela Metropolitan University
Port Elizabeth
South Africa

RE: PERMISSION TO CONDUCT RESEARCH WITHIN UNIVERSITY OF BOTSWANA

Project Title: “A cross-cultural investigation into Southern African University Students proactive coping levels”.

Please be advised that your research proposal has been granted exemption from research permit requirements since the study will only be based in laboratory settings at UB. It has been determined that the study falls in the area of Chemistry and no humans or animals will be involved. In conducting your study, you are however reminded to follow high ethical standards ensure that you handle issues of intellectual property rights appropriately as some new inventions may result from your project.

- **APPROVAL NUMBER**: UBR/RES/IRB/1189
  The above details should be used on all correspondence concerning this exemption.
- **INVESTIGATORS**: Ms Michelle Paddey
- **APPROVAL DATE**: 26 September 2010
- **EXPIRATION DATE**: This approval expires on 25 June 2011
  After this date, this project may only continue upon renewal. For purposes of renewal, a progress report to ORD. The report should be submitted one month before the expiration date.
- **REPORTING OF SERIOUS PROBLEMS**: All serious problems having to do with safety as well as any serious problems impacting on study quality and progress (whether expected or unexpected) must be reported to ORD within 10 working days.
- **MODIFICATIONS**: Prior approval is required before implementing any significant changes to the Protocol.
- **TERMINATION OF STUDY**: On termination of this study, a report has to be submitted to ORD.
- **QUESTIONS**: Please contact ORD ext 2911 or e-mail on paul.ndebele@mopipi.ub.bw.
- **Other**: Study has been exempted from the Govt Research permit requirement in terms of minute reference E/1/20/2 X (15) from MESD dated 24th September 2010. You may accordingly proceed with your study.

Kind regards.

Paul Ndebele
For Director, Office of Research and Development
ANNEXURE E
Additional tables relating to the relationship between age and PCI subscales / second-order factors

No statistically significant relationships occurred between any specific age groups for Strategic Planning, as can be seen from Tables E.1 (Scheffé’s test) and E.2 (mean differences).

Table E.1: Scheffé’s test; variable StrP according to age

<table>
<thead>
<tr>
<th>Age</th>
<th>18-22</th>
<th>23-27</th>
<th>28-32</th>
<th>33+</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-22</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23-27</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28-32</td>
<td>.365</td>
<td>.400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33+</td>
<td>.091</td>
<td>.120</td>
<td>.992</td>
<td></td>
</tr>
</tbody>
</table>

Table E.2: Descriptive statistics and Cohen’s d: StrP

<table>
<thead>
<tr>
<th>Age</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>18-22</th>
<th>23-27</th>
<th>28-32</th>
<th>33+</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-22</td>
<td>421</td>
<td>3.13</td>
<td>0.60</td>
<td></td>
<td>-0.24</td>
<td>-0.29</td>
<td></td>
</tr>
<tr>
<td>23-27</td>
<td>151</td>
<td>3.13</td>
<td>0.60</td>
<td>n.a.</td>
<td></td>
<td>-0.24</td>
<td>-0.29</td>
</tr>
<tr>
<td>28-32</td>
<td>21</td>
<td>3.37</td>
<td>0.44</td>
<td>n.a.</td>
<td>n.a.</td>
<td></td>
<td>-0.05</td>
</tr>
<tr>
<td>33+</td>
<td>29</td>
<td>3.42</td>
<td>0.57</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

No statistically significant relationships occurred between any specific age groups for Instrumental Support Seeking, as can be seen from Tables E.3 (Scheffé’s test) and E.4 (mean differences).
Table E.3: Scheffé’s test; variable ISS according to age

<table>
<thead>
<tr>
<th>Age</th>
<th>18-22</th>
<th>23-27</th>
<th>28-32</th>
<th>33+</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M=3.1820</td>
<td>M=3.3286</td>
<td>M=3.2917</td>
<td>M=3.3966</td>
</tr>
<tr>
<td>18-22</td>
<td>.078</td>
<td>.876</td>
<td>.312</td>
<td></td>
</tr>
<tr>
<td>23-27</td>
<td>.078</td>
<td>.995</td>
<td>.956</td>
<td></td>
</tr>
<tr>
<td>28-32</td>
<td>.876</td>
<td>.995</td>
<td>.944</td>
<td></td>
</tr>
<tr>
<td>33+</td>
<td>.312</td>
<td>.956</td>
<td>.944</td>
<td></td>
</tr>
</tbody>
</table>

A statistically significant relationship was found between the 18 to 22 year age group and 33+ year age group for Future-Oriented Coping, as seen in Table E.5 (p < 0.05 in Scheffe test).

Table E.4: Descriptive statistics and Cohen’s d: ISS

<table>
<thead>
<tr>
<th>Age</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>Above Diagonal: Mean Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>18-22</td>
</tr>
<tr>
<td>18-22</td>
<td>421</td>
<td>3.18</td>
<td>0.63</td>
<td></td>
</tr>
<tr>
<td>23-27</td>
<td>151</td>
<td>3.33</td>
<td>0.51</td>
<td></td>
</tr>
<tr>
<td>28-32</td>
<td>21</td>
<td>3.29</td>
<td>0.48</td>
<td>n.a.</td>
</tr>
<tr>
<td>33+</td>
<td>29</td>
<td>3.40</td>
<td>0.50</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

Below Diagonal: Cohen’s d

A statistically significant relationship was found between the 18 to 22 year age group and 33+ year age group for Future-Oriented Coping, as seen in Table E.5 (p < 0.05 in Scheffe test).

Table E.5: Scheffé’s test; variable FOC according to age

<table>
<thead>
<tr>
<th>Age</th>
<th>18-22</th>
<th>23-27</th>
<th>28-32</th>
<th>33+</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M=3.2248</td>
<td>M=3.2233</td>
<td>M=3.3891</td>
<td>M=3.4493</td>
</tr>
<tr>
<td>18-22</td>
<td></td>
<td>1.000</td>
<td>.345</td>
<td>.039</td>
</tr>
<tr>
<td>23-27</td>
<td>1.000</td>
<td></td>
<td>.374</td>
<td>.055</td>
</tr>
<tr>
<td>28-32</td>
<td>.345</td>
<td>.374</td>
<td></td>
<td>.965</td>
</tr>
<tr>
<td>33+</td>
<td>.039</td>
<td>.055</td>
<td>.965</td>
<td></td>
</tr>
</tbody>
</table>
This relationship was not practically significant though ($d < .20$), as deduced from Table E.6.

<table>
<thead>
<tr>
<th>Age</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>18-22</th>
<th>23-27</th>
<th>28-32</th>
<th>33+</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-22</td>
<td>421</td>
<td>3.22</td>
<td>0.43</td>
<td>-0.17</td>
<td>-0.23</td>
<td>-0.05</td>
<td></td>
</tr>
<tr>
<td>23-27</td>
<td>151</td>
<td>3.39</td>
<td>0.35</td>
<td>n.a.</td>
<td>-0.06</td>
<td>0.12</td>
<td></td>
</tr>
<tr>
<td>28-32</td>
<td>21</td>
<td>3.45</td>
<td>0.41</td>
<td>n.a.</td>
<td>n.a.</td>
<td>0.18</td>
<td></td>
</tr>
<tr>
<td>33+</td>
<td>29</td>
<td>3.27</td>
<td>0.41</td>
<td>0.11</td>
<td>n.a.</td>
<td>n.a.</td>
<td></td>
</tr>
</tbody>
</table>
ANNEXURE F
Additional tables relating to the relationship between national culture and PCI subscales / second-order factors

A statistically significant relationship occurs for Reflective Coping and Emotional Support Seeking between students whose home countries are Botswana and South Africa (p < .05), as seen in Tables F.1 and F.2.

Table F.1: Scheffé’s test; variable RefC according to home country

<table>
<thead>
<tr>
<th>Country H</th>
<th>Botswana (M=3.4517)</th>
<th>Namibia (M=3.4976)</th>
<th>South Africa (M=3.2822)</th>
<th>Zambia (M=3.2975)</th>
<th>Zimbabwe (M=3.3506)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Botswana</td>
<td></td>
<td>.997</td>
<td>.022</td>
<td>.880</td>
<td>.891</td>
</tr>
<tr>
<td>Namibia</td>
<td>.997</td>
<td></td>
<td>.373</td>
<td>.843</td>
<td>.873</td>
</tr>
<tr>
<td>South Africa</td>
<td>.022</td>
<td>.373</td>
<td>1.000</td>
<td>.960</td>
<td>.998</td>
</tr>
<tr>
<td>Zambia</td>
<td>.880</td>
<td>.843</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>.891</td>
<td>.873</td>
<td>.960</td>
<td>.998</td>
<td></td>
</tr>
</tbody>
</table>

Table F.2: Scheffé’s test; variable ESS according to home country

<table>
<thead>
<tr>
<th>Country H</th>
<th>Botswana (M=3.3794)</th>
<th>Namibia (M=3.1053)</th>
<th>South Africa (M=3.1299)</th>
<th>Zambia (M=3.3636)</th>
<th>Zimbabwe (M=3.0143)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Botswana</td>
<td></td>
<td>.638</td>
<td>.034</td>
<td>1.000</td>
<td>.190</td>
</tr>
<tr>
<td>Namibia</td>
<td>.638</td>
<td></td>
<td>1.000</td>
<td>.912</td>
<td>.995</td>
</tr>
<tr>
<td>South Africa</td>
<td>.034</td>
<td>1.000</td>
<td></td>
<td>.870</td>
<td>.945</td>
</tr>
<tr>
<td>Zambia</td>
<td>1.000</td>
<td>.912</td>
<td>.870</td>
<td></td>
<td>.727</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>.190</td>
<td>.995</td>
<td>.945</td>
<td>.727</td>
<td></td>
</tr>
</tbody>
</table>
A statistically significant relationship was observed for Instrumental Support Seeking between students whose home countries are Botswana and South Africa, as well as South Africa and Zambia (p < .05). This is shown in Table F.3.

Table F.3: Scheffé’s test; variable ISS according to home country

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Botswana</td>
<td></td>
<td>1.000</td>
<td>.023</td>
<td>.493</td>
<td>.992</td>
</tr>
<tr>
<td>Namibia</td>
<td>1.000</td>
<td></td>
<td>.550</td>
<td>.705</td>
<td>.995</td>
</tr>
<tr>
<td>South Africa</td>
<td>.023</td>
<td>.550</td>
<td></td>
<td>.041</td>
<td>.749</td>
</tr>
<tr>
<td>Zambia</td>
<td>.493</td>
<td>.705</td>
<td>.041</td>
<td>.430</td>
<td></td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>.992</td>
<td>.995</td>
<td>.749</td>
<td>.430</td>
<td></td>
</tr>
</tbody>
</table>

In terms of the second-order factors, no statistically significant relationships were observed for Future-Oriented Coping between any of the countries highlighted (p > .05), as seen in Table F.4 below.
A statistically significant relationship does however occur for Support Seeking between students whose home countries are Botswana and South Africa. This is illustrated in Table F.5, with p < .05.

Table F.4: Scheffé’s test; variable FOC according to home country

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Botswana</td>
<td></td>
<td>.981</td>
<td>.115</td>
<td>.573</td>
<td>.940</td>
</tr>
<tr>
<td>Namibia</td>
<td>.981</td>
<td></td>
<td>.408</td>
<td>.484</td>
<td>.843</td>
</tr>
<tr>
<td>South Africa</td>
<td>.115</td>
<td>.408</td>
<td></td>
<td>.963</td>
<td>.986</td>
</tr>
<tr>
<td>Zambia</td>
<td>.573</td>
<td>.484</td>
<td>.963</td>
<td></td>
<td>.913</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>.940</td>
<td>.843</td>
<td>.986</td>
<td>.913</td>
<td></td>
</tr>
</tbody>
</table>

Table F.5: Scheffé’s test; variable SS according to home country

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Botswana</td>
<td></td>
<td>.944</td>
<td>.012</td>
<td>.939</td>
<td>.573</td>
</tr>
<tr>
<td>Namibia</td>
<td>.944</td>
<td></td>
<td>.960</td>
<td>.781</td>
<td>.993</td>
</tr>
<tr>
<td>South Africa</td>
<td>.012</td>
<td>.960</td>
<td></td>
<td>.282</td>
<td>1.000</td>
</tr>
<tr>
<td>Zambia</td>
<td>.939</td>
<td>.781</td>
<td>.282</td>
<td></td>
<td>.505</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>.573</td>
<td>.993</td>
<td>1.000</td>
<td></td>
<td>.505</td>
</tr>
</tbody>
</table>
ANNEXURE G

Additional tables relating to the relationship between institutional culture and PCI subscales / second-order factors

A statistically significant relationship occurred for Reflective Coping between students studying at UB and NMMU, as well as UNAM and NMMU (p < .05). This is shown in Table G.1.

Table G.1: Scheffé’s test; variable RefC according to university

<table>
<thead>
<tr>
<th>University</th>
<th>UB M=3.4525</th>
<th>UNAM M=3.4737</th>
<th>NMMU M=3.2839</th>
</tr>
</thead>
<tbody>
<tr>
<td>UB</td>
<td></td>
<td>.969</td>
<td>.004</td>
</tr>
<tr>
<td>UNAM</td>
<td>.969</td>
<td></td>
<td>.037</td>
</tr>
<tr>
<td>NMMU</td>
<td>.004</td>
<td>.037</td>
<td></td>
</tr>
</tbody>
</table>

A statistically significant relationship occurred for Instrumental Support Seeking between students studying at UNAM and NMMU (p < .05). This is illustrated in Table G.2.

Table G.2: Scheffé's test; variable ISS according to university

<table>
<thead>
<tr>
<th>University</th>
<th>UB M=3.3494</th>
<th>UNAM M=3.5395</th>
<th>NMMU M=3.1867</th>
</tr>
</thead>
<tbody>
<tr>
<td>UB</td>
<td></td>
<td>.250</td>
<td>.058</td>
</tr>
<tr>
<td>UNAM</td>
<td>.250</td>
<td></td>
<td>.002</td>
</tr>
<tr>
<td>NMMU</td>
<td>.058</td>
<td>.002</td>
<td></td>
</tr>
</tbody>
</table>

A statistically significant relationship also occurred for Emotional Support Seeking between students studying at UB and NMMU (p < .05), as displayed in Table G.3.
Table G.3: Scheffé’s test; variable ESS according to university

<table>
<thead>
<tr>
<th>University</th>
<th>UB (M=3.3636)</th>
<th>UNAM (M=3.2737)</th>
<th>NMMU (M=3.1169)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UB</td>
<td></td>
<td>.796</td>
<td>.008</td>
</tr>
<tr>
<td>UNAM</td>
<td>.796</td>
<td></td>
<td>.399</td>
</tr>
<tr>
<td>NMMU</td>
<td>.008</td>
<td>.399</td>
<td></td>
</tr>
</tbody>
</table>

In terms of the second-order factors, a statistically significant relationship was observed for Future-Oriented Coping between students studying at UB and NMMU (p < .05), as seen in Table G.4 below.

Table G.4: Scheffé’s test; variable FOC according to university

<table>
<thead>
<tr>
<th>University</th>
<th>UB (M=3.3307)</th>
<th>UNAM (M=3.3523)</th>
<th>NMMU (M=3.2159)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UB</td>
<td></td>
<td>.962</td>
<td>.049</td>
</tr>
<tr>
<td>UNAM</td>
<td>.962</td>
<td></td>
<td>.134</td>
</tr>
<tr>
<td>NMMU</td>
<td>.049</td>
<td>.134</td>
<td></td>
</tr>
</tbody>
</table>

A statistically significant relationship also occurs for Support Seeking between students studying at UB and NMMU, as well as at UNAM and NMMU. This is illustrated in Table G.5, with p < .05.

Table G.5: Scheffé’s test; variable SS according to university

<table>
<thead>
<tr>
<th>University</th>
<th>UB (M=3.3565)</th>
<th>UNAM (M=3.4066)</th>
<th>NMMU (M=3.1518)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UB</td>
<td></td>
<td>.907</td>
<td>.010</td>
</tr>
<tr>
<td>UNAM</td>
<td>.907</td>
<td></td>
<td>.035</td>
</tr>
<tr>
<td>NMMU</td>
<td>.010</td>
<td>.035</td>
<td></td>
</tr>
</tbody>
</table>