THE PSYCHOFORTOLOGY OF FEMALE PSYCHIATRIC OUT-PATIENTS LIVING
WITH MOOD AND ANXIETY DISORDERS

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Each woman is different. Each woman’s pain has its own history, its own roots – and its own solution… We must stop treating women as a homogeneous group, expecting one solution for all, one analysis for all. We do not need either to celebrate or deny differences, whether between women, or between women and men. We share a lot as women, but as individuals we cannot be subsumed under some category, some all-encompassing label that predicts that our experiences will all be the same. Each woman’s experience is still unique to her.

(Department of Health, 2005)
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Abstract

An overview of recent literature indicates that mood and anxiety disorders are the most prevalent of all psychiatric disorders. Depression and anxiety are estimated to be two of the most important causes of disease burden in the world and appear to be more prevalent among women than men. A skewed distribution exists in mood and anxiety research with limited research being done into the area of gender, more specifically females with these disorders. The present study therefore intended to explore and describe the psychofortology of female psychiatric out-patients living with mood and anxiety disorders. An exploratory descriptive research design was used and participants were selected by means of non-probability purposive sampling. The sample consisted of 60 female psychiatric out-patients who were selected for inclusion based on predetermined inclusion criteria. Data were gathered through the administration of a biographical questionnaire, Hammer and Marting’s Coping Resources Inventory (CRI), Antonovsky’s Sense of Coherence Scale (SOC-29), Diener, Emmons, Larson and Griffin’s Satisfaction with Life Scale (SWLS) and Kamman and Flett’s Affectometer-2 (AFM-2). These data were then analyzed according to the aims of the study by the use of descriptive statistics, inferential statistics and multivariate data analysis, namely, K-means cluster analysis.

The results indicated that the female psychiatric out-patients with mood and anxiety disorders were generally experiencing lower levels of coping and subjective well-being. The results indicated three clusters which appeared to have no statistical or practical significance to each other. The first cluster could be characterized as being “of relatively high psychofortology” and patients in this cluster presented with better coping and subjective well-being. The patients in cluster two could be characterized as being “of relatively average psychofortology” and the third cluster as being “of relatively low psychofortology”. The third cluster was characterized by patients who were experiencing poorer levels of coping and subjective well-being.
Key words: Psychofortology, coping resources, sense of coherence, satisfaction with life, happiness, mood disorders, anxiety disorders, females, out-patients.
Chapter 1

Introduction and Problem Statement

1.1 Chapter Preview

This chapter provides a general orientation to the present study. The rationale for this study is outlined and a concise theoretical overview is presented. Thereafter, an introduction to the broad aims of the study is provided and the chapter concludes with a delineation of the chapters that follow.

1.2 General Orientation to the Study

The context of this study is women’s mental health in South Africa. In particular, the setting is the community out-patient clinic in the Nelson Mandela Metropole. Mood and anxiety disorders have been regarded as two of the leading causes of disease burden in the world and contribute significantly to mental ill health in South Africa (Desjarlais, Eisenberg, Good & Kleinman, 1995). In numerous studies, research evidence suggests that women are twice as likely to present with a mood or anxiety disorder as men (Barlow & Durand, 2005). Disparate findings regarding the etiology of these disorders suggest that biological, psychological and social factors play a role in the higher prevalence of these disorders among women (World Health Organization, 2004). The experience of living with a mood and/or anxiety disorder, as well as the effects of such a disorder on an individual’s general psychological well-being forms the primary focus of this study.

In an attempt to gain insight into the way female psychiatric out-patients find the strength to live with and to endure and overcome the negative effects of living with a mood or anxiety disorder, this study investigated the female out-patients coping and subjective well-being within the emerging discipline of psychofortology. The discipline of psychofortology refers to not only the origins of psychological well-being, but also the nature, manifestations, and ways of enhancing psychological well-being and developing human capacities (Wissing & Van Eeden, 1997). The concept of psychofortology is introduced in this study as a framework for conceptualizing the coping and subjective well-being of the female psychiatric out-patients included in this study. The main aim of the
study was to explore and describe the psychofortology of female psychiatric out-patients living with mood and anxiety disorders. Psychofortology has for the purposes of this study been subdivided into two categories: 1) coping (coping resources and sense of coherence), and 2) subjective well-being (happiness and satisfaction with life).

The aforementioned section provided a general orientation to the study, as well as a description of the context in which the study occurred. In the section that follows, specific emphasis will be placed on the current context of women’s mental health in South Africa.

1.3 The Current Context of Women’s Mental Health in South Africa

Throughout the world, women are regarded as central in caring for families and communities, in production and reproduction. Yet, the health needs of women have historically been found to be a pariah in the health services and as a subdivision of fields such as obstetrics, gynaecology and family planning (Gomel, 1997). Women’s mental health needs extend across the life-cycle and require individual attention as well as greater treatment options and services.

Within the South African context, women’s mental health, in terms of policy and mental health services, has not yet established itself as an independent field. With the prevalence of certain mental health problems and mental illnesses, such as mood and anxiety disorders being approximately twice as prevalent in women as in men, there appears to be a dire need for the health needs of women to be addressed independently. A limited amount of research has been done in the field of women’s mental health in South Africa, and where necessary, international studies have been used to contextualize the issues and provide areas for further research (Dennerstein, Astbury & Morse, 1993). This research is however limited and does not portray an accurate reflection of the experiences of women in South Africa. The experiences of women with mood or anxiety disorders or any other mental illness in South Africa are unique and cannot be addressed solely through the use of international methods which may not be applicable in the South African context. The field of women’s mental health in South Africa is
an emerging field, but much work is yet required in terms of research and the development of gender-based mental health services.

1.4 Psychofortology as a Theoretical Model for Research Purposes

Psychology currently finds itself within a rapidly changing arena of health care, one of the first major transformations of which has been the emergence of a new definition of health, in which health is not merely perceived as the absence of disease, but rather as the presence of positive well-being. The dominant approach to research in traditional psychology is one of pathogenesis (Wissing & Van Eeden, 1997). Results emerging from this perspective, although offering great insights in experience and behaviour, are limited in their scope, since they focus on mental illness and vulnerabilities rather than on strengths and capabilities (Wissing & Van Eeden, 1997). A pathogenic appraisal may start a vicious cycle of stress, whereas a salutogenic appraisal can relieve negative emotions and provide opportunities for coping suitably with a situation (Smith, 2005). Strümppher (1995) argued that there were more issues than just the factors which influenced physical health and proposed a more embracing term fortogenesis, or origins of strength, as he was of the opinion that these resources were worthy of inclusion into the broader focus. The field of health psychology has moved increasingly away from the pathogenic orientation of the western medical model (Seligman & Csikszentmihalyi, 2000). The work of authors such as: Seligman, Antonovsky, Strümppher and Wissing and Van Eeden have contributed significantly to the focus on psychological strengths.

Since there is no specific domain in psychology to allot the study of psychological strengths, the neologism “psychofortology” or science of psychological strengths, has been suggested (Wissing & Van Eeden, 1997). The value of developing a science geared towards a better understanding of psychological well-being and strengths lies in the opportunities for capacity building, prevention and enhancement of the quality of life (Wissing & Van Eeden, 1997). A number of recent researchers have used fortogenic principles, such as coping and subjective well-being in their research models (Brown, 2002; Cairns, 2001; Gal, 2003; Hatuell, 2004; Van der Walt, 2002; Vorster, 2002). The coping
construct for the purposes of this study refers to coping resources and sense of coherence. Coping resources have been defined as those resources which individuals possess which enable them to handle stressors effectively, to experience fewer or less intense symptoms upon exposure to a stressor or to recover faster from exposure (Hammer & Marting, 1988). Coping resources thus act as a means of mediating the stress response and promoting wellness. A Sense of coherence is described as a dispositional orientation that is presumed to engender, sustain and enhance health as well as psychological strength (Strümpher, 2001). The second core construct of psychofortology, subjective well-being consists of happiness and satisfaction with life. Happiness has been the focus of attention in research for many years, yet no single definition encompasses all the aspects reported to constitute happiness (Crompton, 2005). Satisfaction with life constitutes the cognitive component of subjective well-being and refers to a global sense of satisfaction that the individual possesses about his / her life (Kamman & Flett, 1993).

The aforementioned section focused on the introduction of psychofortology and its use as a theoretical model to conceptualize and operationalize this study. Since this section is merely a brief introduction, psychofortology is dealt with in more detail in Chapter 2. The next section focuses on the rationale for the study.

1.5 Rationale for the Study

The prevalence of depression and anxiety in women is a well recognized phenomenon with numerous studies focusing on the reasons for the disparity in terms of prevalence between men and women (Dennerstein, Astbury & Morse, 1993). Although depressive and anxiety disorders have been a focal point of study for psychologists, psychiatrists, psychophysiological and psychopharmacologists for many centuries, research studies into these disorders have mainly been pathogenic in orientation. In these studies, emphasis has been placed on the etiology, diagnosis and treatment of these disorders with little reference to variables concerning the coping or subjective well-being of individuals living with these disorders.
Positive psychology and psychofortology are aligned in their focus on mental health rather than on mental illness (Crompton, 2005). This emphasis on strengths rather than deficits has been the primary reason this researcher has chosen the psychofortological approach as a theoretical model with which to conceptualize and operationalize this study. Seligman (1997) has stated that the field of positive psychology requires research into coping mechanisms and the subjective well-being of individuals.

Little research has been done on assisting women with mood and anxiety disorders to cope effectively with life’s difficulties (Dennerstein, Astbury & Morse, 1993). Women are involved in all aspects of life from child bearing to caring for aged parents and they face numerous stressors across the life-cycle. When faced with these stressors all women experience difficulty in coping and making the appropriate adjustments, yet for women with mood and anxiety disorders, these stressors, if not managed effectively, could result in relapse or severe psychological distress. The enhancement of coping and subjective well-being could thus play an essential role in buffering these women against severe stress and prevent relapse. Hence, the motivation for undertaking this study was to explore and describe from a fortogenic orientation, the coping and subjective well-being of female psychiatric outpatients living with mood and anxiety disorders.

In an online database search of NEXUS, Sabinet and EBSCOHost, no research products relating to this study were identified. Vorster (2002) reported that there is a dire need for investigation into subjective well-being in the South African context. This study therefore aims to add to the limited body of research available in this field and to assist in providing ways of developing the coping and subjective well-being of women with mood and anxiety disorders.

1.6 Aims of the Study

The study aimed to explore and describe the psychofortology of female psychiatric out-patients living with mood and anxiety disorders. These sub-constructs, namely: coping and subjective well-being were decided upon and constitute the construct of psychofortology for the purposes of this study. In view of the above, the broad aims of the study can therefore be described as: (a) to explore and
describe the coping (i.e., coping orientation (SOC) and coping resources) of female psychiatric out-patients living with mood and anxiety disorders, (b) to explore and describe the subjective well-being of female psychiatric out-patients living with mood and anxiety disorders and, (c) to explore and describe the patterns of coping resources, sense of coherence, satisfaction with life and happiness of female psychiatric out-patients living with mood and anxiety disorders. These three broad objectives are operationalized in terms of specific aims set out in Chapter 5, which describe the research design and methodology.

1.7 Outline of the Study

This chapter has sketched the context within which the study took place, provided the rationale for it and described the aims of the study. Chapter 2 provides a description of the positive psychology movement, with particular focus on the salutogenic and fortogenic orientations, in contrast to the traditional pathogenic paradigm. The chapter specifically focuses on the strengths, capacities and resources rather than traditional approaches and their emphasis on pathology. Chapter 3 presents and explores women and mental health from an international and national perspective. The gender disparity between men and women, as well as the differing mental health needs between the two genders is discussed. In Chapter 4, mood and anxiety disorders are discussed in terms of their presentation, structure, incidence, etiology and treatment. Chapter 5 describes the research approach and methods employed in the study. The sample’s demographic details are also included in this chapter in order to provide a more comprehensive background to the participants. The results of the study are then provided and discussed in Chapter 6. The study is concluded with Chapter 7 in which the implications of the findings, the limitations of the study and recommendations for future research are discussed.

1.8 Conclusion

In this chapter, a general orientation to the study was provided, as well as a brief overview of the context of women’s mental health in South Africa. The chapter further introduced the emerging science of psychofortology and its use as a theoretical model to conceptualize and operationalize this study.
The rationale for the study is provided with evidence to support the need for research from a fortogenic orientation in the field of women’s mental health and mood and anxiety disorders. Specific aims were outlined for the study, which focused on the psychofortogenic concepts of coping resources, sense of coherence, satisfaction with life and happiness. An outline of the subsequent chapters is provided with a brief description of each chapter. In the following chapter the emerging trend towards positive psychology is discussed.
Chapter 2

Positive Psychology and Psychofortology

2.1 Chapter Preview

The focus of the present study is the exploration and description of the coping (including concepts of coping resources and sense of coherence) and subjective well-being (including concepts of satisfaction with life and happiness) of female psychiatric out-patients living with mood and anxiety disorders. In seeking to investigate these theoretical concepts, the present study is fortogenic in orientation, thus focusing on the psychological strengths, capacities and resources of these female out-patients. In the present chapter, a description of both the pathogenic and a positive paradigm are provided with particular focus on the fortogenic orientation from which the theoretical concepts explored in the present study are derived.

2.2 The Pathogenic Paradigm

Foucault (1980), a key postmodern philosopher, stated that science in different periods develops what we might term regimes of truth about human nature. In the past, the field of psychology firmly aligned itself with the pathogenic orientation of the western medical model. The drawback however, to the alignment with this paradigm was that the other two fundamental missions of psychology – to make the lives of all people better and to nurture genius - were all but forgotten (Seligman & Csikszentmihalyi, 2000). Contemporary psychology thus gave priority to the conception of human beings as possessing faults and dysfunctions. This refers to what Seligman and Csikszentmihalyi (2000) called “medical-orientated psychology”. Saleebey (1997, p.4) in his own writings spoke of contemporary psychology as being “obsessed with and fascinated by, psychopathology, victimization, abnormality and moral and interpersonal aberrations”. The ideology of illness was thus a priori given priority in the field of psychology at the time and is still clearly evident in the emphasis placed on the abnormal in the examination of psychological phenomena today (Barlow & Durand, 2005).
The pathogenic orientation is generally directed at finding out why people fall ill and why they develop a particular disease (Abi-Hashem, 2001). Canon (1927), introduced the concept of homeostasis, which is central to the pathogenic paradigm. It implies that the normal state of the human organism is a relatively constant condition, which may vary somewhat but is maintained by various complex interacting regulatory mechanisms. This constant condition or homeostasis may be disrupted by pathogens and stressors and if the regulatory mechanisms do not function properly, disease sets in. This orientation leads researchers, practitioners and policy makers to concentrate on the specific disease diagnosed or on the prevention of specific diseases, particularly among high-risk individuals or groups (Antonovsky, 1987, 1996; Barnard, 1994; Strümpher, 1993, 2001; Wissing & Van Eeden, 1997; Witmer & Sweeney, 1992).

At the heart of the pathogenic paradigm is the assumption that diseases are caused by physical, biochemical, microbiological and psychosocial agents (Strümpher, 1993). Barnard (1994, p.136), called this orientation “an obsessive proclivity for deficit detecting to the exclusion of acknowledging strengths and resources”. Barnard (1994) also pointed out that much of the focus of this pathological thinking is directed at the past. Saleebey (1997, p.8), commented that:

A swelling conglomerate of business and professions, institutions and agencies, from medicine to pharmaceuticals from the insurance industry to the mass media, turn handsome profits by assuring us that we are in the clutch (or soon will be) of any number of emotional, physical or behavioural maladies.

The pathogenic paradigm with its emphasis on deficits has rarely focused on a client’s resilience, resourcefulness and capacity for renewal. Results from the pathogenic perspective although offering great insights into experience and behaviour, are limited in their scope since they focus on mental illness and vulnerabilities rather than on strengths and capabilities (Wissing & Van Eeden, 1997). Larson (2000, p.170), reported that in the field of development psychology, “we are often more articulate about how things go wrong than how they go right”. Strümpher (2002) reported that the
alternative of resilience is almost never considered. In contrast to the pathological interests in “what can go wrong”, there have also been ongoing attempts to discover “what can go right” (Department of Health, 2002). According to Strümpher (2002, p.22), “the pathogenic approach need not imply that positive psychologists are callous or naïve about the distress, pain, adversity, persecution and trauma suffered by these individuals”. However, what it does imply is the rejection of the ascendancy of psychopathology, of recovery movement beyond rational intents and boundaries of the social construction that those who suffer or are hurt, abused and victimized, will inexorably become lesser, vulnerable, maladjusted human beings (Saleebey, 1997). Positive psychology thus attempts to be an important corrective and demands of predominant mainstream psychology not to continue to marginalize or exclude, but to bring in again and revitalize the positive aspects of human nature: positive subjective experiences, positive individual traits and civic virtues (Seligman & Csikszentmihalyi, 2000). A more comprehensive description of the positive paradigm is provided in the next section.

2.3 The Positive Paradigm

At an American Psychology Conference in 1998, Martin Seligman, the then president of the association, reminded those present that the forgotten mission of psychology was to build human strengths and to nurture genius (Crompton, 2005). According to Crompton (2005), the approach of traditional psychologists was firstly to cure mental illness, secondly to find and nurture genius and thirdly to make normal life more fulfilling. The exclusive focus on pathology which dominated so much of the psychology discipline in the past resulted in a model of the human being lacking the positive features that makes life worth living. Research at the time focused on understanding how people survive and endure under conditions of adversity (Benjamin, 1992; Koch & Leary, 1985; Smith & Meyers, 1997) rather than obtaining insight into what makes life worth living or how normal people flourish under more benign conditions. According to Strümpher (2002), the fundamental idea of focusing on strengths rather than deficits has been around since time immemorial, but the development
of these ideas into theories about health and positive psychological and social functioning is a relatively new endeavour. Crompton (2005) suggested that most research was spent in finding ways to treat people in such a way that they moved from a state of negative emotionality to what might be described as a neutral position. The question of how to move an individual from this neutral position to a positive place of enhanced adaptability, well-being and happiness was not central to the traditional approach of psychology at the time. In order to remedy the relative neglect in these areas of traditional psychology, the positive psychology movement, founded in part by Seligman (1998), focuses on enhancing what is good and functional in life rather than correcting what is considered defective. Positive psychology revisits ‘the average person’ with an interest in finding out what works, what’s right and what’s improving. It asks “What is the nature of the efficiently functioning human being, successfully applying evolved adaptations and learned skills?” (Peterson & Seligman, 2004, p.5).

The positive psychology movement makes a radically different, appreciative set of assumptions and attributions about health, motivation, capacities, potential, and social functioning. The emerging paradigm of positive psychology is based on three assumptions, according to Strümpfer (2002), namely: (a) that stressors, adversity and other inordinate demands are inherent to the human condition, (b) that there are also sources of strength through which this condition can be endured and even transcended which Saleebey (1997), referred to as the “strengths perspective” and (c) that physical, emotional and social trials and tribulations can, for many, be propitious - stimulating continuous growth and strengthening as products of the discovery of capacities, insights and even virtues (Stümpher, 2001). Positive psychology is thus an attempt to urge psychologists to adopt a more open and appreciative perspective regarding human potentials, motives and capacities. Positive psychology therefore focuses on what constitutes the type of life for human beings that leads to the greatest sense of well-being, satisfaction or contentment and the “good life” (Crompton, 2005,p.3).

Positive psychology is thus an umbrella term for the study of positive emotions, character traits and enabling institutions which provide human beings with a sense of well-being, satisfaction and the
“good life” (Seligman & Steen, 2005). On an individual level, positive psychology focuses on studying positive individual traits and the more enduring behavioural patterns over time such as courage, honesty, persistence or wisdom. These traits and behavioural patterns include the capacity for love and vocation, courage, interpersonal skills, aesthetic sensibility, perseverance, forgiveness, originality, future-mindedness, high talent, and wisdom (Seligman & Csikszentmihalyi, 2000). Seligman and Csikszentmihalyi (2000) have further identified several personality characteristics that may be considered as the roots of positive life. These include among others, the capacity to love and be loved, altruism, spirituality, creativity, courage, happiness and wisdom. At a group or societal level, positive psychology focuses on the development, creation and maintenance of positive institutions such as healthy families, healthy work environments and healthy communities. Emphasis is also placed on the civic virtues and institutions that move individuals toward better citizenship such as: responsibility, nurturance, altruism, civility, moderation, tolerance and a work ethic. Linley and Joseph (2004), reported that positive psychology strives to promote optimal functioning across the spectrum of human functioning whether on an individual, group or societal level.

The positive psychology movement reminds researchers and clinicians alike that psychology is not just the study of pathology, weakness and damage; it is also the study of strengths and virtues. This approach may also re-orient psychology to its two neglected missions - making normal people stronger and more productive, and actualizing high potential (Seligman & Csikszentmihalyi, 2000). Lazarus (1992) has suggested that this new field of research could guide psychologists towards an understanding of how positive affect and emotion might help prevent emotional breakdown under severe and prolonged stress. It postulates that treatment involves not just fixing what is broken, but also nurturing what is best. The mission of positive psychology is to understand and foster the factors that allow individuals, communities and societies to flourish (Seligman & Csikszentmihalyi, 2000). The present study incorporates the principles of the positive psychology movement by focusing on the strengths, resources and capacities of female psychiatric out-patients living with mood and anxiety
disorders. The salutogenic orientation, which is one of the core constructs that has stimulated the growth of positive psychology is discussed in the following sub-section.

2.3.1 The Salutogenic Orientation

An important aspect of the emergence of the new paradigm of positive psychology was Antonovsky’s (1979, 1987, 1994) introduction of the construct of salutogenesis. According to Strümpfer (1993), Antonovsky, the late professor of Sociology of Health at Ben-Gurion University in Israel, is the clearest proponent of this orientation. Antonovsky (1979) developed the construct “salutogenesis” from the Latin word “salus” meaning health and the Greek word “genesis” meaning origins which proposed the study of health rather than disease. As early as 1947, the World Health Organisation defined health as “physical, mental and social well-being, not merely the absence of disease or infirmity” (World Health Organisation, 1958, p.1). The prevailing focus on disease began to dissipate and the salutogenic orientation became increasingly utilised by researchers as an alternative orientation facilitating an understanding of health, rather than disease or illness (Peterson & Seligman, 2004). While the pathogenic paradigm produced valuable insights into the causes of illness, as well as illness prevention, the exclusive emphasis on the nature of disease obscured relevant and insightful conclusions about the nature of health.

Strümpfer (1993) traced the origins of the salutogenic orientation in psychological literature to theorists such as: Super (1955), Maslow (1954), Rogers (1959), Rotter (1954), White (1959) and Deci (1975). Super’s (1955) distinction between hygiology and psychopathology was based on a salutogenic premise. Super (1955, p.4) referred to the term hygiology as “normalities of even abnormal persons, with locating and developing personal and social resources and adaptive tendencies so that the individual can be assisted in making more effective use of them”. Hence, Super viewed hygiology as the concern of counselling as opposed to clinical psychology, which is concerned with psychopathology. Similar ideas were raised by other personality theorists such as Maslow (1954, 1973), with his emphasis on the need for self-actualisation and humanistic psychology, as well as
Rogers’ (1959) concepts of the actualizing tendency and the fully functioning personality. Rotter’s (1954) emphasis on social learning could also be viewed as a stimulating source of salutogenic thinking. White’s (1959) concept of competence motivation was another contribution, particularly when it was developed further by Deci (1975) into a view of intrinsic motivation emphasising competence and self-determination. At the core of these ideas was an examination of what human beings are capable of, in spite of the odds that may be against them, a metaphor of health-salutogenesis rather than disease.

Strümpfer (1995) argued that there were more issues than just the factors which influenced physical health that needed to be considered in how people maintain good health. Following on from the salutogenic construct, Strümpfer (1995) expanded this construct to fortigenesis, which refers to “sources of strength”. This construct was seen to be more embracing and holistic than salutogenesis. In the sub-section that follows, the fortogenic orientation which evolved from within the framework of the positive psychology paradigm is discussed.

2.3.2 The Fortogenic Orientation

One could argue that to emphasize health as the core endpoint of a whole paradigm, is to limit the extent of the paradigm (Strümpfer, 1995). Strümpfer argued that Antonovsky was actually struggling with a much more encompassing problem than factors that influence health. Antonovsky appeared to be reflecting on “sources of strength” in general, as references to strength appeared in many of his writings (Strümpfer, 2001). Strümpfer (1993,1995), then suggested that on the basis of Antonovsky’s writings, and with reference to other constructs conceptualized to capture aspects of psychological health, strengths or wellness, a new orientation appeared to be emerging. In taking up Antonovsky’s (1987) suggestion that the concept of SOC could be applied to other areas of human functioning as well as physical health, Strümpfer (1993,p.12) proposed that “…a broader explanatory construct is called for in order to deal with the interaction between GRRs, the SOC and many areas of human experiences”. Strümpfer (2001) proposed the more embracing term of “fortogenesis”, or origins of
strength, as he was of the opinion that these resources were worthy of inclusion into the broader focus. The word fortogenesis is derived from the Latin word ‘fortis” meaning “strong” to refer to the origins of psychological strength. The construct of fortogenesis is thus more embracing and more holistic than salutogenesis. Strümpher’s new construct was recognized as being in line with calls in diverse fields of psychology for more attention to resilience, strengths, resources and capacities of people (Barnard, 1994).

Wissing and Van Eeden (1997) then expanded this concept and suggested a new sub-discipline, namely psychofortology, a psychology of survivorship, resiliency, encouragement and strength (Abi-Hashem, 2001). Since there is no specific domain in psychology to allot the study of psychological strengths, the neologism “psychofortology”, or science of psychological strengths, has been suggested (Wissing & Van Eeden, 1997). This discipline differed from the prevailing focus on deficits and focused its attention on the nature, dynamics and enhancement of psychological well-being (Wissing & Van Eeden, 1997). These authors contended that in this domain “not only the origins of psychological well-being should be studied, but also the nature, manifestations and consequently ways to enhance psychological well-being and develop human capacities” (Wissing & Van Eeden, 1997,p.5). Seligman and Csikszentmihalyi (2000), reinforced the emergence of this new orientation when they wrote about creating “a science of human strength” (p.8) and about “a perspective focused on systematically building competency” (p.10). The value of developing a paradigm geared towards a better understanding of psychological well-being and strengths lies in the opportunities for capacity building, prevention and enhancement of the quality of life (Wissing & Van Eeden, 1997).

The aim of the present study is to explore and describe the psychofortology of female psychiatric out-patients living with mood and anxiety disorders. Psychofortology forms the theoretical basis for the study. For the purposes of the present study, psychofortology is viewed as consisting of coping (Hobfoll, 2001) and subjective well-being (Diener & Lucas, 1999). In this particular study, coping consists of the constructs of coping resources and the sense of coherence and subjective well-being
comprises the constructs of satisfaction with life and happiness. The four constructs within psychofortology, namely, coping resources, sense of coherence, satisfaction with life and happiness are each individually discussed in the sub-sections that follow.

2.3.3 Core Constructs

2.3.3.1 Coping and Coping Resources

Despite the limited theoretical and empirical clarity as to the exact definition of the term stress (Sheridan & Radmacher, 1992), there are few areas in psychology that have received as much attention (Hobfoll, 1989). It has been widely recognized that the adverse health consequences of stressors depend to a large extent on the individual’s ability to cope with these stressors (Olff, Brosschot & Godaert, 1993). Coping is defined by Lazarus and Folkman (1984) as being able to constantly adapt cognitive and behavioural capacities to manage external and internal demands. In order to cope effectively, one requires resources that enable the individual to handle stressors more effectively, to experience fewer or less intense symptoms upon exposure to a stressor or to recover faster from exposure. In the following sub-section, coping resources, as well as the sense of coherence are discussed as components of coping.

*Coping Resources*

Different researchers have explored and defined coping resources in various ways (Lazarus & Folkman, 1984; Hobfoll, 1988a; Schafer, 1996). Modern views of stress emphasize that stress develops as the result of an imbalance between appraised demands and appraised resources (Matheny, Aycock, Curlette & Junker, 1993). This is depicted in the diagram below:

*Figure 2.1: Stress Model (Hewstone, Fincham & Foster, 2005, p.10)*
In the primary appraisal of an event, the decision is made whether it is irrelevant to an individual’s well-being, benign-positive or stressful (Hewstone, Fincham & Foster, 2005). Secondary appraisals then determine the cognitive resources available to cope with the event. Lazarus (1999, 2000) investigated people’s reactions to stressful situations and concluded that how people view or appraise stress cognitively, is more important than the actual amount of stress experienced. Matheny, Aycock, Pugh, Curlette and Canella (1986) suggested that increasing one’s coping resources should positively affect the equation between perceived demands and resources at the appraisal stage. Hobfoll (1989) maintained that the focus of stress models should be directed mainly to the resource side of the equation. In exploring optimal coping, Matheny, Aycock, Pugh, Curlette, and Canella (1986) also suggested that increasing one’s (coping) resources could positively affect the equation between perceived demands and resources at the appraisal stage. Thus, one is less likely to make an appraisal that a demand is sufficiently threatening to represent a stressor.

Some resources are important in helping individuals deal with stress while others are important in preventing demands from becoming stressors (Lazarus & Folkman, 1984). Thus, according to Hobfoll (2001), the role of coping resources is as a means of mediating the stress response and promoting wellness. In working quite extensively in the field of stress and coping, Hammer and Marting, based on their experience in conducting stress programmes and in working with individual clients, developed a model of understanding coping resources. For the purpose of the present study, the definition by Hammer and Marting (1988) will be used. Hammer and Marting (1988, p.2) defined coping resources as “those resources inherent in individuals that enable them to handle stressors more effectively, to experience fewer or less intense symptoms upon exposure to a stressor or to recover faster from exposure”. From the aforementioned definition, it becomes clear that the exploration of coping resources occurs with the fortogenic premise of focusing on the strengths and resources or capacities of people. This definition is further expanded on by Hammer and Marting (1988, p.6), in that resources are then viewed as predispositions that may be derived from genetic factors, environmental influences
and learned relationships. Coping resources can thus be derived from multiple sources which Hammer and Marting (1988) have conceptualized into five domains namely: cognitive, social, emotional, spiritual / philosophical and physical. The cognitive domain refers to the extent to which an individual has a positive sense of self-worth, positive outlook towards others and optimism about life in general. The degree to which an individual is embedded in his/her social networks and the amount of support that is available in times of stress forms the social domain. The emotional domain is characterized by the degree to which an individual is able to accept and express a range of affect based on the premise that a range of emotional responses aids in ameliorating the long-term negative consequences of stress. The spiritual/philosophical domain examines the degree to which an individual’s actions are guided by stable and consistent values from religious, familial, or cultural traditions or from a personal philosophy. The physical domain questions the degree to which an individual enacts health-promoting behaviours which are believed to contribute to increased physical well-being. Hobfoll (1989, p.518), has defined resources as “those objects, personal characteristics, conditions, or energies”. These resources include among others; mastery, self-esteem, locus of control, hardiness, learned resourcefulness, positive affect, socio-economic status and employment. Individuals with low resources have been described as vulnerable and constitutionally fragile (Kessler, 1979), while those with high resources have been characterized as resilient (Garuezy, 1985) and hardy (Kobasa, 1979).

A number of studies have examined the interplay between various types of coping resources available in the coping process. McCarthy, Lambert and Brack (1977) reviewed the literature on coping resources that distinguish between preventative and combative categories of resources. Preventative coping is aimed at preventing potential stressors and at building resources for resisting them. Combative coping resources are those resources that tend to be drawn on to alter or mitigate a stressor that is already being experienced (McCarthy et al., 1997). Preventative resources in a study by Curlette, Aycock, Matheny, Pugh and Taylor (1990) found resources such as confidence, self-directedness, acceptance of self, financial freedom and physical health to be mostly preventative in nature. On the
other hand, resources such as the ability to self-disclose, the use of tension-control strategies, problem-solving, the use of social support networks and physical fitness seemed primarily combative in nature. In another study by Anson, Carmel, Levenson, Bonneh, and Maoz (1993) a distinction was made in terms of personal resources and collective resources. Findings suggested that, although collective resources to some extent foster the development of personal resources, personal resources are more valuable in coping with recent life events. Moreover, in some situations, personal resources facilitate the recruitment of collective resources.

Coping resources play an important role in the prevention of potential stressors, the building of resources for resisting stressors and in using resources to alter or mitigate a stressor that is already being experienced. The importance of coping resources in enabling individuals to handle stressors more effectively, to experience fewer or less intense symptoms upon exposure to a stressor or to recover faster from exposure emphasizes the role of coping resources in mediating the stress response and promoting wellness. In the sub-section that follows, Antonovsky’s sense of coherence concept is also discussed as one of the core constructs of psychofortology as conceptualized for the purposes of this study.

**Sense of Coherence (SOC)/ Coping Orientation**

In 1965 John Kosa, Irving Zola and Aaron Antonovsky from the Harvard School of Public Health embarked on a research review of all empirical studies that related to social class and some measure of disease. This observation led to the first turning point in Antonovsky’s thinking and marked the germination of a new idea: “How do people respond differently when exposed to the same stressful situation?” (Antonovsky, 1979, p.3). In an attempt to conceptualize this question, Antonovsky (1972) developed the theory of breakdown in which he identified common facets to all forms of health. He then defined these common elements as generalized resistant resources (GRRs) in the case of health and resistance resource deficits in the case of disease (Antonovsky, 1972, 1979). GRRs are resources that can facilitate effective tension management in any situation. The term GRR refers to “a property of
a person, a collective or a situation which, as evidenced or logic has indicated, facilitates successful coping with the inherent stressors of human existence” (Antonovsky, 1996, p.25). In Antonovsky’s (1987) view, all GRRs facilitate “making sense out of the countless stressors with which we are constantly bombarded”. In providing these experiences repeatedly, they generate over time a sense of coherence (SOC).

Aaron Antonovsky (1974, 1979) presented a paper in 1968 in which he used the concept of resistance resources that subsequently led to his formulation of the core construct of his model, namely sense of coherence (SOC). Development and formulation of the SOC was then sparked by observation that certain commonalities existed between different GRRs. The SOC construct was developed by Antonovsky (1987) in an attempt to explain the manner in which individuals function successfully and cope with daily living, given the complex stressors that affect their daily lives, and progress towards health and well-being. Antonovsky (1987, p. 516), defined sense of coherence (SOC) as:

A global construct that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that one’s internal and external environments are predictable and that there is a high probability that things will work out as well as can reasonably be expected.

The individual will perceive the stimuli from the external and internal environment as structured and predictable (referred to as comprehensibility), he/she will perceive that resources are available to meet the demands posed by these stimuli (referred to as manageability), and that these demands are challenges worthwhile spending his / her energy on (referred to as meaningfulness). The three core components represented in the definition above are: comprehensibility, manageability and meaningfulness (Antonovsky & Sagy, 1986). These three concepts though unique, are intertwined and strongly related to one another. Antonovsky (1987) expanded on and described these components as follows:
1. Comprehensibility refers to the extent to which the person perceives the stimuli both from within and without as clear, ordered, structured and consistent information. As a result, the person feels that his/her perceptions make cognitive sense. There is also an assurance that stimuli encountered in the future will also be predictable, or at least ordered and explicable.

2. Manageability refers to the extent to which the person feels that the resources needed to meet the stimuli-imposed demands are available to him / her. These resources may include one’s own resources (GRRs) or those resources controlled by legitimate others. The person who presents as high on manageability will not feel victimized by events and will approach situations with the belief that the resources needed to cope are available to him / her.

3. Meaningfulness refers to the extent to which the person feels that life makes sense emotionally rather than cognitively. At least some of the problems and demands of living are felt to be welcome challenges motivating one to invest energy.

In childhood, the family context acts primarily to impede or facilitate the life experiences that shape the SOC. Further development of the SOC during adolescence is mainly influenced by the cultural and social-structural reality in which the adolescent spends most of his / her time (Antonovsky, 1987). According to Antonovsky, the central challenge confronting adolescents of all cultures during this stage is to “put one’s act together” (Antonovsky, 1987, p.101). During adulthood the individual’s location on the SOC continuum becomes more or less fixed as the individual becomes involved in more long-range commitments. These commitments may include commitments to: persons such as spouses and children, social roles and work. Antonovsky (1987) stated that it is especially the experience gained from work as a life role that reinforces or reverses the strength of the SOC that developed during adolescence. The term work in this sense does not refer to an organized occupation or career as we know it, but rather to housework which includes: raising children, cleaning, sharing the sorrow of neighbours in trouble (Antonovsky, 1987). Strümpher (1995) identified other aspects of successful living that could be directly related to the development of the sense of coherence of an individual, like productive
performance at work, career effectiveness, and rewarding marital, parental and other interpersonal relationships. An individual’s SOC thus develops as a function of their experiences in adolescence and early adulthood after which it becomes crystallized around the age of 30 years (Sagy, Antonovsky and Adler, 1990).

In his early writings, Antonovsky (1979) viewed the SOC as stable, and fundamental to an individual’s make-up. However, Antonovsky has recognized the dynamic nature of life experiences in shaping one’s sense of coherence (Post-White, Ceronsky, Kreitzer, Nickelson, Drew, Watrud, Koopmeiners and Gutknecht, 1996). There are four spheres of life which are considered essential to the strength of an individual’s SOC (Antonovsky, 1987). These four factors include work, family, leisure and community and have an effect on experiences of consistency, load balance and participation in socially valued decision-making.

1. Consistency refers to an individual’s need for consistent, stable, predictable and structured behaviours in different contexts. Consistency thus forms the basis of the comprehensibility component of the SOC (i.e., the cognitive component).

2. Load-balance refers to the perceived availability of resources to meet the demands placed on an individual. Someone with overload will feel that the available resources are inadequate to meet the demands placed on them. Someone with underload, on the other hand, experiences a lack of opportunity to actualize his / her potential or capabilities. Load balance thus represents the basis of the manageability (i.e., the instrumental) component of the SOC.

3. Participation in socially valued decision-making refers to the participation in choosing to undergo an experience, judging whether the rules of the game are legitimate and solving the problems and tasks posed by the experience (Antonovsky, 1987). Participation is the third type of life experience that contributes to the meaningfulness (i.e., emotional and motivational) component of the SOC concept.
One could thus suggest that life events such as those with which people have to deal on a daily basis
could alter the strength of the SOC in either direction. The extent of these three experiences is shaped
by the individual’s culture, historical antecedents and position in social structures such as work and
family. However, other factors such as gender, ethnicity, genetics and constitution also shape these life
experiences. Antonovsky (1996, p. 27), was of the opinion that “what matters is that one has a life
experience which leads to a strong SOC”; this in turn, allows one to “reach out” in any given situation
and apply the resources appropriate to that stressor.

High SOC individuals appear to enjoy a generally more positive outlook and this appears to assist
them in meeting life’s challenges more successfully. McSherry and Holm’s (1994) study identified low
SOC individuals as more psychologically distressed before a stressful situation and also found that they
maintain these greater levels of distress subsequent to the stressful experience as well. Furthermore,
low SOC subjects were also significantly less likely than high SOC subjects to believe that they
possessed the personal resources necessary to cope with the situation. Thus low SOC individuals
appraised the situation as more stressful and found it difficult to cope effectively. The SOC of an
individual therefore plays an important role in the location and movement of an individual’s state of
wellness along the health-ease / dis-ease continuum (Wolff & Ratner, 1999).

Research studies on sense of coherence within the international arena indicate that this concept has
gained more popularity and that the value of this concept is beginning to be understood (Compton,
2005). In Belgium, the sense of coherence of caregivers working with the demented elderly was
examined and the remarkable findings elicited by the study were incorporated into the Belgium Health
System (Baro, 1996). Within the South African context, authors such as: Du Toit (2000), Smith (2005),
and Walker (2000) have also explored the sense of coherence as a central component in coping with
adverse stressors. This section introduced the construct of a sense of coherence. The following section
introduces the construct of subjective well-being.
2.3.3.2 Subjective Well-being

The last decade has seen a dramatic increase in research on the construct of subjective well-being (Diener, 2000). The scientific study of subjective well-being has developed in part as a reaction to the overwhelming emphasis in psychology on negative states. Psychologists have become increasingly concerned with the positive end of the psychological well-being spectrum. Instead of focusing solely on factors that lead to disorders such as depression and anxiety which are the areas of focus in this study, researchers have begun to examine the antecedents and consequences of happiness, self-esteem, optimism and other indicators of positive well-being (Lucas, Diener & Suh, 1996). Subjective well-being is a broad category of phenomena that includes people’s emotional responses, domain satisfaction and global judgements of satisfaction with life. Diener, Suh, Lucas and Smith (1999) defined subjective well-being as a general area of scientific interest rather than a single specific construct. In the following section, satisfaction with life, as well as happiness, are discussed as components of subjective well-being. The implications of this conceptualization for the present study include defining and conceptualizing satisfaction with life and happiness within the broader context of subjective well-being.

Satisfaction with Life

A great deal of research has illustrated the separability of positive and negative affect (Diener & Emmons, 1984; Watson & Clark, 1997), with little research addressing the theoretical distinction between the affective components of subjective well-being and the cognitive judgements of satisfaction with life. Although the affective and cognitive aspects of subjective well-being both appear to be important, researchers have focused their attention on the measurement of affective well-being, as evidenced by the number of instruments that measure affect (Beck, Ward, Mendelson, Mock & Erbaugh, 1961; Kammon & Flett, 1983). Generally, the cognitive component of subjective well-being (satisfaction with life) has received less attention (Diener, Emmons, Carsten & Griffin, 1985). In a study by Andrews and Withey (1976), the construct of satisfaction with life was found to form a
separate factor from pleasant and unpleasant affect. Although satisfaction with life and happiness (i.e.,
the more affective dimension of positive functioning), intercorrelate and form a strong general
subjective well-being factor, they are not identical constructs (Andrews & Withey, 1976; Diener, 1994;
Lucas, Diener & Suh, 1996). Therefore, it is theoretically possible for a person who does not
experience much pleasant emotion still to be satisfied with his / her life as a whole and vice versa.
Campbell (1981) distinguished between happiness and satisfaction by claiming that satisfaction does
not possess the same spontaneous “lift-of-the-spirits” (p.16) quality as happiness does.

Definitions regarding satisfaction with life vary. Veenhoven (1991) stated that satisfaction with life
refers to the degree to which an individual judges the overall quality of his / her life as favourable.
Diener, Emmons, Larson and Griffin (1985) appear to agree and state that satisfaction with life
involves a cognitive judgemental process. In this process, individuals assess the quality of their lives on
the basis of their own unique set of criteria (Pavot & Diener, 1993). The definition posed by Strack,
Argyle and Swarz (1991), stated that satisfaction with life is a global assessment of the individual’s
total contextual estimate of life quality in various areas of life such as family life, housing, working
conditions, income, education, health and social security. Shin and Johnson (1978) defined satisfaction
with life as the global assessment of an individual’s quality of life according to his / her own selected
criteria. Satisfaction with life refers to an individual’s total contextual estimate of life quality in various
areas of life such as family life, housing, working conditions, income, education, health and social
security (Strack, Argyle & Swarz, 1991). From the definitions provided above, it is apparent that
satisfaction with life considers the person’s life as a whole and this holistic approach allows the
individual to assess or weigh their lives according to their own value systems. If the discrepancy
between these is small, the result is satisfaction. In turn if the discrepancy is large, there is
dissatisfaction with one’s life. Satisfaction with life is therefore an important component in the
subjective well-being of any individual.
International research in the area of satisfaction with life includes studies such as the work of Suh, Diener and Fujita (1996) in stressful events and subjective well-being, of which satisfaction with life forms a core construct as well as the work of Diener, Scollon, Oishi, Dzokato and Suh (2000) in positivity and the construction of life - satisfaction statements. In the South African context, studies conducted by Wissing and Van Eeden (1997), Vorster (2002), Phillips (2004) and Smith (2005) reflect a growing interest in the study of satisfaction with life across different sample populations. The affective component of subjective well-being will now be discussed by exploring the construct of happiness in the following sub-section.

Happiness

Diener (1984) reported that happiness has always been the focus of attention in the humanities and that the search for it has preoccupied great philosophers. Researchers have generally posited that happiness is difficult to understand because it can take on so many different meanings (Hewstone, Finchan & Foster, 2005). There are two general approaches when studying the topic of satisfaction with life and what is important for happiness (Crompton, 2005). Diener (1984), found that happiness and satisfaction depend on the sum of small pleasures and happy moments which he termed his bottom-up theory. The other approach, Diener (1984) termed his top - down theory which concerned a person’s manner of evaluating and interpreting experiences in a positive way. Variables associated with this approach include experiences of elation, joy, contentment, ecstasy and happiness (Diener, Lucas, Smith & Suh, 1999). Diener (2000), termed these pleasant affect and this formed part of an affective or positive component leading towards greater subjective well-being.

According to Crompton (2005), when researchers ask people about their happiness, they are asking them to report on their emotional state and how they feel about their world and themselves. Diener (1984) described happiness as the positive judgement outcome when an individual weighs up positive versus negative affect and it is considered to be the harmonious satisfaction of one’s desires and goals. With the numerous definitions available concerning happiness, Snyders and Lopez (2005) reported that
happiness theories could be divided into three groups: (a) need and goal satisfaction theories, (b) process or activity theories, and (c) genetic and personality predisposition theories. The first grouping suggests that a decrease in tension leads to happiness and that by moving towards a goal, individuals may attain subjective well-being. Happiness is therefore a desired end state to which all activity is directed (Snyders & Lopez, 2005). The second grouping suggests that happiness is obtained through a process rather than a single event and that it usually involves some form of activity which results in a desired result: happiness (Argyle, 2001). The third grouping on the other hand focuses on the possibility of a genetic predisposition to being happy or the possibility of having a personality pattern that would contribute to the individual’s happiness or lack thereof (Haidt, 2006).

Happy people are likely to experience more desirable events and have the propensity to interpret and recall ambiguous events as good (Hatuell, 2004). Happy people are healthier, more successful and more socially engaged, and the causal direction is mutual. This causality has emerged in the last few years and research has shown that happiness brings many benefits other than merely feeling good (Seligman & Steen, 2005). It is not merely the events of an individual’s life that result in happiness or unhappiness, but rather how that event is interpreted by the individual (Crompton, 2005). Crompton further argued that through the maintenance of consistent patterns of positive interpretation, relatively stable ways of relating to the world are enhanced. These patterns would then create personality descriptions such as “cheerful” and “optimistic”. Seligman (2002) referred to these personality descriptions as finding one’s fundamental strengths and using them every day. These strengths would then, over time become identifiable positive character traits for the individual. He suggested that an individual can develop unprecedented levels of happiness by nurturing existing strengths such as optimism, kindness, generosity, originality and or humour. He called these “inherent signature strengths” and argued that by exercising them frequently and wisely, the individual transforms his / her own life to a higher more positive plane (Seligman, 2002). The term which Seligman (2002) later was coined authentic happiness.
Authentic happiness consists of three parts: positive emotion, strengths and virtues, “in the mansions of life” (Seligman, 2002, p.4). Positive emotion, according to Seligman (2002), refers to the feelings of positive emotion and expressing these emotions which forms not only the central component of the love between mother and her infant, but of almost all love and friendship. Seligman’s extensive work on strengths and virtues, as well as the classification of these “signature strengths” is fundamental to the understanding of authentic happiness. In order to attain authentic happiness, the individual must aim to capitalize on signature strengths, such as: wisdom and knowledge, courage, love and humanity, justice, temperance and spirituality-transcendence (Seligman, 2002). The concept “in the mansions of life” refers to the way in which Seligman felt signature strengths needed to be employed in the areas of work, love and parenting. He thus considered the state of happiness to be attainable only by the activity engaged in by the individual which was consistent with noble purposes.

According to Crompton (2005), studies have investigated whether it is the frequency or the intensity of positive feelings which produces happiness. Both intensity and frequency make independent contributions to happiness and subjective well-being (Diener, Larsen, Levin & Emmons, 1985). They also found that the intensity of positive and negative emotionality are correlated, meaning that both positive and negative emotions are experienced with equal intensity. According to Crompton (2005), this correlation is related to age and gender, as younger people and women report feeling emotions more intensely (Argyle, 1999). In a study related to the stability of happiness, Harker and Keltner (2001) reported that the amount of positive emotion expressed by women in their high school yearbook pictures as measured by their smiles was significantly related to their well-being thirty years later.

The question of what happiness is and how it can be defined has eluded many researchers both internationally and within the South African context (Hewstone, Fincham & Foster, 2005). Within the international arena, research has focused on happiness in terms of: “the good life” (King & Napa, 1998; King, Eells & Burtin, 2004), “positive emotions” (Frederickson, 2001) and “character strengths and virtues” (Peterson & Seligman, 2004). South African research has focused on similar areas of interest.
and as a result of the field of positive psychology being relatively new within the South African context, a limited body of research exists (Coetzee & Viviers, 2007). Studies such as those by Du Toit (2000), Walker (2000), Vorster (2002), Phillips (2004) and Smith (2005) which include happiness as a focus area highlight the need for more research into the study of happiness and contribute to the development of a larger body of research within the South African context.

In the preceding sections, the four core constructs of the present study have been explored to provide a description of the role of coping and coping resources, as well as satisfaction with life and happiness on the overall psychofortology of the individual. In the section that follows, the implications of the fortogenic orientation and more specifically the role of psychofortology are explored.

2.4 Implications of the Fortogenic Orientation

For the purposes of this study, a description of several implications of the fortogenic orientation, more specifically, psychofortology are discussed. The first implication is that the dichotomy of viewing people as being either diseased or healthy, as typified by the pathogenic viewpoint, must be discarded in favour of what Antonovsky (1987) called the “health-ease/dis-ease continuum”. Depending on the individual’s life circumstances, the individual’s mental health may be located at any point along the continuum between the two theoretical poles of total terminal illness and total wellness. As a result, the question posed by the fortogenic orientation and psychofortology becomes: Why are people located towards the positive end of the health-ease/dis-ease continuum and why do they move towards this end (Antonovsky, 1979, 1984, 1987)? Most individuals will be somewhere on the positive side of the continuum, where they are experiencing reasonably good emotional health and negotiating life events that, while stressful, do not feel unmanageable. These individuals are able to employ coping strategies and locate coping resources to assist them in managing stress. The focus of attention is no longer the dichotomy between health and illness, but rather the nature, dynamics and enhancement of psychological well-being (Wissing & Van Eeden, 1997).
The second implication is that the fortogenic model rejects the commonly held assumption that stressors are inherently negative (Antonovsky, 1979) in favour of the possibility “that stressors may have salutary consequences” (Antonovsky & Bernstein, 1986, p.34). A stressor arouses a condition of tension in the person and if the tension is managed poorly, stress results. However, if it is managed well, the stressor may remain neutral or even become health enhancing. In contrast to the pathogenic emphasis on eradicating stressors, the fortogenic emphasis is on how to live with stressors and possibly even how to turn their existence to one’s advantage (Antonovsky, 1984). The focus of the present study is thus the individual’s survivorship, resiliency and strength in the face of living with debilitating depression or anxiety.

A third implication is that behavioural scientists ought to study “the deviant case” (Antonovsky, 1984). In general, deviants are those “who make it against the high odds that human existence poses” (Antonovsky, 1984). In terms of the study of “strengths”, namely psychofortology, “the deviant case” refers to the search for human strengths, capacities and virtues that make life worth living.

The fortogenic orientation, and more specifically psychofortology, is thus re-orientating the field of psychology to its neglected missions - to make the lives of all people better and to nurture genius - through its focus on “strengths” as opposed to deficits.

2.5 Conclusion

This chapter has discussed the growing field of positive psychology which focuses on individual strengths, capacities, and resources in contrast to the traditional approach which is pathogenic in nature. Positive psychology and its salutogenic approach continue to provide insights into the mechanisms available to individuals for coping with stressors. The focus of this research which has included exploring and describing the sense of coherence, coping resources, satisfaction with life and happiness of female psychiatric out-patients living with mood and anxiety disorders, reinforces Wissing and Van Eeden’s (1997) contention that in the domain of psychofortology, not only the origins of psychological well-being should be studied, but also the nature, manifestations and consequently the ways to enhance
psychological well-being and develop human capacities. This focus on strengths incorporates theory and research reflecting an emphasis on the salutogenic and fortogenic frameworks and thus reinforces the principles of the positive paradigm. The popularity of positive psychology is increasing rapidly internationally and results from research that takes a positive psychology approach are already influencing interventions, thus gaining a permanent place for positive psychology in scientific psychology (Crompton, 2005). The nature of positive psychology and its keen interest in promoting human strengths and capacities point to the field of positive psychology as being a thriving area in the field for many years to come.

In the following chapter it is necessary to further examine the life of female psychiatric out-patients living with mood and anxiety disorders by focusing on the specific needs that women present with in the field of mental health.
Chapter 3

Women and Mental Health

3.1 Chapter Preview

Women are drawers of water, hewers of wood, labourers, preparers of food, bearers of children, educators, health-care providers, producers and decision makers (World Health Organization, 1993). Throughout the world, women are regarded as central to caring for families and communities, to production and reproduction (Health Systems Trust, 2000). Considering the many roles women fulfill in their homes and communities, the following chapter focuses on the mental-health needs and problems experienced by women. Mental and physical health are discussed as components of overall well-being with specific emphasis on mental health and the way in which it has been defined. Thereafter, the mental health needs of women are explored as being both similar and different to the mental health needs of men. An overview of international and South African perspectives on women’s mental health is then provided from which the most salient features relating to women’s mental health in South Africa are explored.

3.2 Physical and Mental Health

A 17th-century philosopher, Rene Descartes conceptualized the distinction between the mind and the body (Eisendrath & Feder, 2000, Ogden, 2004). He viewed the mind and body as two completely separable components of which the “mind” was seen to be the concern of organized religion and the “body”, the concern of physicians (Syed, 2002). In recent literature, instead of separating physical from mental health, the more appropriate and neutral distinction is between “mental” and “somatic” health (Baum & Poslusny, 1999; Cohen & Herbert, 1996). The word “somatic” is a medical term that is derived from the Greek word soma, which when translated means “body”. Somatic health refers to conditions in which alterations in non-mental functions predominate such as diabetes and heart disease. Mental health, on the other hand, refers to the successful performance of mental functions in terms of thought, mood, and behaviour (Fischbach, 1992). The dichotomy between body and mind has been
described as a product of western scientific thinking and has created a misconception that “mental health” and “mental illness” are unrelated to “physical health” and “physical illness” (Cohen & Herbert, 1996). Although it is often assumed that traditional African concepts of health view health and illness in a holistic way, research evidence suggests that such a holistic view incorporates a distinction between the mind and body (Fischback, 1992; Gazzaniga, 1998). Studies in Guinea show that major mental disorders such as psychosis, mental retardation and convulsive disorders are differentiated from somatic illness (De Jong, 1987). In Zimbabwe, Gelfand (1967) found that the Shona people’s conception of disease was not very different from the European concepts of mental health and illness. In Sub-Saharan Africa research has found that different cultures tend to distinguish between the mind and the body, at least as far as health and illness experiences are concerned (Patel, 1995).

The World Health Organization (1946, p.1), defined health as “a state of complete physical, mental and social well-being and not merely the absence of disease”. Three ideas central to the improvement of health follow from this definition: (a) mental health is an integral part of health, (b) mental health is more than the absence of illness and, (c) mental health is intimately connected with physical health and behaviour. In the aforementioned definition physical and mental health are regarded as interrelated components of positive health and overall well-being. Physical health can therefore act as a positive attribute influencing both mental and physical illnesses and their outcomes (Fischback, 1992). In the same way, positive mental health can influence the onset, course, and outcomes of both physical and mental illnesses (Gazzaniga, 1998).

Research into this field has shown links between depression and anxiety and cardiovascular and cerebrovascular diseases (Carson, 2002; Kuper, Marmot & Hemingway, 2002). Psychological beliefs such as optimism, personal control, and a sense of meaning have also been found to be protective of mental health as well as physical health (Snyders & Lopez, 2005). Unrealistically optimistic beliefs about the future have been found to be health-protective for men infected with HIV (Catalan, 1999). Promoting positive mental health may thus be seen as significant in terms of health globally and the
alleviation of both physical and mental health problems. In the section that follows, a brief overview of the concept of mental health is provided as the focus of the study precludes a detailed discussion of this concept.

3.3 Mental Health

Jahoda (1958) elaborated on the definition proposed by the WHO (1947), by stating that “health is not merely the absence of illness but a complete state of physical, psychological and social well-being”. This definition conceptualizes health into three domains of which the psychological domain refers to the individual’s mental health. Many ingredients of mental health may be identifiable, but mental health is not easy to define. Cowen (1994, p.4), a distinguished leader in the field of mental health prevention, describes his own difficulty in trying to define mental health by stating that:

. . . built into any definition of wellness . . . are overt and covert expressions of values.

Because values differ across cultures as well as among subgroups (and indeed individuals) within a culture, the ideal of a uniformly acceptable definition of the construct is illusory.

Mental health can be socially constructed and socially defined thus by different professions, communities, societies and cultures which have very different ways of conceptualizing its nature and causes. Thus, what it means to be mentally healthy is subject to many different interpretations that are rooted in value judgments that may vary across cultures. There are, however, certain elements that are universally important to mental health across different societies and cultures (WHO, 1993). These include: self-acceptance, or self-esteem, characterized by a positive evaluation of oneself and one’s past experiences; personal growth reflected in one’s sense of continued psychological growth and development; a sense that one’s life has purpose and meaning; positive relations with others; environmental mastery, the capacity to manage effectively in the surrounding world; and autonomy, a sense of self-determination and the ability to control one’s own life (Health Systems Trust, 2000).

Valliant (2003) highlighted that although certain elements are universal to the definition of mental health, mental health is too important to be ignored and needs to be defined. Definitions regarding
mental health have originated from two main schools of thought (Crompton, 2005). Traditionally ‘mental health’ has been used as a synonym for mental illness and has been seen as the concern of mental health professionals. Some theorists have described mental health from a bio-medical model by considering mental health as the absence of mental illness or symptoms of pathology (Antonovsky, 1979). Now broader and more positive models of mental health are developing, called the ‘salutogenic’ and wellness model. Recent definitions of mental health have focused on positive characteristics which have developed from the salutogenic and fortogenic orientations (Stümpher, 1995). These include concepts such as: resilience and an inner sense of coherence; the ability to make relationships, to attach to others and to love; the ability to think clearly including about emotional matters; the ability to manage emotions successfully and appropriately; the ability to be sensitive to one’s own and others emotions; and the capacity to have an accurate self-concept and high self-esteem (Snyders & Lopez, 2005). The World Health Organization (2004, p.12) defined mental health as “a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stressors of life, can work productively and fruitfully and is able to make a contribution to his or her community”.

Mental health has also been defined as a state of successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and to cope with adversity (Dennerstein, Astbury & Morse, 1993).

Antonovsky (1987) believed that health is relative on a continuum and that an individual progresses along this continuum from a state of health to a state of disease. The continuum posited by Antonovsky (1987) is referred to as the health-ease and dis-ease continuum along which individuals can be placed, but along which they also move from one side to the other in terms of changing levels of well-being. Similarly, mental health and mental illness are not polar opposites but may be thought of as points on a continuum (Fischbach, 1992). Depending on the circumstances in the individual’s life at a given time, his / her state of mental health may be located at any point along the continuum. On the continuum, states of mental health are differentiated by the amount of stress / distress and impairment involved.
The lines differentiating states of mental health are not precise because it is not clear at which exact point a concern becomes a problem, or a problem becomes an illness.

Figure 3.1: The mental health – mental illness continuum (Fischbach, 1992)

Most individuals are located in the left half of the continuum where they are considered to be experiencing reasonably good emotional health and negotiating life events that, while stressful, do not feel unmanageable. In this state of well-being, the stress and discomfort caused by the everyday ups and downs of life do not impair daily functions. However, when major negative life events occur, or more serious or prolonged problems arise, coping becomes progressively more difficult. During these times the individual may experience what are identified on the right side of the continuum as “mental health problems.” Within the category identified as “mental health problems,” there are two major mental health states: emotional problems and mental illness (Price, 2007). Emotional problems or concerns occur when the individual experiences emotional discomfort or distress and this begins to noticeably impair the individual’s daily functioning (Pillay & Kriel, 2006). Some people in this area of the continuum may be diagnosed with mild or temporary mental health problems (Price, 2007).

Located at the right end of the continuum are severe mental health problems which can be classified as mental illnesses. Mental illness is characterized by pronounced or prolonged alterations in thinking, mood, or behaviour (United States Department of Health & Human Services, 1999). These include
relatively common disorders such as depression and anxiety, as well as less common disorders such as schizophrenia. Individuals with mental illness typically experience chronic or long-term impairments that range from moderate to disabling in nature (Barlow & Durand, 2005).

Keyes (2002, 2005) proposed an alternative to the health continuum posited by Antonovsky (1987), as part of his conception of complete mental health. Keyes (2002) visualized mental health as a bipolar continuum. This continuum has also been referred to as the two-continua model of mental health and illness (Snyders & Lopez, 2005). On the horizontal axis of this continuum, individuals are located in terms of mental illness symptoms. On the vertical axis, individuals are located according to the number of mental health symptoms with which they present. An individual will thus fall somewhere within the four quadrants depicted below.

Figure 3.2: The complete mental health model (Keyes, 2005)

In the first quadrant, individuals present with high mental health symptoms, low mental illness symptoms and are described as flourishing. When individuals are flourishing, they experience high levels of positive emotion and function well both psychologically and socially (Keyes, 2002). In the second quadrant, individuals experience few mental health symptoms, few mental illness symptoms
and are described as languishing. Languishing refers to a sense of emptiness and stagnation, leading to a life of quiet despair (Keyes, 2002). In the third quadrant, individuals experience few mental health symptoms and high mental illness symptoms. This results in the individuals feeling depressed and creates a sense of languishing. Individuals who find themselves in the fourth quadrant experience high mental health symptoms and high mental illness symptoms. In this quadrant, individuals are classified as having a “pure episode” of mental illness because they are not languishing in life (Keyes, 2005).

Mental health for each person is affected by individual factors and experiences, social interaction, societal structures and resources, and cultural values. It is influenced by experiences in everyday life, in families and schools, on streets and at work (Lehtinen, Riikonen & Lahtinen, 1997; Lahtinen, 1999). Positive mental health in the broadest sense can be conceptualized as a subjective sense of well-being. The concept of positive mental health can be described in terms that capture positive as well as negative aspects, of coping, resilience, satisfaction, and autonomy (World Health Organization, 2000). In terms of coping, a sense of coherence is considered to be vital to positive mental health as it involves a capacity to respond flexibly to stressors (Antonovsky, 1979). Learning effective coping strategies also directly improves mental health by improving one’s sense of mastery and self-esteem. Relaxation techniques, such as deep breathing and meditation, also help to combat the effects of stress (Simos, 2002). Optimism appears to be the dominant cognition of the mentally healthy, and optimists have been found to have better coping mechanisms such as acceptance of reality and reliance on personal growth (Scheier & Carver 1992). Social support from friends and family members has been found to promote good mental health. Conversely, research has shown that negative social interactions, such as constant criticism and belittlement from other people, can undermine mental health (Mitchell & Hodson, 1983). Physical activities have also been found to have a positive impact on mental health and research has shown that regular aerobic exercise helps to boost self-esteem, relieve depression, and improve concentration (Blaxter, 1990).
Mental health is an essential component of overall well-being and a significant part of every individual’s life. Mental health is influenced by a number of factors which can either improve or impede the individual’s mental health as he/she progresses along the mental health-illness continuum. Positive mental health is therefore essential for the well-being and healthy functioning of individuals, families, communities and society.

In the section that follows, the mental health needs of women are explored as being both similar to and different from the mental health needs of men.

3.4 Women’s Mental Health

The issue of women’s mental health as a separate field has emerged relatively recently (World Health Organization, 2000). Historically the health needs of women were recognized largely in relation to women’s reproductive functioning in fields such as: obstetrics and gynecology, and family planning (Gomel, 1997). When women's health issues have been addressed in these fields, activities have tended to focus on issues associated with reproduction - such as family planning and child-bearing - while women's mental health has been relatively neglected (World Health Organization, 1993; World Health Organization, 1995). Women’s concerns with psychological well-being extend across the life cycle and cannot be confined or defined by their reproductive functioning (Health Systems Trust, 2000). Women’s mental health needs differ across the life course ranging from mental health supports related to pregnancy and post-partum depression during their childbearing years to mental health needs related to adulthood and ageing in later life (World Health Organization, 1993).

Women bear the burden of responsibility associated with being wives, mothers and carers of others. Increasingly, women are becoming an essential part of the labour force and in one-quarter to one-third of households they are the prime source of income (World Health Organization, 1995). Women have also been found to be more vulnerable than men to sex exploitation and violence, to poverty and malnutrition, to environmental degradation, to chronic diseases which are often exacerbated by pregnancy and lactation, and to the debilitating effects of harmful traditional practices (Patel, Araya, de
Lima, Ludermir & Todd, 1999). The accumulation of epidemiologic evidence that links mental health problems with alienation, poverty, hunger, malnutrition, overwork, domestic violence, powerlessness and poverty indicates that these conditions are most frequently experienced by women (Dennerstein, Astbury & Morse, 1993). The role of women in society and in their homes makes it more difficult for them to cope with the many demands made upon them, whether of a physical, social or emotional nature (World Health Organization, 1995).

Research findings indicate that certain mental health problems are more prevalent in women, that women utilize mental health services more frequently than men do, and that women would like a wider range of treatment and support options than is currently available (World Health Organization, 2001). In terms of mental, behavioural and social problems that affect women either exclusively or to a greater extent than men, higher rates of depression, anxiety, psychological distress, sexual violence, domestic violence and escalating rates of substance use were identified (Desjarlais, Eisenberg, Good & Kleinman, 1995). In the same study, men were identified as being three times more likely than women to be diagnosed with a substance-use disorder or anti-social personality disorder. The prevalence of these different disorders highlights the fact that men and women have different mental health needs and require different intervention and treatment approaches.

Current research studies indicate that significant changes are taking place in the beliefs and expectations of women, their roles and identities in the context of community, family, and work. Hence research studies tend to adopt qualitative rather than quantitative approaches to define, understand and explain the female experience (Kleintjes, Flisher, Flick, Railoun, Lund & Molteno, 2006). Organizations and women’s groups are working in conjunction with researchers in the field of women’s mental health to identify culturally appropriate solutions to the mental health needs of women (Russo, 1990).

In the section that follows, an international perspective on women’s mental health as well as supporting international literature on the topic of women’s mental health is provided.
3.5 International perspectives on Women’s Mental Health

In 1999 a team of female psychiatrists, psychologists, social workers, mental health nurses, policy experts and representatives of non-governmental organizations (NGOs) from Europe, Asia, Africa, North and South America and Australia embarked on research to determine the psychosocial, cultural and environmental factors which were considered salient to women's mental health and mental illness (Stewart, Rondon & Damiani, 2001). Two years later, these research findings were presented at the 2001 First World Congress on Women's Mental Health in Berlin where it was suggested that women's mental health must be considered within the context of women's lives and that women’s mental health cannot be achieved without equal access to basic human rights. In the guidelines for Psychological Practice (2007) strong emphasis is placed on the provision of services in a way that does not discriminate on the basis of factors such as age, race and gender. The guidelines also state that services should cater to the needs and requirements of the individual being assisted. Factors such as: autonomy of the person, education, safety, economic security, property and legal rights, employment, physical health, including sexual and reproductive rights, access to health care, and adequate food, water, and shelter were also emphasized as contributing to women’s mental health (Stewart, Rondon & Damiani, 2001).

In 2003-2004, further discussions were held which culminated in a roundtable at the Second World Congress on Women's Mental Health in Washington. At this congress, a decision was made to develop an International Consensus Statement on Women's Mental Health which would describe the most salient issues relating to women’s mental health worldwide (Stewart, 2006). This Consensus Statement was approved in 2004 by the American Psychological Association and the American Psychiatric Association. The main points contained in this document emphasize the way in which mental health services worldwide should be tailored to the mental health needs of women. These include:
1. Support psychological health promotion programmes that encompass the life context of girls and women to include equal access to basic human rights, education and employment, the elimination of violence and discrimination and the reduction of poverty.

2. Support women's marital, sexual and reproductive choices and ensure access to safe motherhood.

3. Support public education and awareness campaigns that increase recognition and reduce the stigma of mental illness in girls and women.

4. Support safe, respectful, appropriate, gender-sensitive comprehensive mental health and physical health services for girls and women across the life cycle irrespective of their economic and social status, race, nationality or ethnocultural background.

5. Support timely access to adequately skilled mental health professionals who provide quality of care consistent with best current knowledge and availability of appropriate therapy, technology or drugs and who take women's special needs into consideration.

6. Support the development and use of culturally appropriate diagnostic systems that consider the sociocultural context of women's lives, and biological differences when they are salient.

7. Support the provision of accurate information and respect choices in treatment decision making by girls and women whenever possible.

8. Support the provision of mental health care for girls and women that is free from breaches in fiduciary responsibility.

9. Support increased attention to research on girls' and women's mental health including those factors which enhance or inhibit the development of resiliency.

10. Support the provision of core training and education about gender issues for health, and mental health, professionals.
11. Support gender equality in practice and promotion within mental health services and organizations including equal opportunities for advancement and the eradication of gender harassment, intimidation or unjustified discrimination on the basis of sex.

International findings in numerous countries suggest that psychological services around the world are accessed more by women than men, a phenomenon that is probably more related to gender differences in help-seeking behaviour, than psychopathology prevalence (World Health Organization, 2001). With this type of patient profile at mental health facilities worldwide, it is critical that service providers and planners examine whether they are positioning themselves to meet the needs of the women seeking help. Internationally, it appears as though a concerted effort is being made to attend to the mental health needs of women. In the section that follows, the mental health needs of women in Sub-Saharan Africa are discussed.

3.6 Women’s Mental Health in Sub-Saharan Africa

Mental health is a neglected topic and that of women’s mental health even more so, with the latter receiving little attention within the South African public health sector (Desjarlais, Eisenberg, Good & Kleinman, 1995). Mental health has over many decades acquired the unwelcome reputation of being a pariah or stepchild of the health services (Moultrie & Kleintjes, 2000). This was partly because it was narrowly understood as psychiatric illness, an area of concern for only psychiatrists, psychiatric nurses, patients and their families. However, the past three to four years have seen mental health care steadily moving out of this quarantine, towards mainstream health care (World Health Organization, 2000). Mental health care has begun to address issues that distress South Africans on a day- to- day basis, such as crime, violence and Human Immune Virus (HIV)/ Acquired Immune Deficiency Syndrome (AIDS). This change in focus has led to changes in perceptions regarding mental health. Mental health is no longer seen as an abstract, mysterious set of interventions, but rather as a component of health that addresses issues of general psychological well-being and problems of day-to-day living (Health Systems Trust, 2000).
The call for definitions of women's mental health which are broader than the reproductive and the maternal roles of women, incorporating mental and physical health across the life cycle, has been repeatedly expressed in recent years (World Health Organization, 2001). Within the South African context, transformation in the field of mental health has been made possible by a diversity of developments at national and regional levels. These developments have mainly been pioneered by the Mental Health Directorate in the National Department of Health in conjunction with provincial departments of health, non-governmental organizations and other interest groups (Health Systems Trust, 2000). Mental health policy, namely the Draft Mental Health Bill of 1999 which was published for public comment in the Government Gazette in February 2000 makes provision for mental health care in a humane manner and is based on the individual rights espoused by the Constitution. The Health Care Act no. 17 of 2002 has changed the field of mental health with its focus on promoting the human rights of people with mental disabilities, improving mental health services through a primary health-care approach, emphasizing community care and protecting the safety of the public (Government Gazette, 2004). Yet at this point, there is still no section allocated specifically to the mental health needs and provision of services to women in either of these policy documents (Janse van Rensburg, 2007).

The area of women’s mental health is relatively new and considerably more research is required to develop a better understanding of and treatments for many of the mental health problems experienced by women. Very little relevant South African research has been published in the area of women’s mental health and where necessary international research findings have been used to contextualize the issues and assist in delineating areas for further research (Dennerstein, Astbury & Morse, 1993). Women in South Africa disproportionately suffer from mental health problems and are more frequently subject to social causes that lead to mental illness and psychosocial distress (World Health Organization, 2004). In the section that follows, specific focus is placed on the factors affecting women’s mental health.
3.6.1 Factors affecting Women’s Mental Health

The role of individual behavioural and material factors, economic and psychosocial factors, and their complex reciprocal relationships needs to be considered in determining health and illness (Biggings & Moose, 1982). Women’s mental health is affected by experiences of hunger, poverty and overwork, sexual and reproductive violence, domestic, civil and state violence, and the potential noxious effects of certain state economic policies, such as structural adjustment programmes and monetary crises (World Mental Health, 1995). Women are integral to all aspects of society, yet the multiple roles that they fulfill in society render them at greater risk of experiencing mental health problems than others in the community. The factors influencing women’s mental health can broadly be classified into three domains, namely: physiological, psychological and social factors.

3.6.1.1 Physiological factors

Scientific research suggests that the brain produces either too many or too few neurotransmitters which result in changes in how individuals perceive and experience the environment around them (Baum & Posluszny, 1999). In terms of mental health, these chemicals appear to bring about changes in behaviour, mood and thought which result in mental health problems. While the causes of these fluctuations in the brain chemicals are not yet fully understood, physical illness, hormonal changes, reactions to medication, substance abuse, diet and stress have been identified as factors contributing to women’s mental health (Eisendrath & Feder, 2000).

Physical illness is known to be associated with mental health problems. In women and men, emotional well-being is a strong predictor of physical health (Ogden, 2004). Individuals with chronic physical illnesses are reported to be at a higher risk of developing mental health problems. Research has also shown that individuals with mental health problems are more likely to have physical illnesses, such as cardiovascular disease and respiratory complaints (Kuper, Marmot & Hemingway, 2002; Carson, 2002). Somatic complaints or illnesses are two to three times more common in women, hence physical illness plays an important role in women’s mental health (Baum & Posluszny, 1999).
The role of female hormonal changes plays an important role in mental health in terms of possible reasons for the disparity between the experiences of men and women. Increased prevalence of depression and other mental health problems in women may be in part explained by the impact of hormonal and reproductive changes (Kaplan & Saddock, 2003). Hormone levels are known to influence mood hence women have been found vulnerable to developing a mood disorder during pregnancy and in the postnatal period. Research in Khayelitsha found prevalence rates of 34% (approximately three times higher than international estimates) of maternal depression at 2 months postpartum (Tomlinson, Swartz, Cooper & Monteno, 2004).

Obot (1989) pointed out that one of the most disturbing health-related problems in contemporary South Africa is the use and abuse of chemical substances. Both popular and scientific periodicals have identified a trend in the use and abuse of substances such as: alcohol, tobacco products, stimulants, cannabis, sedative-hypnotics and narcotics (Peltzer, 1998). Although there are variations between countries, rates of substance abuse – particularly abuse of alcohol, tranquillizers and analgesics – are increasing around the world (World Health Organization, 2001). Despite increasing rates, services to assist women are limited, as substance abuse has traditionally been viewed as a problem experienced by men and as incompatible with women’s role in society (Health Systems Trust, 2000). Consequently this has led to considerable stigma for women who abuse substances. This has impacted on their mental health and help-seeking behaviour.

3.6.1.2 Psychological factors

There is a well-described association between major life events and mental health problems. Certain types of events appear more likely to be associated with specific mental health problems: events involving loss, such as bereavement, being associated with depression and events associated with threat, associated with anxiety (Belle, 1982). Although generalizations can be made about specific types of events, it is the meaning of those events for the individual, and their psychological resilience, that are likely to be important in determining whether mental health problems ensue (Stümpher, 2005).
Where women lack autonomy, decision-making power and access to an independent income, many other aspects of their lives and health will necessarily be outside their control (Okojie, 1994) including their susceptibility to communicable diseases (Hartigan, 1999). The different levels of susceptibility and exposure to various kinds of health risks that women face compared with men will inevitably set limits on their opportunities for exercising control over the determinants of their mental health. In South Africa, women are exposed to higher levels of poverty, single parenthood, lack of mobility and numerous other factors which pose a risk to their mental health (World Health Organization, 1993).

Social isolation has also been associated with mental ill health as women are more vulnerable to social isolation than men (Kulkarni, 2006). In the South African context, women are more likely than men to be dependent on public transport, as they are less likely to be able to drive or to own a car; longer life expectancy in women makes them more likely to live alone and in poverty in their later years than men; fear experienced by women in the city who are afraid to go out alone at night due to the crime rate increases social isolation (Health Systems Trust, 2000). Research findings illustrate a relationship between these factors and their association with mental health problems in women (Belle, 1990). In a study with single mothers, it was found that lone mothers are three times more likely to be depressed than any other group of women (Baxter, 1981; Belle, 1991; Trehewy, 1989). In these studies, a correlation between mental health problems and high rates of material disadvantage were also identified.

3.6.1.3 Social factors

People are affected by broad social and cultural factors as well as by unique factors in their personal environments. Early experiences, unique to individuals, such as a lack of loving parents, violent or traumatic events, or rejection by childhood peers can negatively impact mental health (Dennerstein, Astbury & Morse, 1993). Current stressors such as relationship difficulties, the loss of a job, the birth of a child, relocation, or prolonged problems at work can also be important environmental factors. Cultural factors such as racism, discrimination, poverty and violence may also contribute to the causes
of mental illness (Motsei, 2004). Socio-economic contexts, substances, gender-based violence, child abuse and neglect, child labour, poverty, domestic isolation, powerlessness and patriarchal oppression are all associated with a higher prevalence of psychiatric morbidity in South African women (Patel & Kleinman, 2003).

Gender, like socio-economic status, shapes individual opportunities and experiences across life and consequently creates differences in exposure to risk and protective factors. Deprivation and poverty are strongly linked to the prevalence of mental-health problems in communities and especially among women (Patel, Araya, de Lima, Ludermir & Todd, 1999). Psychosocial health in women seems to be particularly strongly related to socio-economic status (Desjarlais, Eisenberg, Good & Kleinman, 1995). This suggests that the impact of inequalities in health between socio-economic groups may be different for women and men. In the South African context, where many women fulfill the role of mother or carer, a gender inequality exists in income and wealth. It has been estimated that two thirds of adults living in the poorest households in South Africa are women (Statistics South Africa, 2005). A similar percentage of adults who are dependent on income support are also women. Women are also more likely than men to live in poverty, particularly if they are single parents or later in life.

Research suggests that poor women experience more severe life events than do the general public (Brown et al., 1975; Makosky 1982); they are more likely to have to deal with chronic sources of social stress, such as low-quality housing and dangerous neighborhoods (Makosky, 1982; Pearlin & Johnson 1977); they are at higher risk for becoming victims of violence (Belle, 1990; Merry 1981); and they are especially vulnerable to encountering problems in parenting and child care (Belle et al., 1990).

Adverse health outcomes are two to two-and-a-half times higher amongst people in the most disadvantaged social position compared with those in the highest (Dohrenwend, 1990; Najman, 1993; Bartley & Owen, 1996). The link between mental health and low income amongst urban women has also been documented in Bombay, Olinda and Santiago (Blue, Ducci & Jaswal, 1995). Compared with people in high socioeconomic groups, those in low socioeconomic groups are far more likely to have
lower levels of resources, education, poorer living and working environments and lower levels of social support. Women in South Africa also experience differences in the quality of the health care they receive when they encounter the health-care system and this has an influence on their psychological health (Bartley & Owen, 1996; Feinstein, 1993; Kunst, Geurt & Van den Berg, 1995; Macran, Clarke & Joshi, 1996; Power, 1994; Wadsworth, 1997; Whitehead et al., 1993; Wilkinson, 1997).

Nearly twice as many women (30%) as men (16%) of working age are economically inactive, and nearly twice as many men (60%) as women (35%) are in full-time paid employment (Patel & Kleinman, 2003). The majority of women in paid employment are employed part time; half are in the low-paid clerical, retail and personnel sectors. Within the South African context, this contributes to women’s vulnerability to poverty and lower socio-economic status. Unemployment in South Africa is another area of concern as a major portion of the population is unemployed and unemployment is associated with mental health problems (Patel & Kleinman, 2003). In September, 2005 the highest rate of unemployment was amongst African females (37.1%). This was 10.3 times higher than that of White males (3.6%) and 1.4 times higher than that of African males (26.6%) (Statistics South Africa, 2005). The impact of unemployment on women and men seems to be different, some studies showing a less negative effect on women (Patel, Araya, de Lima, Ludermir & Todd, 1999). This disparity is explained by the gender differences in expectations of work and the role of women within the family (Health System Trust, 2000).

Women provide the majority of care for children and other family dependents. In some cases, women’s work in the family is their reason for being categorized as ‘economically inactive’. Studies have found that women who work, whether part time or full time, generally also undertake the majority of the housework and childcare (Desjarlais, Eisenberg, Good & Kleinman, 1995). Many women work a "double day" maintaining households, raising children, carrying out economically productive activities in marketing and agriculture and in household-based industries. Numerous studies document that women "work" more hours than do their husbands given their widely diverse economic and household
responsibilities (Brown & Moran, 1997). Overwork may lead to exhaustion and stress thus placing women at greater risk of mental-health problems. The tension and stress inherent in having competing, and often unsupported, multiple roles and responsibilities as mothers, homemakers, carers and partners may have an adverse effect on women’s mental health. The low societal status and value placed on women’s roles in the family and workforce and the potential negative impact on a woman’s sense of self-worth may also contribute to mental ill health (Denton & Walters, 1999). Women may also be exposed to gender-based violence within the home environment or in the larger community which may negatively influence their mental health.

According to Levinson, (1989) wife-beating is the most common form of family violence in the world. Between one-third and one-half of women surveyed in many developing countries report being beaten by their partners (Heise, 1993). According to the National Institute for Crime Prevention and Reintegration of Offenders (NICRO), one in every four women is assaulted regularly by her male partner in South Africa (Kadalie, 1997) and approximately 38600 rapes occur within the country each year. Gender-based violence which only recently emerged as a pervasive global issue, contributes significantly across cultures to women suffering such problems as depression, stress-related syndromes, substance abuse, suicide and homicide (Fischbach & Herbert, 1997).

The oppressive patriarchal cultural beliefs and gender inequalities experienced by women in South Africa appear to exacerbate the occurrence of gender-based violence and the prevalence of HIV in South African women (Dunkle, Jewkes, Brown, Gray, McIntyre & Harlow, 2004). In the South African context the prevalence of HIV-positivity is much higher in women than in men (Department of Health, 2005). In the latest 2005 national survey of the general population, HIV prevalence rates were 13.3% in females and 8.2% in males (Shisana, Rehle, Simbayi, Parker, Zuma & Bhana, 2005). In younger females, the rates were significantly higher than for males (Shisana et al., 2005). Evidence-based reviews have reported significant correlations between HIV sero-positivity and a range of psychopathology and psychological distress disorders (Olley, Gxama, Seedat, Theron, Taljaard & Reid,
Poverty, adversity and HIV place considerable strain on social networks and particularly on women, who tend to carry the disproportionate burden of caring, not only for their own families, but for others also in their social networks, and may thus be especially vulnerable to stress.

The stressors and grief experienced by the families of those who live with and die of HIV-related diseases are often compounded by the associated loss of income as well as social and material support (Orner, 2006). These material losses can be particularly distressing to women who are more likely to be economically dependent on family members and can result in mental-health problems.

The factors affecting women’s mental health in South Africa discussed in the preceding section provide greater insight into the mental health needs of women and the possible mental-health problems that could ensue within the South African context. In the section that follows, these mental health problems are further explored.

3.7 Mental Health Problems

Mental health problems are of significant public health importance (World Health Organization, 2001). The term “mental health problems” encompasses two terms: a) mental-health problems in which the signs and symptoms are of insufficient intensity or duration to meet the criteria for a mental disorder, b) mental health problems where the intensity or duration of symptoms meet the criteria for a mental illness (Price, 2007). In this section, specific emphasis will be placed on the latter category.

The burden resulting from mental and behavioural problems is as significant in developing countries as it is in industrialized countries (Koblinsky, Timyan & Gay, 1993). Yet in many developing countries many patients suffering from mental disorders and behaviour-related problems are not recognized and therefore do not receive adequate treatment or intervention. According to the Medical Research Council, one in five South Africans suffer from a mental disorder severe enough to affect their lives in a significant manner (Medical Research Council, 2001). Worldwide, it is reported that psychiatric illnesses will rise to be the number one cause of disability within the next 15 years (World Health Organization, 2001).
An overview of research indicates disparate findings in terms of representative South African population-based studies of prevalence rates for psychiatric disorders (Dennerstein, Astbury & Morse, 1993). A recent consensus estimate of prevalence rates for selected mental disorders in the Western Cape Province, South Africa, derived to inform local public health service planning for mental health, found an overall prevalence rate for mental disorders of 25.0% for adults and 17.0% for children and adolescents (Kleintjes, Flisher, Fick, Railoun, Lund & Molteno, 2006). The most reliable available estimates of the burden of psychiatric disorders in South Africa (SA) are the revised burden of disease estimates for SA 2000, which are a revision and extension of earlier work (Norman, Bradshaw, Schneider, Pieterse & Groenewald, 2006). The findings of the study are depicted in Figure 3.3.

Figure 3.3: Neuropsychiatric causes of years lost to disability (YLDs) in South Africa, revised estimates 2020 (Norman, 2006).

<table>
<thead>
<tr>
<th>Cause</th>
<th>% of total YLDs reported: females</th>
<th>% of total YLDs reported: males</th>
<th>% of total YLDs reported: persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unipolar depressive disorders</td>
<td>7.12</td>
<td>4.36</td>
<td>5.76</td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>2.19</td>
<td>1.96</td>
<td>2.07</td>
</tr>
<tr>
<td>Bipolar disorder</td>
<td>2.08</td>
<td>2.14</td>
<td>2.11</td>
</tr>
<tr>
<td>Other neuropsychiatric disorders</td>
<td>1.66</td>
<td>1.55</td>
<td>1.61</td>
</tr>
<tr>
<td>Alcohol dependence</td>
<td>1.65</td>
<td>3.94</td>
<td>2.77</td>
</tr>
<tr>
<td>Panic disorder</td>
<td>1.27</td>
<td>0.63</td>
<td>0.96</td>
</tr>
<tr>
<td>Obsessive-compulsive disorder</td>
<td>1.10</td>
<td>0.97</td>
<td>0.99</td>
</tr>
<tr>
<td>Alzheimer and other dementias</td>
<td>1.10</td>
<td>0.79</td>
<td>0.95</td>
</tr>
<tr>
<td>Epilepsy</td>
<td>0.91</td>
<td>0.82</td>
<td>0.92</td>
</tr>
<tr>
<td>Drug use disorders</td>
<td>0.80</td>
<td>2.32</td>
<td>1.55</td>
</tr>
<tr>
<td>Mental retardation, lead-caused</td>
<td>0.65</td>
<td>0.65</td>
<td>0.65</td>
</tr>
<tr>
<td>Post traumatic stress disorder</td>
<td>0.63</td>
<td>0.22</td>
<td>0.43</td>
</tr>
<tr>
<td>Multiple sclerosis</td>
<td>0.14</td>
<td>0.07</td>
<td>0.11</td>
</tr>
<tr>
<td>Parkinson disease</td>
<td>0.11</td>
<td>0.18</td>
<td>0.14</td>
</tr>
<tr>
<td>Total neuropsychiatric conditions</td>
<td>21.32</td>
<td>20.48</td>
<td>20.91</td>
</tr>
</tbody>
</table>

Source: Adapted from Norman et al., 2006.
In this study, depressive and anxiety disorders ranked among the top five psychiatric disorders with unipolar depression ranked as the most prevalent disorder. This study also noted a higher prevalence of depressive and anxiety disorders in women.

Patel and Kleinman (2003, p. 54) asserted that there is “a consistent sex difference in risks for common mental disorders in all societies”. While research has sometimes yielded inconsistent findings regarding the relationship between gender and mental disorders, some patterns are evident (Strebel, Msomi & Stacey, 1999). Traditionally, women were thought to have higher rates of mental illness than men, yet population-based studies suggest similar rates of psychiatric morbidity for both men and women (Robins et al., 1984; Thornley et al., 1991). The discrepancy in terms of gender differences however appears to be in terms of depression (Desjarlais, Eisenberg, Good & Kleinman, 1995) and anxiety disorders (Robins et al., 1984; Rosser, 1992; Titus & Smith, 1992) where women have been consistently found to have higher rates.

In the Global Burden of Disease (Üstün, Ayuso-Mateos, Chatterji, Mathers & Murray, 2004), it is estimated that depression and anxiety will become two of the most important causes of disease burden in the world by the year 2020. Women in developed and developing countries alike are almost twice as likely as men to experience depression and some form of anxiety (Desjarlais, Eisenberg, Good & Kleinman, 1995). The higher prevalence of depression among women than men is one of the most widely documented findings in psychiatric epidemiology. This difference has been found throughout the world, using a variety of diagnostic schemes and interview methods (Nolen-Hoeksema, 1987). The prevalence of major depression among women in these studies has typically been between one and a half to three times that in men (Blazer et al., 1994).

A recent systematic global review on anxiety disorders found a consistently higher prevalence of general anxiety disorder, panic disorder and phobic disorders in women than in men (Somers, Goldner, Waraich & Hsu, 2006). In addition to the higher rates of depression and anxiety, women are much more likely to receive a diagnosis of obsessive compulsive disorder, somatization disorder and panic
disorder (Russo, 1990). In contrast men are more likely to receive a diagnosis of anti-social personality disorder and alcohol abuse or dependency. Depressive disorders are reported to account for close to 30 percent of the disability from neuropsychiatric disorders among women, but only 12.6 percent among men (Lehman, Myers & Corty, 2000). Conversely, alcohol and drug dependence accounts for 31 percent of neuropsychiatric disabilities among men, but account for only 7 percent of the disability disorders among women (Somers, Goldner, Waraich & Hsu, 2006).

In investigating common mental, behavioural and social problems in the community one finds that women are more likely than men to be adversely affected by specific mental disorders, the most common being: anxiety-related disorders and depression; the effects of domestic violence; the effects of sexual violence; and escalating rates of substance use (Desjarlais, Eisenberg, Good & Kleinman, 1995). Nolen-Hoeksema and Keita (2003) provide other possible reasons for the increased levels of depression and anxiety in South African women: income effect, women are more willing to express depression and seek help, women have more biological “upsets” than men with changes in hormone levels, women look to relationships more and thus experience more loss, and women learn helplessness more easily.

In South Africa, the first-ever national epidemiological study assessing the extent of mental illness in South Africa was completed in 2000 (Health Systems Trust, 2000). This study was coordinated by the Medical University of South Africa (Medunsa) and funded by the US National Institute for Mental Health. This study revealed that the extent of mental illness in South Africa is under-reported and that services in the country are unable to address the growing mental-health needs in the country (Health Systems Trust, 2005). In a survey of current research in the area of mental health problems in South Africa and particularly among women, three studies were identified. In a study of people living in Mamre, a small town in the Western Cape, it was found that 27% were suffering from psychiatric problems, most of which were anxiety and depressive disorders (Strachan & Clarke, 2000). In a similar study in KwaDedangendlale, KwaZulu-Natal, 24% were found to be suffering from anxiety or
depressive disorders alone (Strachan & Clarke, 2000). A study among children and adolescents aged six to 16 years in Khayelitsha found that 19% were suffering from a mental disorder (Strachan & Clarke, 2000). From these studies, it is evident that mental-health problems experienced by women in South Africa appear to cluster in the area of mood and anxiety disorders which will be further explored in the following chapter.

3.8 Conclusion

In this chapter an attempt was made to discuss how different cultures understand mental and physical health as components of well-being. In most of these cultures, mental and physical health are understood as interrelated components which contribute to overall well-being. Traditionally mental health is considered to include only aspects relating to mental illness. However, in this chapter, mental health was discussed as a multidimensional process on which individuals embark from birth. Gender-related differences which are evident in mental-health research were explored with specific emphasis on the mental health needs of women. An overview of international and South African perspectives on women’s mental health was provided from which the most salient features relating to women’s mental health in South Africa were explored. The mental-health problems experienced by South African women, namely mood and anxiety disorders were identified and discussed. Mood and anxiety disorders are further explored in the following chapter, where specific emphasis is placed on the epidemiology, etiology, diagnosis and treatment of these disorders.
Chapter 4

Mood and Anxiety Disorders

4.1 Chapter Preview

The role of anxiety and depression in the development and expression of human psychopathology has been acknowledged by mental-health practitioners for many centuries (Last & Hersen, 1988). People have been plagued by mood and anxiety disorders for at least as long as they have been able to record their experiences. Since antiquity, dysphoric states outside the range of normal sadness or grief have been recognized, but only within the past 40 years or so have researchers had the means to study the changes in cognition and brain functioning that are associated with severe depressive and anxiety states (Dennerstein, Astbury & Morse, 1993). In this chapter, a comprehensive overview of mood and anxiety disorders is provided. In the first section of the chapter, a distinction is made between mood and anxiety disorders. Thereafter, an independent discussion of both mood and anxiety disorders is provided. The co-morbidity between mood and anxiety disorders is explored in the subsequent section and the chapter concludes with a discussion on the treatment of mood and anxiety disorders in South Africa.

4.2 Differentiation between Mood and Anxiety Disorders

The co-morbidity of anxiety and depression is so pronounced that it has led to theories of similar etiologies (Barlow & Durand, 2005). Depressive and anxiety disorders are not the same though, although at first glance they seem very similar. Research tends to draw a clear distinction between mood and anxiety disorders (Hamilton, 1989). Anxious and depressed individuals appear to have similar symptom profiles which include: sleep disturbance, appetite changes, non-specific cardiopulmonary and gastrointestinal complaints, difficulty concentrating, irritability and fatigue or lack of energy (Montgomery, 1990). Though these symptoms can often be deceiving in terms of diagnosis, there are often discrete differences between patients with mood and those with anxiety disorders.
Mood disorders are characterized by gross changes in mood with fundamental experiences of depression and mania which contribute singly or together to all mood disorders. Depression generates emotions such as hopelessness, despair and anger (Kaplan & Sadock, 2003). Energy levels are usually very low, and depressed people often feel overwhelmed by the day-to-day tasks and personal relationships so essential to life. A person who experiences an elevated, expansive or irritable mood is said to be experiencing mania which is demonstrated by expansiveness, flight of ideas, decreased sleep, heightened self-esteem and grandiose ideas (APA, 2000).

Anxiety disorders on the other hand, which may be understood as the pathological counterpart of normal fear, are manifested by disturbances of mood, as well as of thinking, behaviour, and physiological activity (Kaplan & Sadock, 2003). A person with an anxiety disorder experiences fear, panic or anxiety in situations where most people would not feel anxious or threatened (Last & Hersen, 1989). The person may experience sudden panic or anxiety attacks without any recognized trigger, and often lives with a constant nagging worry or anxiousness (apprehensiveness) (Kaplan & Sadock, 2003).

Mood and anxiety disorders are the most prevalent of all psychiatric disorders and are very disabling and costly in terms of both human suffering and economic cost, hence they warrant special attention (Bradshaw, Groenewald, Laubscher, Nanan, Nojilana & Norman, 2003). In the section that follows, mood and anxiety disorders are further discussed.

4.3 Mood Disorders

4.3.1 Introduction

Mood disorders can be traced back to many ancient documents such as the writings of early Greek and Roman philosophers which allude to changes in mood and the Old Testament story of King Saul which describes a depressive syndrome. In 400BC Hippocrates identified mood variations in people he came into contact with in his daily interactions and fused the terms mania and melancholia to describe mental disturbances (Carson, Butcher & Mineka, 2000). The Roman physician Celsus in around AD30 described melancholia in his work “De Re Medicina” as a depression caused by black bile (Sarason &
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Sarason, 1999). In 1854 Jules Farlet described a condition called “Folie Circulaire” in which the patient experiences alternating moods of depression and mania (Carson, Butcher & Mineka, 2000). The German psychiatrist Karl Kahlbaum (1882), noting Farlet’s discovery of changes in mood used the term cyclothymia to described mania and depression as stages of the same illness. Emil Kraepelin in 1899, building on the knowledge of the previous psychiatrists, described manic-depressive psychosis which he believed to be two variations of mood forming the same illness. With its early beginnings in the ancient writings, variations in mood are still an area of interest today.

Emotions such as fear, joy, anxiety, love, anger, sadness and surprise are all normal parts of the human condition and variations in mood are regarded as a natural part of life. They indicate that a person is perceiving the world and responding to it. Extremes in mood are also linked to extremes in human experience such as creativity, madness, despair, ecstasy, romanticism, personal charisma and interpersonal destructiveness (Stuart & Laraia, 2001). As with many other aspects of personality, an individual’s moods are an essential part of human life and functioning. When one refers to the term mood, one is referring to an enduring period of emotionality (Alloy, Jacobson & Acocella, 1999). This period can serve an adaptive role for the individual by performing functions such as: a means of communicating with others, a biological role of physiological arousal, providing the individual with a sense of subjective wellness and acting as a psychodynamic defense against unconscious drives (Stuart & Laraia, 2001). However, when the individual’s mood does not fulfill these functions and distress is experienced, the individual’s mood is regarded as maladaptive, abnormal or unhealthy. In the section that follows, adaptive and maladaptive emotional responses are further explored.

4.3.2 Understanding and defining Mood Disorders

According to Stuart and Laraia (2001, p.345), the term “mood” refers to “a prolonged emotional state that influences the person’s whole personality and life functioning”. It is further described as a prevailing and pervading emotion and is synonymous with terms such as a feeling state and emotion
In Figure 4.1 below the emotional responses involved in mood variations are identified.

![Figure 4.1: Continuum of emotional responses (Stuart & Laraia, 2001)](image)

On the continuum above, emotional responses are identified as being either adaptive or maladaptive. At the adaptive end is emotional responsiveness which involves the individual being affected by and being an active participant in their internal and external worlds (Sarason & Sarason, 1999). This implies an openness to and awareness of feelings which provide the individual with valuable learning experiences. These learning experiences are characterized by feedback on individual functioning and relationships as well as ways in which the individual can function more effectively (Staurt & Laraia, 2001). The second adaptive response depicted on the diagram, the uncomplicated grief reaction indicates that the individual is facing the reality of a difficult situation and dealing with it effectively (Alloy, Jacobson & Acocella, 1999). The individual thus displays emotions that are appropriate to the given circumstances and are the expected reaction to a given stressor (Staurt & Laraia, 2001).

On the far end of the continuum, maladaptive emotional responses are identified. A maladaptive response is the suppression of emotions which can be characterized by either a denial of one’s feelings or a detachment from them (Freud, 1957). A transient suppression of feelings at times may be necessary to cope, as in an initial response to distressing information. However, prolonged suppression of emotions will ultimately interfere with the effective functioning of the individual. The most maladaptive emotional response and severe mood disturbances are recognized by their intensity, pervasiveness, persistence and interference with social and physiological functioning (Staurt & Laraia, 2001).
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2001). These characteristics apply to the clinical states of depression and mania which are characteristic of mood disorders.

Research and diagnostic classification systems indicate that although mood disorders were previously referred to as affective disorders, the preferred term is mood disorder (Bebbington & Ramana, 1995). The main reason for this being that the term “mood disorder” refers to a sustained emotional state and not merely the external (affective) expression of a transitory emotional state (Barlow & Durand, 2005). Mood disorders encompass a large group of disorders in which pathological mood and related disturbances dominate the clinical picture. They are thus best considered as syndromes consisting of a cluster of signs and symptoms sustained over weeks to months, which represent a marked departure from a person’s habitual functioning and tend to recur, often in periodic or cyclical fashion (Kaplan & Sadock, 2003). Individuals who do not have a mood disorder experience a wide range of moods, have an equally large repertoire of affective expressions and feel a sense of control over their moods, whereas individuals with a mood disorder indicate that there is a sense of loss of control and a subjective experience of great distress. Individuals with mood disorders also indicate that they experience variations in mood which range from feeling depressed to feeling elated. In the section that follows, a description of the structure of mood disorders is provided.

4.3.3 The structure of Mood Disorders

Individuals who experience either depression or mania are said to experience a unipolar mood disorder, because their mood remains at one “pole” of the usual depression-mania continuum. Someone who alternates between depression and mania is said to have a bipolar mood disorder travelling from one “pole” of the depression-mania continuum to the other and back again. Research has however indicated that this label is somewhat misleading because depression and mania may not be exactly at opposite ends of the same mood state. In fact, they are often relatively independent (Alloy, Jacobson & Acocella, 1999). In a study by Coryell and Endicott (1995), the distinction between unipolar and bipolar mood disorder appeared clearly defined, as only 5.2% of a large group of 381 patients with
unipolar depression experienced a manic episode during a 10 year follow-up period. Though depression and mania may be experienced either singly or together by those diagnosed with a mood disorder, the severity, course and occasionally the accompanying symptoms may differ from one person to another (Angst & Merikangus, 1997).

4.3.3.1 Unipolar Mood Disorders

Individuals who experience a depressed mood show loss of energy and interest, feelings of guilt, difficulty concentrating, loss of appetite and thoughts of death or suicide, as well as other signs and symptoms such as changes in activity level, cognitive ability, speech and vegetative functions (Sarason & Sarason, 1999). These symptoms result in impaired interpersonal, social and occupational functioning. The aforementioned symptoms all constitute a major depressive episode and individuals who experience these symptoms are said to have major depressive disorder or unipolar depression. Major depressive disorder occurs without a history of a manic, mixed or hypomanic episode and must last at least two weeks (American Psychiatric Association, 2000). An individual with a diagnosis of a major depressive disorder also experiences at least four additional symptoms, such as changes in: appetite and weight, sleep and activity, lack of energy, feelings of guilt, problems thinking and making decisions and recurring thoughts of death or suicide (Kaplan & Sadock, 2003).

When an individual however presents with symptoms which do not meet all the criteria, or the symptoms are less severe than those of major depressive disorder, the individual is described as having dysthymic disorder. Dysthymic disorder is characterized by at least two years of depressed mood that is not severe enough to fit the diagnosis of a major depressive episode (APA, 2000). This disorder is further characterized by the presence of a depressed mood that lasts most of the day and is present almost continuously (Akiskal & Casano, 1997). Typical features of the disorder include: feelings of inadequacy, guilt, irritability and anger, withdrawal from society, loss of interest, inactivity and the lack of productivity (Kaplan & Sadock, 2003). The main distinguishing factor between major
depressive disorder and dysthymic disorder is that individuals complain that they have always been
depressed (Carson, Butcher & Mineka, 2000).

Over the past few decades, the number of diagnostic categories for mood disorders has increased
markedly with each edition of the major classification systems for mental disorders (e.g., the
Diagnostic and Statistical Manual of Mental Disorders, DSM, and the International Classification of
Diseases, World Health Organization, 1993). According to the DSM IV-TR (2000), which is an
internationally accepted classification system of mental disorders, three unipolar mood disorders have
been identified. These include: major depressive disorder, dysthymic disorder and depressive disorder
not otherwise specified. Two of these three diagnostic categories are included in the present study.

4.3.3.2 Bipolar Mood Disorders

Individuals with manic and depressive episodes or individuals with manic episodes alone are said to
have bipolar mood disorder. If however, the individual does not experience a depressive episode or
present with a history of depressive symptoms, she is described as having unipolar mania, pure mania
or euphoric mania (Hilty, 1999). A manic episode is characterized by a distinct period of an abnormally
and persistently elevated, expansive or irritable mood lasting for at least one week or less if
hospitalization is required (APA, 2000). A hypomanic episode lasts at least four days and is similar to a
manic episode except that it is not severe enough to cause impairment in social or occupational
functioning and no psychotic features are present (Kaplan & Sadock, 2003). Both mania and
hypomania are associated with inflated self-esteem, decreased need for sleep, distractibility, great
physical and mental activity and over-involvement in pleasurable activity or behaviour (Carson,
Butcher & Mineka, 2000).

An individual who presents with a clinical case of one or more manic or mixed episodes which are
usually accompanied by major depressive episodes is described as having bipolar I disorder (APA,
2000). A variant of bipolar I disorder is characterized by one or more major depressive episodes
accompanied by at least one hypomanic episode rather than mania and is known as bipolar II disorder (APA, 2000).

A symptomatically milder form of bipolar II disorder, namely cyclothymic disorder is characterized by episodes of hypomania and mild depression. Cyclothymic disorder is characterized by at least two years of frequently occurring hypomanic symptoms that do not fit the diagnosis of a manic episode and of depressive symptoms that do not fit the diagnosis of major depressive episode (Barlow & Durand, 2005). This disorder has been referred to as a “chronic, fluctuating disturbance” consisting of numerous periods of hypomania and depression (APA, 2000). Bipolar II disorder is differentiated from cyclothymic disorder by the presence of major depressive and hypomanic episodes.

The DSM IV-TR with its focus on clinical, research and educational purposes, as well as its extensive empirical foundation of support has identified it as one of the most credible and utilizable classification systems (APA, 2000). According to this classification system, four bipolar mood disorders have been identified. These include: bipolar I disorder, bipolar II disorder, cyclothymic disorder and bipolar disorder not otherwise specified. The DSM IV-TR also includes three mood disorder research categories, mood disorders due to a general medical condition, substance-induced mood disorders and residual disorders (coded as NOS - not otherwise specified). For the purpose of the present study, only five of the ten listed mood disorders were included (See Appendix 1). The disorders that have been excluded in the study are excluded based on the fact that they are co-morbid with another mental illness or general medical conditions. Participants with these disorders are therefore excluded from the study.

4.3.4 Incidence and prevalence rate of Mood Disorders

4.3.4.1 Gender

Several large epidemiological studies estimating the prevalence of mood disorders have been carried out in recent years (Kessler, 1994; Weissman, 1991). These studies have consistently found female: male (F:M) prevalence ratios around 2:1 and agree that women are twice more likely than men to
experience a mood disorder. Surveys of depression among children and adolescents show that the gender differences first emerge in the age range 11–14 (Angold, 1998). Major Depressive disorder is twice as common in adolescent and adult females as in adolescent and adult males (Barlow & Durand, 2005). An almost universal observation, independent of country or culture, is the two-fold greater prevalence of major depressive disorders in women than in men (Sarason & Sarason, 1999).

Smaller numbers of epidemiological studies have examined gender differences in minor depression (Kessler, 1997) or brief recurrent depression (Angst & Merikangas, 1997) and consistently found a higher incidence among women than men. The reasons for the gender difference have been hypothesized to involve hormonal differences, the effects of childbirth, differing psychosocial stressors for women and men and behavioural models of learned helplessness (Halbreich, 2007). Epidemiological studies have also examined gender differences in dysthymia (Angst & Merikangas, 1997). The results of these studies indicate that the lifetime prevalence of dysthymic disorder is approximately 6% and that women are two to three times more likely to develop dysthymic disorder than men in adulthood.

In contrast to major depressive disorder, bipolar mood disorder has an equal prevalence among men and women (Weissman, 1993). No meaningful gender difference exists in the prevalence of mania either in epidemiological surveys (Kessler, 1998) or in clinical studies (Goodwin & Jamison, 1990). Manic episodes have been identified as more common in men and depressive episodes more common in women (Goodwin & Jamison, 1990). When manic episodes occur in women, they are more likely than men to present with a mixed picture (e.g., mania and depression) and have a higher rate of being rapid cyclers (Coryell, Endicott & Keller, 1992).

Bipolar II, on the other hand, may be more common in women than in men and the number of hypomanic episodes in men equals or exceeds the number of major depressive episodes. In women, major depressive episodes predominate and mixed episodes are also more prevalent among women (Bland, 1997; Hankin & Abramson, 2001; Nolen-Hoeksema, 1987; Weissman, 1991). Community
studies indicate that the prevalence of Bipolar II is approximately 0.5% (Thom, Zwi & Reinach, 1993). The prevalence rates for Cyclothymic disorder indicates that there is no significant gender difference between men and women in community samples (Depue, 1981).

4.3.4.2 Diagnosis

The lifetime prevalence of major depressive disorder ranges between 15% to, perhaps even as high as, 25% among women (Hammen, 2001). In community samples, major depression accounts for 10% of the diagnoses in primary-care patients and 15% in medical inpatients (Kaplan & Sadock, 2003). Dysthymic disorder is seen in patients in general psychiatric clinics where it affects between a half and three quarters of all patients (Klein, Taylor, Dickstein & Harding, 1988). Dysthymic disorder is common among the general population and affects between 5% and 6% of all persons (Akiskal & Cassano, 1997). In terms of bipolar disorders, bipolar I disorder is less common than major depressive disorder with a lifetime prevalence of about 1%, similar to the figure for schizophrenia (Carson, Butcher & Mineka, 2000). The prevalence of this disorder in community samples ranges between 0.4% and 1.6% of all persons (Taylor & Abrams, 1981). Bipolar II on the other hand has a lifetime prevalence of between 0.6 and 0.7 (Rihmer & Pestality, 1999). Individuals with cyclothymic disorder constitute between 3% and 5% of all psychiatric outpatients and are often referred with significant complaints on marital and interpersonal difficulties (Depue, 1981).

4.3.4.3 Age

Major depressive disorder appears to occur along the lifespan, sometimes beginning in childhood or even in old age. The mean age of onset for major depressive disorder is about 40 years with 50% of all individuals having onset between the ages of 20-50 years (Kendler, Kessler & Walters, 1995). Recent epidemiological data suggest that the incidence of major depressive disorders may be increasing among people less than 20 years old (Weissman, Bruce, Leaf, Floria & Holzer, 1991; Kessler, 2003). This may be related to increases in alcohol and drug abuse in this age group. The onset of bipolar I disorder is earlier than that of major depressive disorder and the age of onset for bipolar I ranges from childhood
(5 or 6 years) to 50 years or even older in rare cases, with a mean age of 30 years (Weissman, 1991). The mean age of onset for bipolar II is 22 years (Rihmer & Pestality, 1999). Cyclothymic disorder usually begins in adolescence and early adult life with a mean age of onset between 15-25 years (Waters, 1979).

4.3.4.4 Marital status

A number of studies have documented that major depressive disorder occurs most often in individuals without close interpersonal relationships or amongst those who are divorced or separated (Blazer, Kessler & McGonagle, 1994). In many of these individuals, not having a close intimate relationship or lack of interpersonal relationships with others appears to play a role in the development and maintenance of their disorder. Bipolar I and II disorder is more common in divorced and single persons than among married persons, but this difference is regarded as a reflection of the early onset and the resulting marital discord characteristic of the disorder (Bebbington & Ramana, 1995).

4.3.4.5 Socio-economic and cultural factors

In studies regarding the prevalence of mood disorders, researchers have identified that the diagnosis of these disorders does not differ among races (Alarcon, 1995). There does however appear to be a tendency for examiners to under-diagnose mood disorders in certain racial groups and over-diagnose schizophrenia in individuals whose racial or cultural background differs from the examiner. When studying the relationship between socio-economic status and major depressive disorder, researchers identified no significant correlation between the two variables (APA, 2000). One study did, however, regard depression as more prevalent in rural than urban areas (Abramson, Alloy & Metalsky, 1995). In terms of bipolar I disorder, a higher than average incidence of the disorder is found among the upper socio-economic groups (Kaplan & Sadock, 2003).

4.3.5 Etiology

A number of factors are involved in the development and expression of human psychopathology. Although the cluster of factors which together result in the development of a mood disorder may be
different for each individual, psychopathologists have identified biological, psychological and social factors that seem strongly implicated in the etiology of mood disorders whatever the precipitating factor (Ogden, 2002). The interaction of biological, psychological and social dimensions has contributed significantly to the development of an integrative theory for the etiology of mood disorders. This theory is depicted in the Figure 4.2 below.

Figure 4.2: An integrative model of mood disorders (Barlow & Durand, 2005)

4.3.5.1 An Integrative Theory

As depicted in Figure 4.2, the integrative model of mood disorders considers the biological, psychological and social dimensions and the vulnerabilities that may exist in these dimensions. The interaction of one of these dimensions, either singly or in combination with one or both of the other dimensions, can influence the development of a mood disorder (Barlow & Durand, 2005). In this diagram, a stressful life event may trigger or activate stress hormones which have a wide range of effects on the neurotransmitters in the brain (e.g., serotonin, norepinephrine and dopamine). Prolonged
stress or exposure to a very traumatic event over the long term may result in structural and chemical changes in the brain thereby creating a biological vulnerability (Kessler, 1997). A stressful life event or traumatic experience could activate a dormant psychological vulnerability such as a negative cognitive schema or hopelessness which also places the individual at a psychological vulnerability to develop a mood disorder. An individual may experience a social vulnerability if they are experiencing problems in interpersonal relationships, have recently suffered a loss, or are experiencing other social stressors. These social difficulties, either singly or together with the other vulnerabilities (biological or psychological), can influence the development of a mood disorder (Sarason & Sarason, 1999). In the section that follows, these vulnerabilities are discussed.

4.3.5.2 Biological vulnerability

The biological vulnerability of individuals in the development of mood disorders appears to be a relatively well-researched area. Mood disorders have been the subject of more intense neurobiological study than almost any other area of psychopathology with the possible exception of schizophrenia (Alloy, Jacobson & Acocella, 1999). Regular information regarding exciting findings and possible understandings of the relationship of specific neurotransmitters and neurohormones to mood disorders appear relatively often in the academic literature. In this difficult research area, most breakthroughs have proven to be illusory but false starts provide an even deeper understanding of the enormous complexity of the neurobiological underpinnings of mood disorders (Garlow & Nemeroﬀ, 2003; Green, Mooney, Posener & Schildkrout, 1995; National Institute of Mental Health, 2003).

Various neuroendocrine dysregulations have been reported in individuals with mood disorders and thus the abnormal regulation of neuroendocrine axes (adrenal axis, growth hormone axis and thyroid axis) may result from the abnormal functioning of biogenic amine-containing neurons (Power & Cowen, 1992). The biogenic amines, norepinephrine and serotonin are the two neurotransmitters most implicated in the pathophysiology of mood disorders. Dopamine has also been theorized to play a role in the pathophysiology of depression. Neuroendocrine studies indicate that the abnormal regulation of
the adrenal axis and thyroid axis play a significant role in the course of dysthymic disorder (Akiskal & Casano, 1997). The thyroid axis in dysthymic disorder may be a trait variable associated with the chronic nature of the illness. This is supported by Bauer and Whybrow (1990) in a study of individuals with dysthymic disorder in which a higher percentage were identified as having thyroid axis abnormalities than the normal control subjects.

Brain-imaging studies of patients with mood disorders have provided several inconclusive clues about abnormal brain function in these disorders. Individuals with major depressive disorder in magnetic resonance imaging (MRI) studies have been identified as having smaller caudate nuclei and smaller frontal lobes than control subjects (Elkis, Friedman & Wise, 1995; Soares & Mann, 1997). Depressed individuals have also been found to have abnormal hippocampal relaxation times compared with normal controls. Increased cerebral blood flow in individuals with major depressive disorder has also been found through MRI studies which also indicate state-dependent increases in the cortex, basal ganglia and the medial thalamus indicating abnormal brain functioning in depressed individuals and the possibility of a biological vulnerability (Abramson, Alloy & Metalsky, 1995).

Although studies have not reported consistent findings, the data indicate that a significant set of bipolar I disorder men have enlarged cerebral ventricles (Sands & Harrow, 2000). In MRI studies with bipolar I individuals, significantly more deep white matter lesions were identified (Kaplan & Sadock, 2003). Research with Bipolar I individuals has also produced data consistent with the hypothesis that the pathophysiology of the disorder may involve an abnormal regulation and metabolism of the membrane phospholipids (Carson, Butcher & Mineka, 2000).

Both the symptoms of mood disorders and biological research findings support the hypothesis that mood disorders involve pathology of the limbic system, the basal ganglia and the hypothalamus (Carson, Butcher & Mineka, 2000). Persons with disorders of the basal ganglia and the limbic system are likely to show mood-related symptoms. The limbic system and basal ganglia are intimately connected and the limbic system is identified as playing a significant role in the production of emotions.
Depressed and manic individual’s alterations in sleep, appetite, sexual behaviour and biological changes in endocrine, immunological and chronobiological measures suggest dysfunction of the hypothalamus (Holsboer, 1992). Individuals with mood disorders also present with changes in psychomotor behaviour which are similar to disorders of the basal ganglia (Abramson, Alloy & Metalsky, 1995).

Genetic data strongly indicate a significant genetic factor in the development of mood disorders but the pattern of genetic inheritance is complex (Sarason & Sarason, 1999). Family studies have shown that the 1st degree relatives of major depressive disorder individuals are 1.5 to 2.5 times more likely to have bipolar I mood disorder than are 1st degree relatives of normal control subjects and 2 to 3 times more likely to have major depressive disorder (Angst & Merikangus, 1997). Family studies of 1st degree relatives of bipolar I disorder individuals are 8 to 18 times more likely than 1st degree relatives of control subjects to have bipolar I disorder and 2-10 times more likely to have major depressive disorder (Winolcur, 1995). These findings indicate that a genetic component plays a more significant role in transmitting bipolar I disorder than in major depressive disorder. This is also seen in cyclothymic disorder where about 30% of all individuals have family histories of bipolar I disorder (APA, 2000).

Adoption studies have also produced data supporting the genetic basis for the inheritance of mood disorders. Two out of three adoption studies have found a stronger genetic component for the inheritance of major depressive disorder and Bipolar I mood disorder (Kaplan & Sadock, 2003). These adoption studies have shown that the biological children of affected parents remain at increased risk of a mood disorder, even if they are reared in non-affected adoptive families (Bebbington & Ramana, 1995). In twin studies with monozygotic and dizygotic twins, the concordance rate of major depressive disorder in monozygotic twins was 50% and 10% to 25% in dizygotic twins (Barlow & Durand, 2005). In similar studies, monozygotic twins were found to have a 33% to 90% concordance rate for Bipolar I, depending on the particular study, and the concordance rate of dizygotic twins varied between 5% and
25% (Bebbington & Ramana, 1995). These concordance rates highlight the role of genetics in the development and expression of mood disorders.

Sleep abnormalities are a common characteristic in mood disorders whether the individual is depressed and experiences insomnia or hypersomnia, or manic where the individual experiences a decreased need for sleep (Kaplan & Sadock, 2003). Researchers have long recognized that sleep electroencephalograms can assist in identifying individuals with mood disorders by considering: delay in sleep onset, rapid eye movement, latency and longer 1st REM period and abnormal delta sleep (Shelton, 1991; Thase & Howland, 1995). This disruption in sleep architecture, evident in mood disorders has led to theories that mood disorders reflect abnormal regulation of circadian rhythms. Sleep studies have identified decreased REM latency and increased REM density in the sleeping pattern of individuals diagnosed with dysthymic disorder (Akiskal & Casano, 1997).

In the preceding section, it is evident that a number of biological factors, such as neurotransmitters, abnormal brain functioning, genetics and sleep disturbances play an important role in the etiology of mood disorders. In the section that follows, psychological vulnerabilities are discussed as contributing factors in the development of mood disorders.

4.3.5.3 Psychological vulnerability

One of the most salient contributions to the etiology of all psychological disorders is the role of stress and trauma (Johnson & Hayes, 2000). Throughout psychopathology, the roles of stress and trauma have been reflected and incorporated into the understanding of mood disorders (Gibbons, 1964; Owens & Nemeroff, 1996). This is evident in a wide adoption of the diathesis-stress model of psychopathology which describes possible genetic and psychological vulnerabilities. In this model, emphasis is placed on seeking what activates an individual’s vulnerability (diathesis) and the nature of the stressful or traumatic event (activating event). Numerous research studies indicate that stressful life events are strongly related to the onset of mood disorders (Kessler, 1997; Kendler, Karkowski & Prescott, 1999; Mazure, 1998).
In studies conducted on the relationship between stressful and traumatic events and the onset of depression, it was found that, a marked relationship existed between severe and in some cases traumatic life events and the onset of depression (Brown, 1989; Harris & Hepworth, 1994; Kendler, Karkowski & Prescott, 1999; Mazure, 1998). Specific events identified in these studies were more likely to lead to depression than others. These events included: the breakup of a relationship, loss and death. A strong relationship between stressful events and the onset of Bipolar disorder has also been identified (Ellicott, 1988; Goodwin & Jamison, 1990; Johnson & Roberts, 1995; Reilly-Harrington, Alloy, Fresco & Whitehouse, 1999). Stressful life events appear to trigger early mania and depression resulting in the diagnosis of bipolar mood disorder (Hammen & Gitlin, 1997). As the disorder progresses, these episodes appear to develop a life of their own and an activating event is no longer essential to initiate an episode (Kaplan & Sadock, 2003). In some cases and especially in the postpartum period, the precipitants of manic episodes seem to be related to a loss of sleep (Goodwin & Jamison, 1990).

The attribution that one does not have control over the stress in one’s life or the stressful and traumatic events mentioned before results in a feeling of hopelessness which can later result in depression. Some evidence suggests that a pessimistic style of attributing negative events to one’s own character flaws results in hopelessness (Abramson, Alloy, Metalsky, 1995; Gotlib & Abramson, 1999). This sense of hopelessness which the individual experiences may result in him or her making arbitrary inferences or overgeneralizations resulting in cognitive errors and negative cognitions. This style may predate and therefore, contribute to the onset of a depressive episode.

Research has indicated that no single personality trait or type uniquely predisposes a person to the development of a mood disorder, as all humans, of whatever personality type or pattern, can develop a mood disorder given the appropriate cluster of circumstances (APA, 2000). With this said, research has shown that persons with certain personality disorders, such as obsessive compulsive, histrionic and borderline, may be at greater risk for developing a mood disorder than persons with anti-social or
paranoid personality disorder (APA, 2000). In terms of bipolar disorder, no particular personality disorder has been identified as being related to any of the bipolar mood disorders (Bebbington & Ramana, 1995). Research does however indicate that patients who present with a mood disorder often present with a co-morbid diagnosis i.e. anxiety disorders, substance-related disorders and medical conditions (MacKinnon, Zandi & Cooper, 2002).

4.3.5.4 Social vulnerability

A number of social and cultural factors contribute to the onset or maintenance of mood disorders. A large number of studies have demonstrated that the greater the number and frequency of social relationships and contacts one has, the longer you are likely to live (Berkman & Syme, 1979). The main reason for this is that social relationships give meaning to life and create a sense of belonging. Social relationships also tend to protect individuals against many psychological disorders by providing a buffer to stressful events and support in times of crisis (Alloy, Jacobson & Acocella, 1999). Difficulties in social relationships will have the opposite effect and stressors such as marital problems, a break-up with a boyfriend or loss could influence the development of a mood disorder.

4.3.6 Treatment

The treatment of mood disorders includes pharmacotherapy, psychotherapy, a combination of these two therapies and alternative therapies. In the treatment of mood disorders, the clinician needs to be aware of the specific treatment methods for unipolar disorders and those for bipolar disorders.

In unipolar disorders, many studies indicate that clinicians and researchers believe that a combination of psychotherapy and pharmacology is the most effective treatment (APA, 2000). Some studies do however suggest another view by stating that either pharmacotherapy or psychotherapy alone is effective (APA, 2006). The frontline pharmacological treatment for depressive disorders is antidepressants. The selective serotonergic reuptake inhibitors (SSRI) are the most widely used antidepressant drugs currently in use (Palmer, 2000). They are agents of choice because of their effectiveness, ease of use and relative lack of adverse effects, even in high dosages. Tricyclics,
tetracyclics and monoamine oxidase (MAO) inhibitors have also been shown to be effective in the
treatment of depressive disorders but have adverse effects. Tricyclics and tetracyclics have been found
to cause sedation and MAOs require dietary restrictions (Thase & Kupfer, 1996). Alternatives to drug
treatment for depressive disorders include two organic therapies, electroconvulsive therapy (ECT) and
phototherapy. ECT is used when the individual is unresponsive to pharmacotherapy or cannot tolerate
pharmacotherapy, or if the clinical situation is so severe that the rapid improvement seen with ECT is
needed. If individuals have a seasonal pattern to their mood disorder, phototherapy is the treatment of
choice (Barlow & Durand, 2005).

In bipolar disorders, the clinician needs to address both the depressive and manic or hypomanic
symptoms. The single use of antidepressants is thus not effective in the treatment of bipolar disorders.
The first line of pharmacological treatment for individuals with bipolar disorders is a mood stabilizer,
antimanic agent or anticonvulsant (Post, Ketter, Denicoff & Pazzaglia, 1996). In the manic phase,
lithium, valporate, carbamazepine or other anticonvulsants are the drugs of choice. In the mixed or
dysphoric mania, rapid cycling and psychotic mania, carbamazepine, divalporex and valporic acid are
the preferred pharmacological treatments. ECT has also been described as highly effective in all phases
of bipolar disorder (Janicak, 2002; Grunhous, Schreiber, Dolberg, Polak & Dannen, 2003). Individuals
who do not respond well to mood stabilizers may do well on a combination treatment such as
carbamazepine and valporic acid. In bipolar II treatment must be approached cautiously as treatment
for depressive episodes with antidepressants can frequently precipitate a manic episode (APA, 2000).

Psychosocial therapies for the treatment of mood disorders vary among the different mood
disorders. Generally, three short-term therapies namely, cognitive therapy, interpersonal therapy and
behaviour therapy have been studied in relation to mood disorders (Sarason & Sarason, 1999). In
addition to these three therapies, psychoanalytic therapy is also used by a number of therapists (Carson,
Butcher & Mineka, 2000). Although family therapy is not viewed as a primary therapy in mood
disorders, increasing evidence indicates that helping the patient with the mood disorder to reduce and
cope with stress will lessen the chance of a relapse. Family therapy also focuses on the role of the mood-disordered member in the overall psychological well-being of the whole family and the role of the family in the maintenance of the individual’s symptoms (APA, 2000). Although current treatment emphasizes pharmacotherapy and psychotherapy in the treatment of mood disorders, psycho-education focused on reducing the number and severity of the stressors in the individual’s life also needs to be considered to reduce the relapse rate.

This section introduced and discussed the incidence, structure, etiology and treatment of mood disorders. The following section introduces anxiety disorders.

4.4 Anxiety Disorders

4.4.1 Introduction

The concern with fear and anxiety is as old as humanity itself. The phenomenon of anxiety has always existed; it belongs to no particular era or culture and is derived from the Greek root meaning “to press tight”. The term anxious on the other hand is related to the Latin word angere, which means “to strangle” or “to distress”. This word resembles the word anger, meaning “trouble”. It is also related to the word anguish, which is described as “acute pain, suffering or distress”. These words, all related to anxiety, capture the essence of anxiety and the physical symptoms which accompany it. Anxiety is complex and mysterious, as Freud (1909) realized many years ago. In some ways, the more one learns about it, the more baffling it seems. The 21st century has been called the age of anxiety, and anxiety has been viewed as a pervasive aspect of contemporary life (Barlow & Durand, 2005).

Anxiety can be adaptive at low levels because it serves as a signal that the individual must prepare for an upcoming event (Castello, 1976). It thus warns the individual of threats of bodily damage, pain, helplessness, possible punishment or the frustration of social or bodily needs, of separation from loved ones or separation from unity or wholeness. It also prompts an individual to take the necessary steps to prevent the threat or to lessen its consequences. In contrast, high levels of anxiety become incapacitating by disrupting concentration, performance and the individual’s normal level of
functioning. In the section that follows, anxiety and related concepts such as fear and panic are introduced.

4.4.2 Understanding and defining Anxiety Disorders

The concept of fear has been clearly represented in the ancient Egyptian hieroglyphics and there are frequent references to fear in the Bible, as well as in early writings of the Greek and Roman philosophers. Darwin (1852) regarded fear as a fundamental human emotion. In 1872, Darwin reasoned that the potential for experiencing fear was an inherent characteristic of both humans and animals. Within the framework of his theory of evolution, the function of fear was to arouse and mobilize the organism for coping with external danger. He further pointed out that the word fear is derived from the words meaning “sudden” and “dangerous”. In terms of current understanding, fear is experienced in the face of real, immediate danger which usually builds quickly in intensity and helps organize the person’s behavioural responses to threats from the environment (Barrios & O’Dell, 1997). Fear thus protects the individual by activating the autonomic nervous system, which along with the individual’s subjective sense of terror motivates him / her to escape or possibly to attack; this is also known as the fight or fright response.

Cannon’s (1927) “fight or flight response” as well as Selye’s (1976) General Adaptation Syndrome and Darwin’s early writings all indicate that an alarm reaction is activated by a stressor which results in a response by the individual to protect themselves from harm. These fear reactions vary in intensity ranging from attention and mild apprehension or to what Darwin (1859) described as an extreme “agony of terror”. While Darwin (1872) placed greater emphasis on observable manifestations of fear, Cannon (1927) and Selye (1976) were more concerned with the physiological and biochemical changes that occurred in the body when exposed to such stressors. The adaptive function of a fear reaction is thus to provide a signal that warns the individual that something must be done either to escape or to eliminate a potential danger. The drive to escape pain is probably the foundation for the learned drives termed fear and anxiety (Donald & Miller, 1950). Like Darwin, Freud emphasized the usefulness of
fear and anxiety in helping a person adapt to danger. But while fear and anxiety have long been regarded as important reactions to stress, there is still a great deal of confusion and controversy about the definitions of these terms.

Historically, the most common way of distinguishing between fear and anxiety has been whether there is a clear and obvious source of danger that would be regarded as real by most people (Gray, 1991; Barlow, 1996). When the source of danger is obvious the experienced emotion has been called fear. With anxiety, it becomes more difficult to delineate a clear danger or threat. Fear is a response to a known external, definite or non-conflictual threat, where anxiety is a response to a threat that is unknown, internal, vague or conflictual (Gray & McNaughton, 1996). The distinction between fear and anxiety arose accidentally when Freud’s early translator mistranslated angst, the German word for “fear” as anxiety (Alexander, 1948). Freud himself therefore generally ignored the distinction that associates anxiety with a repressed, unconscious object and fear with a known, external object. The main psychological difference between fear and anxiety are the two emotional responses of the suddenness of fear and the insidiousness of anxiety. In contrast to fear, anxiety involves a more general or diffuse emotional reaction beyond simple fear, that is out of proportion to any threats from the environment (Roth & Argyle, 1988).

A certain level of anxiety is normal from time to time in everyday life and may often serve the useful function of spurring one on to necessary action. The emotion of anxiety would be experienced as normal if it were appropriate to the circumstances and accepted as a natural concomitant of the arousal needed to deal with a particular situation. Anxiety is a future-orientated mood-state focused on a potential danger or threat, as opposed to an emergency or alarm reaction to actual present danger (Barlow, 1988; Barlow, 1996). Rather than involving the activation of the fight or flight response itself, as one sees with fear, anxiety involves preparing for that response should it become necessary in future. Anxiety is associated with the anticipation of future problems rather than being directed toward the person’s present circumstances. Howard Liddell (1949) first proposed this idea when he called anxiety
the “shadow of intelligence”. He thought the human ability to plan in some detail for the future was connected to that gnawing feeling that things could go wrong and we had better be prepared for them.

Anxiety is usually characterized by a diffuse, unpleasant, vague sense of apprehension, often accompanied by automatic symptoms such as headaches, perspiration, palpitations, tightness of chest, mild stomach discomfort and restlessness, indicated by an inability to sit or stand still for long (Carson, Butcher & Mineka, 2000). Anxiety involves three basic components (a) subjective reports of tension, apprehension, dread and expectations of inability to cope, (b) behavioural responses: such as avoidance of a feared situation, impaired speech and motor functioning and impaired performance on cognitive tasks, (c) physiological responses: including muscle tension, increased heart rate, blood pressure, rapid breathing, dry mouth, nausea, diarrhea and dizziness (Alloy, 1999). Individuals who experience anxiety are also apt to select certain things in their environment and overlook others in their effort to prove that they are justified in considering the situation frightening. If they falsely justify their fear, they augment their anxiety by selective response and set up a vicious cycle of anxiety, distorted perception and increased anxiety. If alternatively, they falsely reassure themselves by selective thinking, appropriate anxiety may be reduced and they may fail to take the necessary precautions.

The borderline between what one can accept as normal anxiety and pathological levels is determined largely by the level of functioning of the anxious individual. The particular constellation of symptoms present during anxiety tends to vary among persons and degrees as depicted in Figure 4.3 below.

![Figure 4.3: Continuum of anxiety responses (Peplau, 1963)](image-url)
The continuum above reflects both adaptive and maladaptive anxiety responses. The responses depicted above range from less severe forms of anxiety to anxiety which is often experienced as severe and debilitating. Anticipation which can also be described as mild anxiety is associated with the tension of day-to-day living (Sarason & Sarason, 1999). In this area on the continuum, the individual is alert and their perceptual field is increased. The individual sees, hears and grasps more than before as they are more aware of the environment and any potential threats. This kind of anxiety can motivate learning and produce growth and creativity.

Moderate anxiety on the other hand results in a narrowing of the individual’s perceptual field as he/she sees, hears and grasps less, focuses only on immediate concerns and blocks selected areas to increase focus and attention on the stressor. The role of mild and moderate anxiety is to heighten the individual’s capacity, whereas severe and panic levels of anxiety paralyze and overwork the individual’s capacities (Stuart & Laraia, 2001). Individuals with mild and moderate levels of anxiety thus usually have no medically diagnosed health problem whereas individuals with severe anxiety levels are diagnosed with anxiety disorders (Barrios & O’Dell, 1997). These individuals experience anxiety that is maladaptive and becomes a chronic concern.

When an individual experiences severe anxiety, there is a significant reduction in the perceptual field, the individual tends to focus on specific detail and not think about anything else. The individual then becomes preoccupied with trying to relieve anxiety and the accompanying discomfort. The individual’s attention and focus are now solely directed at the stressor. Panic which is also located on the maladaptive end of the continuum is associated with awe, dread and terror (Barlow, Chorpita & Turousky, 1996). At this stage, details are blown out of proportion as a result of a complete loss of control and the individual is unable to do things, even with direction. The individual experiences increased motor activity and a decreased ability to relate to others, distorted perceptions and loss of rational thought. These high levels of anxiety are usually classified as neurotic disorders that fall under the category of anxiety disorders in the DSM IV-TR (Sarason & Sarason, 1999). Neurotic disorders are
maladaptive anxiety responses associated with moderate and severe levels of anxiety. As anxiety increases to the severe and panic levels, the behaviours displayed become more intense, potentially injurious and the quality of life decreases.

Historically, anxiety disorders were considered to be examples of neurotic behaviour which involved the exaggerated use of avoidance behaviour and defense mechanisms (Bruno, 1980). Although neurotic behaviour is maladaptive and self-defeating, a neurotic person is not out of touch with reality, incoherent or dangerous. It was Freud (1909) who first proposed a critical role for anxiety in the formation of neurotic and psychosomatic conditions. For him, anxiety was the fundamental phenomenon and the central problem of neurosis. Freud (1946) regarded the reaction to external danger as objective anxiety and the reaction to forbidden or unacceptable internal impulses as neurotic anxiety. In neurotic anxiety, the source of the danger is internal rather than external and the individual is not consciously aware of the stressor (Alexander, 1948). Until the 1980’s, the anxiety disorders were grouped with somatoform and dissociative disorders under neurosis (Carson, Butcher & Mineka, 2000). Throughout the 19th century, anxiety disorders were seen as an unidentified neurological dysfunction (Barlow, 1991). It was only at the beginning of the 20th century that the biogenic view was gradually replaced by Freud’s psychogenic view (Freud, 1909).

Maladaptive anxiety, or what David Barlow has called anxious apprehension, refers to an unpleasant inner state in which the individual anticipates something dreadful happening that is not entirely predictable from his / her actual circumstances (Barlow, 1991; Barlow, Chorpita & Turovsky, 1996). Anxious apprehension consists of three things, namely: (a) high levels of diffuse negative emotions, (b) a sense of uncontrollability and, (c) a shift in attention to a primary self-focus or a state of self preoccupation (Barlow, 1991). Individuals with an anxiety disorder tend to overestimate the danger and the possibility of harm in a given situation and a tendency to underestimate one’s abilities to cope with perceived threats to one’s physical or psychological well-being. When experiencing anxiety, individuals use various coping mechanisms to relieve their discomfort. The inability to cope with
anxiety constructively is a primary cause of pathological behaviour, as many symptoms of illness develop as attempted defenses against anxiety (Freud, 1946). In the section that follows, the structure of anxiety disorders is introduced.

4.4.3 The structure of Anxiety Disorders

Unlike mood disorders where an individual moves from one “pole” to another on the continuum or remains at one “pole”, anxiety disorders are not structured along the same continuum. Anxiety disorders are characterized by either an internal or external stressor activating an alarm response which is either adaptive or maladaptive (Carson, Butcher & Mineka, 2000). In anxiety disorders, this alarm response is maladaptive and causes increased levels of anxiety. For the purpose of this study, anxiety disorders will be classified into three groups namely: panic disorders, phobic disorders and others.

In disorders where panic is the most prominent symptom, namely, panic disorders, the individual experiences unexpected attacks of panic which are often sudden in onset with intense fear and a range of somatic symptoms. This disorder can present with or without agoraphobia. Agoraphobia refers to the fear of being alone in public places, particularly places from which rapid exit would be difficult in the course of a panic attack (APA, 2000).

A phobic disorder, namely a specific phobia or social phobia is characterized by a persistent and disproportionate fear of some specific object or situation that presents little or no actual danger to a person (Kaplan & Sadock, 2003). A specific phobia is identified as a strong, persistent fear of an object or situation; and these include: animals, a natural environment, blood-injection-injury, situational and others (APA, 1994). Social phobia on the other hand refers to a strong, persistent fear of situations in which embarrassment can occur, such as not being able to escape if a panic attack occurs at the shopping mall (Kaplan & Sadock, 2003).

The category referred to as others includes: obsessive-compulsive disorder and generalized anxiety disorder. Obsessive-compulsive disorder is characterized by the symptom of recurrent obsessions or compulsions which are sufficiently severe to cause marked distress to the individual. The obsessions or
compulsions are time consuming and interfere significantly with the individual's normal routine, occupational and social functioning (APA, 2000). Generalized anxiety disorder is characterized by excessive worrying over trifles. This persists for 6 months or more, accompanied by symptoms of anxiety such as tension, automatic arousal, irritability and concentration difficulties (APA, 2000). These disorders will be elaborated on in the next section.

4.4.3.1 Panic

The pivotal feature of panic disorder is unexpected attacks of panic which are often sudden in onset with intense fear and a range of somatic symptoms such as palpitations, choking, dizziness, trembling and sweating (Antony & Barlow, 1996). Anxiety begins suddenly and unexpectedly and soon mounts to an almost unbearable level. A panic attack usually lasts several minutes though it may continue for hours. The symptoms are inexplicable and often so distressing that the individual fears he/she may be dying or going crazy. The panic usually subsides after an hour, but may recur with little or no provocation within a few days. It often leads to avoiding situations in which an attack had previously been experienced, where an attack would be embarrassing or where help might not easily be available (Alloy, Jacobson & Acocella, 1999). The individual may also fear future attacks in between or refuse to go anywhere a complication of panic disorder called agoraphobia.

Three basic types of panic attacks are referred to when diagnosing panic disorder, namely: situationally bound, unexpected and situationally predisposed. A situationally bound panic attack has a specific, cue whereas an unexpected panic attack is not cued (Sarason & Sarason, 1999). The third type of attack, the situationally predisposed indicates that the individual is more likely to have a panic attack but not inevitably going to have a panic attack in that environment (Carson, Butcher & Mineka, 2000). Panic can be distinguished from anxiety in two aspects, (a) it is more intense, and (b) it has a sudden onset. A panic attack is also a sudden overwhelming experience of terror or fright, whereas anxiety involves a blend of several negative emotions.
Panic disorder in terms of the DSM IV-TR has three different presentations. These include panic disorder without agoraphobia, panic disorder with agoraphobia and agoraphobia without a history of panic disorder.

4.4.3.2 Phobias

A phobia can be described as an intense state of fear which is produced by a specific object or situation that is in fact relatively harmless (APA, 2000). A phobia involves two factors: a) an intense and persistent fear of an object or a situation that the person realizes actually poses no real harm, b) avoidance of the phobic stimulus (Mennin, Heimberg & Holt, 2000). When exposed to the feared object or situation, a phobic individual experiences an anxiety attack that leads him/her to take elaborate steps to avoid the phobic object. Since intense anxiety is aroused by a stimulus that is relatively harmless, phobic reactions are regarded as irrational and pathological.

In the DSM IV-TR there are two main categories for phobias: specific and social phobias. A specific phobia is a strong, persistent fear of an object or situation, such as: animals, a natural environment, blood-injection-injury and situational (Hope & Heimberg, 1993). A social phobia is a strong, persistent fear of situations in which embarrassment can occur, such as not being able to escape if a panic attack occurs in a shopping mall. Fear of negative evaluation by others may thus be the hallmark of social phobia.

4.4.3.3 Other

An essential feature of obsessive-compulsive disorder (OCD) is the symptom of recurrent obsessions or compulsions which are sufficiently severe to cause marked distress to the individual. The obsessions or compulsions are time consuming and interfere significantly with the person’s normal routine, occupational and social functioning. An obsession is a thought or an image that keeps intruding into an individual’s consciousness; the individual finds the thought inappropriate, distressing and tries to suppress it unsuccessfully (Franklin, Rynn, Marsh & Foa, 2002). Obsessive thinking can be distinguished from worry in two primary ways: (a) obsessions are usually experienced as coming from
“out of the blue” whereas worries are often triggered by problems in everyday living and, (b) the content of obsessions most often involves themes that are perceived as being unacceptable or horrific such as sex, violence and disease or contamination, whereas the content of worries tends to centre around more acceptable commonplace concerns such as money and work (Turner, Beidel & Stanley, 1993). A compulsion is an action that a person feels compelled to repeat again and again in a stereotyped fashion, though she has no conscious desire to do so (Kaplan & Sadock, 2003). The most common compulsions fall into two categories, cleaning rituals such as handwashing, wiping objects used and checking rituals namely, locks, the time and door catches (Khanna & Mukherjee, 1992; Rachman & Hodgson, 1980).

The individual who seems to be anxious about almost everything is likely to be classified as having generalized anxiety disorder. Individuals who present with generalized anxiety disorder have excessive anxiety and worry about several events or activities on most days during a six-month period and display symptoms such as: tension, autonomic arousal, irritability and concentration difficulties (APA, 2000). The worry is difficult to control and is associated with somatic symptoms. The most common areas of worry include family, money, work and health (Rapee & Barlow, 1993). The anxiety is subjectively distressing and produces impairment in important areas of the individual’s life.

The DSM IV-TR also includes three anxiety disorder research categories: anxiety disorders due to a general medical condition, substance-induced anxiety disorders and residual disorders (coded as NOS—not otherwise specified). For the purpose of the present study, only seven of the twelve listed anxiety disorders have been included. The disorders that have been excluded from the study are exclusions based on the fact that they are co-morbid with another mental illness or general medical condition.

4.4.4 Incidence and prevalence rate of Anxiety Disorders

4.4.4.1 Gender

Anxiety disorders often precede and predict other disorders, suggesting that they may in fact represent an early developmental manifestation of shared emotional distress. Clear and objective
analyses of the factors that place individuals at risk for anxiety such as: negative affectivity and threat-based style of emotional regulation are strongly associated with being female (Gordon, 1992). The lifetime prevalence of anxiety disorders among women (30.5%) indicates that they are more likely than men (19.2%) to present with anxiety-related symptoms (Sarason & Sarason, 1999).

Although under-diagnosis of panic disorder in men may contribute to a skewed distribution, women have been identified as two to three times more likely to be affected by panic disorder (Barlow & Durand, 2005). In a study by Eaton (1994), the gender ratio for women was higher in terms of a diagnosis of panic disorder without agoraphobia compared with males. Women were also twice as likely to experience panic disorder and generalized anxiety disorder in their lifetime.

Specific phobia is the most common mental disorder among women and the second most common among men (Malis, Hartz, Doebbling & Nayes, 2002). Pertinent data from the National Comorbidity Survey indicates that women are three times more likely than men to experience a specific phobia (Magee, Eaton, Wittchen, McGonagle & Kessler, 1996). The lifetime prevalence rate of specific phobia among women (16%) compared with men (7%) indicates that women are at a greater risk for the development of specific phobia at some point in their lives (Kessler 1994; Magee, 1986). As many as 13.3% of the general population suffer from social phobias at some point in their lives (Kessler, 1994). Epidemiological and community-based studies suggest that social phobia is more common in women (15%) than in men (11%). In most clinical samples however, both genders are equally represented or the majority are male (Stein, Walker & Forde, 1995).

In children, obsessive-compulsive disorder is more common in boys than in girls (Crino, 1991). As the age group develops to adulthood, men and women are identified as having equal risk for the development of obsessive-compulsive disorder (Yonkers & Gurguis, 1995). Research has however noted that there is a curious sex differential in the nature of compulsions: young single men are more likely to have checking rituals, whereas married women more likely to have cleaning rituals (Khanna & Mukherjee, 1992; Sturgis, 1993).
In both clinical samples (Woodman, Noyes, Black, Schlosser & Yagla, 1999; Yonkers, Warshaw, Massion & Keller, 1996) and epidemiological studies which include people who do not necessarily seek out treatment, (Blazer, George & Hughes, 1991; Carter et al., 2001; Wittchen, Zhao, Kessler & Eaton, 1994) two-thirds of the sample consisted of women identified as having generalized anxiety disorder. This indicates a higher prevalence of generalized anxiety disorder among women. Beck and Emery (1985) also reported a female-to-male ratio of 2:1 for out-patient settings and a ratio of 1:1 for inpatient treatment.

4.4.4.2 Diagnosis

The anxiety disorders make up one of the most common groups of psychiatric disorders. Kessler (1994) found that anxiety disorders are more common than any other form of mental disorder. The National Comorbidity Study reported that one in four persons met the diagnostic criteria for at least one anxiety disorder (Magee, Eaton, Wittchen, McGonagle & Kessler, 1996).

Approximately 3.5% of the population meet the criteria for panic disorder at some point during their lives (Kaplan & Sadock, 2003). Epidemiology studies have reported the lifetime prevalence rates of 1.5% to 5% for panic disorder and 3% to 5% for panic attacks (APA, 2000). Panic disorder with and without agoraphobia affects many individuals. The lifetime prevalence of agoraphobia has been reported as ranging from 0.6% to 6%, and more than 75% of those who suffer from agoraphobia are women (Barlow, 2002; Myers et al., 1984; Thorpe & Burns, 1983). In Lesotho, Africa, the prevalence of panic disorder (and GAD) was found to be equal to or greater than in North America (Hollifield, Katon, Spain & Pule, 1990). In a more comprehensive study, prevalence rates for panic disorder were remarkably similar in the United States, Canada, Puerto Rico, New Zealand, Italy, Korea and Taiwan, with only Taiwan showing somewhat lower rates (Horwath & Weissman, 1997).

Recent epidemiological studies have shown that phobias are the single most common mental disorder in many countries in the world (APA, 2000). It is estimated that 5% to 10% of population are reported to have experienced a phobic disorder at some point in their life (Barlow & Durand, 2005).
The lifetime prevalence of specific phobia is approximately 7.2 to 11.3% and social phobia 3% to 13% (Kaplan & Sadock, 2003). Specific phobias are the most common type of anxiety disorder with a female to male ratio of 4:1. This ratio is consistent around the world (Arrindell, 2003). Recent surveys also indicate that specific fears of a variety of objects or situations occur in a majority of the population (Myers, 1984).

Obsessive-compulsive disorder is the fourth most common psychiatric diagnosis (Antony, Downie & Swinson, 1998). Lifetime prevalence of obsessive-compulsive disorder in the general population is 2% to 3% with average lifetime prevalence of 2.5 % (Robins & Regier, 1991). Some researchers have estimated that obsessive-compulsive disorder is found in as many as 10% of outpatients in psychiatric clinics. Epidemiological studies in Europe, Asia and Africa have confirmed these rates across cultural boundaries (Wetherell, Kim, Lindamer, Thorp, Hawthorne, Kim, Hough, Garcia & Jeste, 2007).

Approximately 4% of the population meet the criteria for generalized anxiety disorder during a given year (Blazer, Hughes, George, Swartz & Boyer, 1991; Carter, Wittchen, Pfister & Kessler, 2001; Kesler et al., 1994). Epidemiology studies indicate that generalized anxiety disorder is a common condition and is prevalent in anxiety disorder clinics, where 25% of patients are diagnosed with generalized anxiety disorder (Thom, Zwi & Reinach, 1993). Similar rates are also reported around the world, for example in rural South Africa (Bhagwanjee, Parekh, Paruk, Petersen & Subedar, 1998).

4.4.4.3 Age

Panic disorder with agoraphobia, panic disorder without agoraphobia and agoraphobia without a history of panic disorder appear to be diagnosed in early adulthood. The onset of panic disorder usually occurs in early adult life ranging from mid-teens through to about 40 years of age (Kaplan & Sadock, 2003). There may be a bimodal distribution in the disorder with one peak in late adolescence and a second smaller peak in the mid-30s (Sarason & Sarason, 1999). The mean age of onset is between 25 and 29 years of age (Craske & Barlow, 2001; Ost, 1987).
Many phobias begin in childhood but phobias such as claustrophobia and agoraphobia tend to begin in adolescence and early adulthood (APA, 1994; Ost, 1987). The first symptoms of a specific phobia usually occur in childhood or early adolescence and may occur at a younger age for women than men (APA, 2000). The peak age of onset for situational type is in childhood with a second peak in the mid 20s which is close to the age of onset for agoraphobia. Social phobia begins in adolescence and early adulthood (Hope & Heimberg, 1993; Wells & Clark, 1997) and is more prevalent in people who are 18-29 years.

Although obsessive-compulsive disorder usually begins in adolescence or early adulthood, it may begin in childhood. The age of onset appears earlier for males (6-15 years) than females (20-29) (Kaplan & Sadock, 2003). The peak age of onset is in the adolescent years, although onset is common in children less than 5 years old and those older than 35 years (Barlow & Durand, 2005). According to Burke, Burke & Regier (1990), the median age of onset for obsessive-compulsive disorder is 23 years.

Some people with generalized anxiety disorder report onset in early adulthood, usually in response to a life stressor, whereas others however report that they have felt anxious and nervous all their lives. Two thirds of affected individuals experience the onset before 25 years (APA, 2000). Individuals usually present to their clinician in their 20’s although over half of those who present report the onset during childhood or adolescence (Sarason & Sarason, 1999). The onset of generalized anxiety after 20 is not uncommon with the mean age of onset for men being 19 years and 22 years for women (Carson, Butcher & Mineka, 2000).

4.4.4.4 Marital Status

A number of studies have documented that anxiety disorders occur more often in individuals without close interpersonal relationships or in those who are divorced or separated (Karno, Golding, Sorenson, 1988). The history of a divorce or separation also appears to play a role in the development of anxiety disorders. Panic disorder is more common in individuals who are single, divorced or separated (Kaplan & Sadock, 2003). Phobic disorders, namely, specific phobia and social phobia
develop in childhood, as well as in adults with few interpersonal relationships (Barlow & Durand, 2005). Obsessive-compulsive disorder occurs more often in single than married individuals and this finding tends to reflect the difficulty that individuals with obsessive-compulsive disorder experience in maintaining a relationship due to the illness (APA, 2000). Generalized anxiety disorder also tends to occur in single rather than married individuals.

4.4.4.5 Socio-economic and cultural factors

Cross-cultural research suggests that although anxiety is a universal emotion and anxiety disorders probably exist in all human societies, there are many differences in prevalence and in the form of expression of the different disorders in different cultures (Good & Kleinman, 1985; Kirmayer, Young & Hayton, 1995). No outstanding differences in the prevalence of anxiety disorders have been found on the basis of race, income, and education or rural vs. urban dwellings (APA, 2000). Risk factors such as lower socio-economic status and unemployment have however been identified as predisposing factors in the development of anxiety disorders.

4.4.5 Etiology

Anxiety disorders can be viewed as problems that arise in the regulation of the fear and anxiety response systems (Barlow, 1988; Marks & Nesse, 1994). In order to understand the etiology of anxiety disorders, one must consider a variety of psychological, biological and social systems that have evolved for the purpose of triggering and controlling these alarm responses (Cacioppo, 1994). Isaac Marks and Randolph Nesse (1994) suggested that generalized forms of anxiety evolve to help the person prepare for threats that could not be identified clearly, and that specific forms of anxiety and fear evolve to provide more effective responses to certain types of danger. The factors which result in the controlling and triggering of alarm responses will be discussed through the use of an integrative theory in the section that follows.
4.4.5.1 An Integrative Theory

Excessive emotional reactions have no simple one-dimensional cause, but come from multiple sources. A broad understanding of the etiology of anxiety includes a multiplicity of factors, such as biological, psychological, and social determinants, which are mediated by a range of risk and protective factors (Sarason & Sarason, 1999). Anxiety disorder research aims at presenting a view of human functioning under pathological conditions that integrate multiple sources of theory and information (Kaplan & Sadock, 2003). Figure 4.4 below depicts the integration of multiple factors in the development of anxiety disorders.

Figure 4.4: An integrative model of anxiety disorders (Barlow & Durand, 2005)
Evidence is accumulating that supports an integrated model (Figure 4.4) of anxiety involving a variety of factors (Barlow, 2002). Putting the factors together in an integrated way, Barlow and Durand (2005) have described a theory of the development of anxiety and related disorders called the “Triple Vulnerability” theory (Barlow, 2002). The first vulnerability (or diathesis) is a generalized biological vulnerability. A generalized biological vulnerability refers to biological predispositions such as genetics, neurochemical abnormalities, as well as structural abnormalities in the brain (Barlow & Durand, 2005). A generalized biological vulnerability to develop anxiety is not anxiety itself. The second vulnerability is a generalized psychological vulnerability. If an individual has a psychological predisposition to develop anxiety, he/she may have been an anxious child or have been taught to be over-cautious and nervous about certain situations or objects (Barrios & O’Dell, 1997). The individual may thus grow up believing the world is dangerous and out of control and he/she may not be able to cope when things go wrong. The third vulnerability is a generalized social vulnerability. Studies are beginning to demonstrate the substantial power and depth of social influences (Alloy, Jacobson & Acocella, 1999). Fears and phobias are universal, occurring across all cultures, but what one fears is strongly influenced by the social environment. Gender roles in society also play a role in the development of certain fears and phobias, as in some cultures it is more acceptable for women to express fear than it is for men (Carson, Butcher & Mineka, 2000). In the section that follows the three components of the “Triple Vulnerability” theory will be further explored.

4.4.5.2 Biological vulnerability

Studies of the neuroendocrine status of individuals with anxiety disorders have shown several abnormalities, although the studies have been inconsistent in their findings (Charney, Grillon & Bremmer, 1998). Whatever the specific biochemical process involved in anxiety disorders, recent findings have given new impetus to research on neurotransmitters (LeDoux, 1995). The three major neurotransmitters associated with anxiety on the bases of animal studies and responses to pharmacological treatment are norepinephrine, serotonin and y-aminobutyric acid (Depue & Zald,
1993). Some anxiety disorders are more biochemically linked to neurotransmitters, such as norepinephrine and serotonin, as much attention has been drawn to the likelihood of alterations in serotonin transmission in panic disorder as well as alterations in norepinephrine transmission (Charney & Devits, 2002). The general theory about the role of norepinephrine in anxiety disorders is that affected individuals may have a poorly regulated noradrenergic system with occasional bursts of activity. Panic disorder implicates the locus coeruleus in the brain stem and a particular neurotransmitter – norepinephrine is involved in the etiology of anxiety (Charney, Woods, Krystal, Nagy & Heringer, 1992). Thus it is possible that abnormal norepinephrine activity in the locus coeruleus may play a role in panic attacks (Kasper, Den Boer & Sitsen, 2003). Current theory suggests that serotonin may have an inhibitory effect on norepinephrine function in the central grey area or the locus coeruleus, acting to inhibit surges of norepinephrine activity that are thought to occur during a panic attack (Goddard, 1996; Gray & McNaughton, 1996). The identification of many serotonin receptor types has stimulated the search for the role of serotonin in the pathogenesis of anxiety disorders (Lucki, 1996). The neurotransmitter, serotonin has been implicated in the etiology of social phobia (Tancer, 1993), as well as obsessive-compulsive disorder. In obsessive-compulsive disorder, the dysregulation of serotonin is involved in the symptom formation of obsessions and compulsions (Rasmussen & Eisen, 1992). Serotonin has also been connected to serotonin abnormalities during glucose metabolism (Coplan, Gorman & Klein, 1992). The role of GABA in the development of anxiety disorders appears to be related to the fact that highly anxious people present with a functional deficiency in GABA which ordinarily plays an important role in the way the human brain inhibits anxiety in stressful situations (Redman, 1985).

A range of brain imaging studies have also produced ways of understanding the development of anxiety disorders. A conservative interpretation of these data is that some patients with anxiety disorders have a demonstrable functional cerebral pathological condition and that the condition may be causally relevant to their anxiety disorder symptoms (Kasper, Den Boer & Sitsen, 2003). Functional
brain-imaging studies, such as: positron emission tomography (PET), single photon emission computed tomography (SPECT) and electromyograms (EMG) of individuals with anxiety disorders have variously reported abnormalities in the frontal cortex, occipital and temporal areas. Abnormalities during glucose metabolism of individuals with anxiety disorders have been indicative of frontal lobe dysfunctions (Kaspers, 1994). Several other brain-imaging studies have identified abnormal findings in the right hemisphere, but not the left hemisphere which suggests that the same types of cerebral asymmetries may play a role in the development of anxiety disorder symptoms in specific individuals (Charney, Nagy, Bremmer, Goddard, Yehuda & South, 2000).

In combination with the data from brain imaging studies, the limbic system and cerebral cortex have become the focus of much hypothesis building about neuroanatomical substrates of anxiety disorders (Kasper, Den Boer & Sitsen, 2003). The limbic system generates anxiety which often involves a vague sense that future panic attacks may occur and be dangerous (Charney & Devits, 2002). Two main areas of the limbic system have received special attention in literature: the septohippocampal pathway and the cingulate gyrus (Gray & McNaughton, 1996). The frontal cerebral cortex has also been implicated in the parahippocampal region, the cingulate gyrus and thus may be involved in the etiology of anxiety disorders. The temporal cortex has also been implicated as a pathophysiological site in anxiety disorders (Kasper, 1994).

The biological data on panic disorder have led to a focus on the brainstem, limbic system and prefrontal cortex (Mennin, Heimberg & Holt, 2000). Computerized tomography (CT) and magnetic resonance imaging (MRI) scans have specifically detected defects in the right temporal lobe, particularly the hippocampus of individuals with panic disorder (Gormon, 2000). In a similar study on panic disorder, abnormalities were also found in the parahippocampal gyrus (Charney, Woods, Goodman & Heninger, 1987). Functional brain imaging of obsessive-compulsive patients shows increased activity in the frontal lobe, basal ganglia and cingulum (Bigler, 1996). Individuals with generalized anxiety, on the other hand, show abnormalities in alpha rhythms, as well as evoked
potentials in brain imaging (Thayer, Freidman & Borovec, 1996). The role of brain-imaging procedures will undoubtedly yield much more information in the years to come, as it has already become relevant in the 21st century (Charney & Drevets, 2002).

Research into the neurobiology of anxiety and panic is still very new, exciting progress has been made by implicating two seemingly different brain systems and confirming the crucial role of the corticotrophin system (CRF) and the amygdala (Gormon, 2000). In the face of anxiety, whether through the presence of a direct or internal threat, stimulation of the autonomic nervous system causes certain cardiovascular, muscular, gastrointestinal and respiratory symptoms. These peripheral manifestations of anxiety are neither a precursor to anxiety disorders, nor are they necessarily correlated with the subjective experience of anxiety (Sarason & Sarason, 1999). The James-Lange theory states that subjective anxiety is a response to peripheral phenomena. Current thinking in the field of anxiety research is that the central nervous system (CNS) anxiety precedes the peripheral manifestations of anxiety, except when a specific peripheral cause is present (Carson, Butcher & Mineka, 2000).

The autonomic nervous system of some individuals with an anxiety disorder especially those with panic disorder, exhibits increased sympathetic tone, adapts slowly to repeated stimuli and responds excessively to moderate stimuli (Kaplan & Sadock, 2003). One interpretation is that the symptoms of panic disorder are related to a range of biological abnormalities in brain structure and function (Alloy, Jacobson & Acocella, 1999). These and other hypotheses implicate both peripheral and central nervous system dysregulation in the pathophysiology of panic disorder. In panic disorder, the “suffocation false alarm hypothesis” is regarded in the etiology (Mennin, Heimberg & Holt, 2000). In terms of this hypothesis, it is believed that there is a monitor in the CNS that signals impending suffocation in response to elevated levels of carbon dioxide and brain lactate (Kaplan & Sadock, 2003). These monitors are hypersensitive and produce false alarms which in turn produce panic attacks.
Other areas of the brain have also been implicated in the etiology of anxiety disorders. These include: abnormalities in the hypothalamic-pituitary-adrenal hormone system (Abelson, Curtis & Cameron, 1996) and an increase in neurological firing and abnormal brainwave activity in the locus coeruleus (Levy, Kimhi, Barak, 1996). Studies also implicate abnormalities in the basal ganglia, more specifically the caudate nucleus of the basal ganglia (Cottroux & Gerard, 1998, Insel, 1992; Trivedi, 1996). More recently, another brain structure in the midbrain, namely the central periaqueductal grey has also been implicated as playing a central role in the generation of panic attacks (Gray & McNaughton, 1996). Further research is however needed before a complete understanding of the neurobiology of anxiety disorders is gained.

Of all the anxiety disorders, the one that seems most likely to have a genetic basis is panic disorder (Crowe, 1991). For the other anxiety disorders, the genetic evidence is weaker but still significant (Bruno, 1980). If anxiety disorders are inherited what exactly is inherited - probably a diathesis or vulnerability towards a specific syndrome is inherited or an overly responsive autonomic nervous system or an attentional bias for threat (Eysenck, 1967). Increasing evidence shows that individuals inherit a tendency to be tense or uptight (Eysenck, 1967; Gray & McNaughton, 1996; Lader & Wing, 1964; McGruffin & Reich, 1984). Genetic studies have produced solid evidence that at least some genetic component contributes to the development of anxiety disorders (Bruno, 1980). No single gene seems to cause anxiety, instead contributions from many genes in several different areas on the chromosome collectively make individuals vulnerable to anxiety when the right psychological and social factors are in place (Kendler, 1995; Lesch, 1996; Plomin, 1997). Recently, sophisticated methods of studying genetics, namely, quantitative trait loci have indicated that numerous genes seem to create a tendency to be uptight, over-emotional or anxious (Flint, 1995).

Although the number of well-controlled studies of the genetic basis of panic disorder and agoraphobia is small, the data to date support the conclusion that the disorders have a distinct genetic component (Jacob, Furman, Durrant & Turner, 1996). Various studies have found that the first degree
relatives of panic disorder individuals have a four to eight-fold higher risk of panic disorder than first
degree relatives of other psychiatric patients. The tendency of panic disorder also seems to run in
families and may have a genetic component (Barlow, 2002). Almost one half of all individuals
diagnosed with panic disorder have at least one relative affected (Keller & Hanks, 1993). The figures
for other anxiety disorders, although not as high, also indicate a higher frequency of the illness in 1st
degree relatives of affected patients than in the relatives of non-affected persons. Adoption studies with
anxiety disorders from twin registers also support the hypothesis that anxiety disorders are at least
partly genetically determined. Clearly, a linkage exists between genetics and anxiety disorders, but no
anxiety disorder is likely to result from a simple Mendelian abnormality (Patenoude, Guttmacher &
monozygotic twins were more likely to be concordant for the diagnosis of panic disorder than dizygotic
twins. Genes have thus also been implicated in twin studies of panic disorder individuals (Skre, Onstad,
Torgersen, 1993).

There are several studies suggesting a modest genetic contribution to the development of specific
phobias. One study found elevated risk of specific phobias in first-degree relatives of those diagnosed
with specific phobia (Fyer, 1995). Studies have reported that two thirds to three quarters of affected
probands have at least one first-degree relative with specific phobia of the same type (Gormon, 2000).
Specific phobia tend to run in families and the blood-injection-injury type has been found to have a
strong familial pattern (Magee, Eaton, Wittchen, McGonagle & Kessler, 1996). For social phobia, the
evidence is sketchier, though there are indications that the disorder runs in families (Fyer, Mannuzza,
Chapman 1995). In studies done with first-degree relatives of individuals with specific phobias, the
relatives were three to four times more likely to have phobias compared with the non-affected control
group (Fyer, Mannuzza, Chapman 1995). Recent results from a very large study on female twins
revealed that there is a modest genetic contribution to social phobia and indicate that the proportion of
variance due to genetic factors is about 30% (Kendler, 1992).
One of the main genetic hypotheses on genetic hereditability at present indicates that obsessive-compulsive disorder has a significant genetic component, as well as a pattern of genetic transmission (Baxter, Schwartz & Guze, 1991). Family studies have shown that 35% of first-degree relatives of individuals with obsessive-compulsive disorder have at least one family member who is also affected by the disorder (Billet, Richer & Kennedy, 1998). Twin studies also show higher concordance rates for monozygotic twins than for dizygotic twins (Pauls & Alsobrook, Goodman 1995).

Fewer genetic studies have been conducted in the field of anxiety disorders with regard to generalized anxiety disorder. One study found that a genetic relationship might exist between generalized anxiety disorder and major depressive disorder, especially in females (Borkovex, Abel & Neuman, 1995). Family studies in generalized anxiety disorder show that about 25% of first-degree relatives of an individual with generalized anxiety disorder were also affected (Brown, O’Leary & Barlow, 1993). In a twin study of individuals with generalized anxiety disorder, the concordance rate in monozygotic twins was 50% compared with 15% in dizygotic twins (Carey & Gottesmon, 1981).

In this section emphasis was placed on the biological vulnerabilities that play a role in the development of anxiety disorders (Sarason & Sarason, 1999). In the section that follows, a discussion on the psychological vulnerabilities will be provided.

4.4.5.3 Psychological vulnerability

A number of psychological mechanisms play an important role in helping to shape the development and maintenance of anxiety disorders. Mechanisms link experiences to specific emotional difficulties such as intense fear, panic attacks and excessive worry. Since the 1920s experimental psychologists have been interested in the possibility that fears might be learned through classical or Pavlovian conditioning (Eysenck, 1979; Mineka, 1985; Mineka & Zinborg, 1995). An enormous body of research has also been conducted on the process of fear acquisition and extinction in humans (Eysenck, 1979, Rackman, 1991). Evidence from these studies indicates that certain constraints which appear to be biologically based may be the result of evolutionary pressures and are associated with the process by
which fears are learnt. Seligman (1971) argued that human fears that reach phobic proportions may be similar to the taste-aversion phenomenon. Seligman also believed that prepared conditioning played an important role in the etiology of both social and specific phobias (Seligman, 1977). The work of another theorist, namely Albert Bandura (1986), reflected a similar process in which individuals experiencing intense fear could develop a phobia in the absence of any direct experience with the feared object (Rachman, 1990).

Three major schools of psychological theory namely: psychoanalytic, behavioural and existential therapy have contributed hypotheses on the causes of anxiety. Freud (1909) viewed anxiety as stemming not just from external danger but also from threatened breakdowns in the ego’s struggle to satisfy the id without violating the demands of reality and the superego. In some cases, anxiety between the push and counterpush of these two ego states resulted in intense anxiety that was experienced consciously with debilitating results (Freud, 1946). From a behavioural perspective, researchers challenged the psychodynamic argument that anxiety disorders originated from unconscious conflict, contending that these disorders arose from faulty learning (Bandura, 1969). Behavioural theorists thus view anxiety as a product of early classical conditioning, modelling, or other forms of learning (Bandura, 1986). One important theory of anxiety disorders is that they are engendered through avoidance learning (Mower, 1948). Avoidance learning is characterized by a neutral stimulus paired with an aversive stimulus, thus through respondent conditioning, the neutral stimulus becomes anxiety provoking (Barlow, Craske, Cerny & Klosko, 1989). The individual may also avoid the conditioned stimulus, and because this avoidance results in relief from anxiety (negative reinforcement) the avoidance response via operant conditioning becomes habitual (Bandura, 1974). Many studies indicate that such an explanation is insufficient. A stimulus does not have to be experienced directly in order to arouse anxiety. Individuals can acquire anxiety responses by watching others react to an anxiety-provoking stimulus (Cook, Mineka, Wolkenstein, 1985). The role of cognitive processes therefore plays an important role in the acquisition of anxiety responses.
It is now widely accepted that cognitive factors play a crucial role in the etiology and maintenance of various types of anxiety disorders (Beck, 1976). Cognitive theories have for many years emphasized the important relationship between anxiety and control (Mandler, 1966). In childhood, individuals may acquire an awareness that events are not always predictable or controllable (Chorpita & Barlow, 1998). The continuum of this perception may range from total confidence in their control of all aspects of their lives to deep uncertainty about themselves and their ability to deal with upcoming events (Alloy & Clements, 1992). This results in the individual learning either to cope with or to fail to cope with adversity. The individual also learns that he/she cannot control his/her life completely. Individuals who believe they can control events in their environment are less likely to show symptoms of anxiety than those who believe they are helpless (Chorpita & Barlow, 1998). An extensive body of research supports the conclusion that individuals who believe that they are less able to control events in their environment are more likely to develop global forms of anxiety (Andrews, 1996), as well as specific types of anxiety disorders (McNally, 1994). In the section that follows, social vulnerabilities in the development of anxiety disorders are presented.

4.4.5.4 Social vulnerability

Stressful life events involving danger and interpersonal conflict can play an important role in the onset of certain anxiety disorders (Brown, 1972). Various aspects of parent-child relationships result in some individuals being vulnerable to the development of anxiety disorders when they become adults. These include: childhood adversity, parental indifference and physical abuse (Alloy, Jacobson & Acocella, 1999). Studies are beginning to demonstrate the substantial power and depth of social influences on the development of anxiety disorders (Butcher, Narikiyo & Vitousek, 1993). Gender roles sometimes have a strong and puzzling effect on psychopathology, as social roles play an important role in the learning of behaviour and how fear or anxiety should be expressed (Halbreich, 2007). The expression of fears and phobias is strongly influenced by the social environment and has been hypothesized to change the sensitivity of brain circuits, making the individual more or less
susceptible to developing an anxiety disorder (Francis, Diorio, Plotsky & Meany, 2002). The extent and quality of social networks has been an area of research in all forms of mental illness. Sufficient evidence is now available to state that a lack of social support plays a significant role in the development of psychopathology (Kaplan & Sadock, 2003). Although the exact nature of the factors which contribute to the development of anxiety disorders and how they are interrelated is not yet understood, major research efforts are currently underway and are sure to enhance understanding of this very serious and disabling disorder in the next decade (Carson, Butcher & Mineka, 2000). The section that follows focuses on the treatment of anxiety disorders.

4.4.6 Treatment

In recent years, it has been increasingly acknowledged not only that anxiety disorders are highly prevalent, but also that the burden of illness associated with these disorders is often considerable (Lopez, Mathers, Ezzati, Jamison & Murray, 2006). There have been considerable advances in the understanding and treatment of anxiety disorders in the past 20 years (Antai-Otang, 2000). Research on the effectiveness of new treatments is important to psychopathology as the responses to certain treatments, whether pharmacological or psychological, may indicate possible causes of the disorder (Alloy, Jacobson & Acocella, 1999). When considering the treatment of anxiety disorders, three forms of treatment can be identified: pharmacological or psychological or a combination of pharmacological and psychological.

Pharmacological treatment refers to the use of medication as the frontline treatment for the disorder. In anxiety disorders, anxiolytics and antidepressants are the preferred treatment (Kaplan & Sadock, 2003). Among the minor tranquilizers or drugs taken to reduce anxiety, the most popular are the benzodiazepines (Kasper & Resinger, 2001). In terms of antidepressants, three classes of antidepressants are used namely: monoamine oxidase (MAO) inhibitors, tricyclics and selective serotonin reuptake inhibitors (SSRI). MAO inhibitors interfere with the action of the enzyme monoamine oxidase which in turn degrades certain neurotransmitters including norepinephrine and serotonin (Charney,
Nagy, Bremmer, Goddard, Yehuda & South, 2000). MAOs are often quite effective in treating anxiety disorders and are recommended as the first medication to use with anxiety disorders, as in the example of social phobia (Clark, 1997). As some of the MAO inhibitors prove less useful with some individuals, tricyclic antidepressants can also be prescribed. As many as 40% of anxiety disorder individuals cannot tolerate the tricyclics (Kunovac & Stahl, 1995) and recent research indicates that they are gradually being displaced by SSRIs. Of physicians surveyed, 60% started an anxiety disorder patient with an SSRI rather than another form of medication (Lydiard, Brawman & Bellenger, 1996).

In terms of specific anxiety disorders and preferred treatment, antidepressants appear to be most effective in panic disorder and obsessive-compulsive disorder (Rosenbaum & Gelenberg, 1991). At present there are no known effective pharmacotherapies for specific phobias (Malis, Hartz, Doebbling & Nyes, 2002). In contrast to specific phobias, there are effective medications for social phobia which have received increasingly more attention in the past decade (Gitlin, 1996). Promising results have been obtained in the use of beta-blockers in individuals with mild symptoms of social phobia (Gitlin, 1996). In more severe cases, categories of other drugs have proven more effective: antidepressants, anti-anxiety or anxiolytics (Den Boer, 1996).

Anxiety appears in response to various situations during the lifecycle and an attempt to eradicate it by pharmacological means may do nothing to address the life situation or the internal correlates that have induced the state of anxiety (Sarason & Sarason, 1999). Some theorists therefore believe that the use of psychological treatment can therefore be just as effective, if not more effective than pharmacological treatment. The psychological treatments that are most effective in anxiety disorders that are behavioural and cognitive approaches and to a lesser degree, psychodynamic and existential approaches (Barlow, 1988).

The behavioural or learning theorists of anxiety have developed some of the most effective treatments for anxiety disorders (Watson, 1913; Skinner, 1953; Bandura, & Walters, 1963). According to these theorists, anxiety is a conditional response to specific environmental stimuli. Classical
conditioning results in generalizations or the learning of an internal response to anxiety by imitating the anxiety responses of parents or caregivers (Pavlov, 1932). In either case, treatment is usually a form of desensitization by repeated exposure to the anxiogenic stimulus, coupled with cognitive psychotherapeutic approaches (Wolpe, 1958). In recent years, proponents of behavioural theories have shown increasing interest in cognitive approaches to conceptualizing and treating anxiety disorders. The work of cognitive theorists has focused specifically on proposing alternatives to the traditional learning theory’s models of anxiety. Whether adding a cognitive therapy component to the already established behavioural treatments of these disorders enhances treatment efficacy is still a matter of some debate in literature (Clarke, 1996).

Cognitive behavioural therapy is an effective way to treat anxiety disorders and some studies suggest that psychotherapy may alter abnormal patterns of brain activation. However, much more work is required in this area (Kaplan & Sadock, 2003). Moreover, there is also reason to believe that more recently developed and refined versions of cognitive behavioural therapy may ultimately prove superior (Clarke, 1997). In recent years, a number of researchers have sought to determine whether the addition of cognitive techniques to these exposure-based techniques can produce additional gains (Beck, Emery & Greenberg, 1985). In general, the results of the studies using cognitive techniques alone have not produced significant results compared with those using exposure-based techniques. The addition of cognitive techniques has not generally added much in terms of the effectiveness of treatment (Craske & Rowe, 1997). Cognitive behavioural therapy has proven to be successful in the treatment of panic disorders (panic control treatment), phobias (exposure-based exercises) and obsessive-compulsive disorder (exposure and response prevention).

Existential theories of anxiety provide models for generalized anxiety disorder in which there is no specific identifiable stimulus for a chronically anxious feeling. The central concept of this theory is that individuals become aware of feelings of profound nothingness in their lives, feelings that may be even
more discomforting than an acceptance of their inevitable death, and thus anxiety is a response to the vast void in existence and meaning.

From a psychodynamic perspective, the goal of psychotherapy is not necessarily to eliminate all anxiety but to increase anxiety tolerance, namely, the capacity to experience anxiety and use it as a signal to investigate the underlying conflict that has created it (Freud, 1946). According to Freud (1909), the experience of anxiety could be the result of either unconscious drives or repressed content. The effectiveness of psychotherapy alone has been an area of debate and many clinicians agree that the solution seems to be psychotherapy, preferably in combination with pharmacotherapy (Andrews & Harvey, 1981).

Anti-anxiety drugs are widely used in conjunction with psychological treatment particularly for anxiety disorders (Gitlin, 1996). The aim of pharmacotherapy is to relieve the symptoms to the point that the individual has the capacity to actually concentrate on therapy. The role of therapy is then to teach the individual new skills and help him/her to solve problems so that he/she can live his/her life without anxiety (Wells & Butler, 1997). Cognitive behavioural therapy has become increasingly effective in recent years with a 80% cure rate, which is at least as impressive as medication and therapy combined (Barlow & Lehman, 1996). For the other anxiety disorders, the prospects for combined treatments are less clear (NICE, 2004). Using anti-anxiety medication for a brief period of time with cognitive behavioural therapy instituted as a longer-term solution while the drugs are being withdrawn has proven to be an effective treatment plan (Shear, 1995). In obsessive-compulsive disorder, which is largely determined by biological factors, classical psychoanalytic theory has fallen out of favour. Moreover, because obsessive-compulsive disorder symptoms appear to be largely refractory to psychodynamic psychotherapy and psychoanalysis, pharmacotherapy and behavioural treatments are the preferred form of treatment (NICE, 2004).

Some studies however indicate that taking medication simultaneously with behaviour therapy can interfere with the long-term effects of effective behaviour and cognitive-behavioural treatments.
(Barlow & Marks, 1993; Hayward & Wardle, 1997). Whether one treatment modality or a combination should be used depends to a large extent on the presentation of the individual and the most effective treatment plan given the unique circumstances. In the section that follows, the co-morbidity of mood and anxiety disorders is discussed.

4.5 Co-morbidity of Mood and Anxiety Disorders

In a study by Brown and Barlow (1992), 50% of individuals with one anxiety disorder also met the criteria for at least one other form of anxiety or mood disorder. It is very common for a person diagnosed with one anxiety disorder to be diagnosed with one or more additional anxiety disorders, as well as with a mood disorder (Wittchen, Lieb, Wunderlich & Schuster, 1999). Many individuals who experience panic attacks develop phobic avoidance and many individuals with obsessive-compulsive disorder would also be considered as chronic worriers (Rasmussen & Eisen, 1992). Given the emotional basis of both anxiety and depression, it is not surprising that considerable overlap exists between anxiety and mood disorders. 61% of the people who received a primary diagnosis of major depressive disorder also qualified for a secondary diagnosis of some type of anxiety disorder (Brown, 1996).

Individuals with panic disorder often have one or more additional diagnoses, including generalized anxiety disorder, social phobia, simple phobia, depression and alcohol abuse (Brown, 1996; Craske & Barlow, 1993). Research results indicate that 91% of patients with panic disorder and 84% of those with agoraphobia have at least one other psychiatric diagnosis (Gorman & Coplan, 1996). Current estimates are that about 30-50% of persons with panic disorder experience a serious depression at some point in their lives (Gamon & Caplan, 1996). According to the DSM IV-TR, 10% to 15% of panic disorder individuals have a co-morbid major depressive disorder (APA, 2000). About one third of the individuals with panic, as well as major depressive disorders have a major depressive disorder before the onset of panic disorder and about two thirds first experience panic disorder during or after the onset of the major depressive disorder (Breier, Charney & Weninger, 1984).
Individuals with obsessive-compulsive disorder have been found to have a number of co-morbid diagnoses. These include: social phobia, alcohol use, generalized anxiety disorder, specific phobia, panic disorder, eating disorder and personality disorder (Rasmussen & Eisen, 1992). Individuals with obsessive-compulsive disorder also present with tourettes and tics (Kaplan & Sadock, 2003). It is reported that other disorders, such as generalized anxiety and social phobia also present with co-morbid diagnoses (Borkovec, Abel & Newman, 1995). In a study with individuals who have generalized anxiety disorder, 50% to 90% had another mental disorder (Stein, 2001). Individuals with social phobia have been shown to present with a diagnosis of avoidant personality disorder (Alpert, Ubelacker, McLeon, Nierenberg, Pava, Worthington, Tedlow, Rosenbaum & Fava, 1997).

One of the mysteries faced by psychopathologists is the apparent overlap of anxiety and depression. Researchers have consistently found that almost everyone who is depressed, particularly to the extent of having a disorder, is also anxious (Barlow, 2002; Brown, Campbell, Lehman, Grisham & Mancill, 2001; DiNardo & Barlow, 1990; Sanderson, DiNardo, Rapee & Barlow, 1990) but not everyone who is anxious is depressed. Epidemiological studies have confirmed that major depression almost always follows anxiety and may be a consequence of it (Breslou, Schultz & Petersen, 1995; Kessler, 1996). Merikangas (2003) followed about 500 individuals for 15 years and found relatively few people suffered from depression (or anxiety) alone. When they did, they usually ended up suffering later with both anxiety and depression. Another large-scale study was recently completed which examined the comorbidity of anxiety and mood disorders (Brown, Campbell, Lehman, Grisham & Mancill, 2001; Brown & Barlow, 2002). The results of this study indicate that 55% of the individuals who received a principal diagnosis of an anxiety or mood disorder had at least one additional anxiety or mood disorder at the time of assessment. By far the most common additional diagnosis for all anxiety disorders was major depression, which occurred in 50% of the cases over the course of the individual’s life. This relationship is depicted in Figure 4.5 below.
The co-morbidity of anxiety and other disorders, specifically major depressive disorder is not yet fully understood and much research is still needed into this phenomenon. In the section that follows, the treatment of mood and anxiety disorders in South Africa will be explored.

4.6 Treatment of Mood and Anxiety Disorders in South Africa

The history of the development of health services in Africa falls into four phases. These include: pre-colonial, rise of asylums, colonial and deinstitutionalization. Firstly, the pre-colonial phase where the care of mentally ill individuals rested upon the traditional and spiritual healers (Kigozi, 2003). This period was followed by the rise of asylums which centred on mainly custodial confinement (Patel, 1995). More modern and expanded asylum–like mental hospitals were developed during and soon after the colonial period, where mentally ill individuals were housed (Thom, 2004). With the more recent developments in mental health services, the decentralization of mental health care, adoption of the World Health Organization recommendations and the Alma Ata concept, mental health care has been integrated into the general health care system (Kigozi, 2003).

Mental health services in South Africa are under-resourced and face considerable constraints (Patel, 1995). Despite this, there have been significant strides in policy development and the implementation
of programmes at national and provincial levels. Individuals who experience mental health problems in South Africa experience considerable stigma and discrimination not only socially and at work but also in the treatment of their illness by some service providers and many medical aid schemes (Thom, 2004).

Although mood and anxiety disorders constitute two of the most common forms of psychiatric disorders, relatively few investigations have examined the prevalence or service use of individuals with these disorders in the public health sector (Kessler, 2005). In addition, most of this research has focused on treatment within primary care, as opposed to specialty mental health clinics (Olfson, 2000; Roy-Byrne, 2003). Although individuals with mood and anxiety disorders are more often seen in general medical settings, particularly primary care clinics and emergency departments, than in mental health settings, data suggest that only 13.4% of individuals with mood and anxiety disorders receive minimally adequate health services in general medical settings, compared with 51.5% of individuals with these disorders seen in mental health departments (Wang, 2005). Thus, an examination of the health service use of individuals with mood and anxiety disorders in public mental health clinics may represent a more accurate perspective on the mental health needs of individuals with mood and anxiety disorders than studies conducted in primary care settings (Kessler, 2005). For the purposes of this study, community clinics and two mental health support groups were used for sampling.

4.6.1 Treatment in the Eastern Cape

The Eastern Cape has a population of approximately 6,436,763 million with 2,975,512 (46.2%) males and 3,461,251 (53.8%) females based on the 2001 census and it is the third most populated province (Stats SA: Census, 2001). The provincial growth is 2.1% as compared with the 10.4% national growth (Stats SA: Census, 1996). Within the Nelson Mandela Metropolitan area, the population is approximately 1,005,776 with the majority of the population residing in the urban areas (97.9%) (Stats SA: Census, 2001). The Nelson Mandela Metropole, renamed in 2006, consists of the greater Port Elizabeth, Uitenhage and Despatch areas. An analysis of the Eastern Cape population
reveals that in the age brackets of 20-24, there are more females than males (Stats SA: Census, 1996). This pattern becomes significant until in the 60-64 year category (Stats SA, Census 2001). The population of the Eastern Cape has a disability figure of 10%, where the national figure is only 5% (Stats SA: Census, 2001). According to the 2001 Census, more than half (54.6%) of the economically active population in the Eastern Cape was unemployed, compared with the national average of around 41% unemployed (Stats SA: Census, 2001). The high unemployment rate, lack of sanitation and piped water places a high demand and dependency on public facilities and contributes to ill-health in the province (Kessler, 2005).

The psychiatric services in the Nelson Mandela Metropole consist of mental health hospitals, clinics and non-governmental organizations. The Metropole consists of two mental health hospitals (Elizabeth Donkin Hospital and Hunters Craig Psychiatric Hospital) and 49 primary care clinics of which only 13 provide mental health assistance. Of these primary care clinics, only 5 provide mental health assistance once a month. Non-government organizations, such as the PE Mental Health, South African Depression and Anxiety Group and other support groups provide community support and information about mental illness in the metropole. The population of the metropole and the high disability rate indicate that the services of mental health professionals are greatly needed in the metro. At present the services available are unable to cater for the needs of the population and many individuals are placed on waiting lists or told to return at a later date. The chapter is concluded in the following section.

4.7 Conclusion

In this chapter, a comprehensive overview of mood and anxiety disorders has been provided. Mood disorders were discussed in terms of presentation, structure, incidence, etiology and treatment. Thereafter, an independent discussion of anxiety disorders was also presented. The focus of the discussion centred on the presentation, structure, incidence, etiology and treatment of anxiety disorders. The co-morbidity between mood and anxiety disorders was explored and research regarding the relationship between mood and anxiety disorders was also presented. Thereafter, the treatment of mood
and anxiety disorders within South Africa, and more specifically the Eastern Cape, Nelson Mandela Metropole was presented. In the chapter that follows, the methodology of the present study will be provided.
Chapter 5
Research Design and Methodology

5.1 Chapter Preview

Many studies regarding mood and anxiety disorders have been completed in recent years. Most of these studies adopt a pathogenic rather than a fortogenic orientation, focusing on the deficits and deficiencies of the individual rather than focusing on his / her strengths, resilience and coping. This chapter provides an overview of the research design and methodology employed in this study. In the first section of the chapter, the primary objectives of the study are outlined. Thereafter, a description of the research method and design are provided. The participants and sampling procedure are discussed and an outlook of the sample is provided from the biographical questionnaire. A brief explanation of the measures utilized in the study is then included in order to provide a better understanding of the data collection and methodology of the study. The process and procedure of the study are further discussed, followed by a motivation for the methods of data analysis utilized in the study. Lastly, the ethical considerations regarding this study are reviewed.

5.2 Primary objectives of the study

The study aimed to explore and describe the psychofortology of female psychiatric out-patients living with mood and anxiety disorders. For the purposes of this study, psychofortology consists of four constructs namely: coping resources, sense of coherence, satisfaction with life and happiness. The primary aims of the study are thus:

1. To explore and describe the coping (i.e., coping orientation [SOC] and coping resources) of female psychiatric out-patients living with mood and anxiety disorders. This aim specifically entails the following:

   To explore and describe the sense of coherence of these patients.

   To explore and describe the coping resources of these patients.
To explore and describe the subjective well-being of female psychiatric out-patients living with mood and anxiety disorders. This aim specifically entails the following:

To explore and describe the **satisfaction with life** of these patients.

To explore and describe the **happiness** of these patients.

To explore and describe the patterns of coping resources, sense of coherence, satisfaction with life and happiness of female psychiatric out-patients living with mood and anxiety disorders.

### 5.3 Research Design and Methodology

For the purpose of this study, a quantitative, exploratory-descriptive research method was employed. De Vos (2000) stated that exploratory designs aim at gaining familiarity with a phenomenon, while descriptive studies aim to accurately portray the characteristics of a particular individual, group, situation or event. The advantage of using exploratory research is that it provides research into an area that has not yet been studied and in which a researcher wants to develop initial ideas and a more focused research question. This was in line with the primary aim of the study which was to explore and describe the psychofortology of female psychiatric out-patients living with mood and anxiety disorders.

Data were collected using standardized paper and pencil measures in which participants were asked to complete self-report survey type questionnaires. Neuman (2003) stated that survey type questionnaires are useful when participants are required to report about their beliefs, opinions, characteristics and past or present behaviour. In terms of the present study, participants were required to report on their coping and subjective well-being. The use of standardized measures has both advantages and disadvantages. Elkonin, Foxcroft, Roodt and Astbury (2001) reported that standardized measures allow for statistical analysis since they yield data which allow for comparison and a degree of objective assessment. Kelinger (1986) also stated that standardized measures allow for vast savings in time and expenses and the economical amount and quality of information obtained. No interviewer bias
is reported to be present in the use of standardized measures since all respondents completed identically worded self-report measures (Baily, 1987).

A disadvantage of this method, however, is that a possibility of faking exists and the researcher needs to bear this in mind when analyzing the results. Another disadvantage of using survey type research is that the researcher has no control over the context in which the questionnaires are completed (Granziono & Roulin, 2004). For the purpose of this study the questionnaires were completed in group sessions where the researcher was present to answer questions related to the completion of the questionnaires. Another disadvantage of survey type research is that it yields a poor response rate (Granziono & Roulin, 2004). In order to ensure a good response rate, the participants were required to attend group-testing sessions and return the questionnaires to the researcher at the end of the session. The benefit of using standardized measures such as those that were used in the present study relate to the fact that the included measures focused on specific variables that were quantifiable through rating scales, frequency counts and other means. The associations and differences among the variables were then analyzed using statistical methods. In terms of the present study, these methods included descriptive statistics, inferential statistics and K-means cluster analysis. The aforementioned section introduced the research design and method. The following section presents the participants and the sampling method.

5.4 Participants and Sampling

The sample for the present study consisted of female psychiatric out-patients living with mood and anxiety disorders. The study specifically focused on women with mood and anxiety disorders, as the prevalence of these disorders among women is approximately twice that of men (Nolen-Hoeksema & Keita, 2003). The prevalence of depressive and anxiety disorders in women indicates that most women are diagnosed during adulthood (Chisholm, Sanderson, Ayuso-Mateos & Saxena, 2004). The reason for this prevalence is not known, but the theory suggests that women face more challenges and stressors at
this time in their lives as a result of: selecting a life partner, loss of relationships (intimate or social), child bearing and rearing and juggling the role of worker and caregiver (WHO, 1993).

The women included in the study were required to have a primary diagnosis of a mood disorder or anxiety disorder or both in order to be considered for inclusion in the study. In terms of mood disorders, the following disorders were included: Major Depressive Disorder, Dysthymic Disorder, Bipolar I Disorder, Bipolar II Disorder and Cyclothymic Disorder. In terms of anxiety disorders, women with the following primary diagnoses were included in the study: Panic Disorder Without Agoraphobia, Panic Disorder With Agoraphobia, Agoraphobia Without a History of Panic Disorder, Specific Phobia, Social Phobia, Obsessive-Compulsive Disorder or Generalized Anxiety Disorder. This excludes mood and anxiety disorders which were co-morbid with another mental illness or a general medical condition. Participants who presented with an Axis II diagnosis were not included in the study. Participants who had a diagnosis with a psychotic features specifier were also excluded from the study due to the ethical issues regarding the ability of these participants to provide consent.

Sampling procedures are normally divided into two categories, namely: probability and non-probability sampling. The participants for this study were chosen by the researcher through the use of non-probability purposive sampling procedures. This type of sampling involves the selection of cases in order to gain insight into specific experiences which are being investigated (De Vos, 1998). According to Flick (1998), it is the participant’s relevance to the research topic rather than their representativeness which determines the way in which the participants in the study are selected. This method is suitable for the present study due to the unique characteristics of the population being studied and the advantages this method offers. The advantage of using non-probability purposive sampling in this study is that it is less complicated and less expensive than probability sampling. The disadvantage of this method is that the probability that a person will be chosen is not known, the researcher generally cannot claim that the obtained sample is representative of the larger population, and the researcher has to make his / her own judgement about which participants to include in the sample (Babbie, 2005).
There was also no method to guarantee that each element of a population was equally represented. For the purposes of this study however, the inclusion criteria as well as the biographical form provided the researcher with the necessary information to select participants in an unbiased manner. Thus, in order to minimize any form of bias in the selection of participants, an inclusion form was used to select the participants.

The sample size is the number of units that needs to be surveyed in order for findings to be valid and reliable (Fink, 2003). The target sample size for the present study consisted of a minimum of 60 participants. In exploratory descriptive research, a minimum of 30 participants is considered to be acceptable for the findings to be valid and reliable. The researcher thus attempted to obtain an equal number of participants from both groups (those with mood disorders and those with anxiety disorders) in order to increase the rigour of the study. In cases where a participant had more than one disorder (co-morbid) the primary diagnosis was used. Now that a picture of the sample has been provided, a brief discussion of the biographical and standardized questionnaires that were utilized in the study is provided. The following section provides the biographical variables that pertain to the information obtained from the biographical questionnaire which was completed by all participants.

5.5 Biographical Information

A brief biographical questionnaire (Appendix 2) was included in the study to gather demographic and background information from the participants. Due to the small sample size, investigations between the variables contained in the biographical questionnaire and results were not possible. The reporting of these data therefore serves to provide a context for the findings related to the measures. The sample consisted of 60 female out-patients living with mood and anxiety disorders in the Nelson Mandela Metropole. The questions included in the biographical questionnaire were based on a literature review and the necessary biographical information needed for a meaningful description of the sample. The biographical questionnaire consisted of fixed responses, where an “X” was marked in the appropriate block and completion of the “other” section indicated the participants’ answer. The
questions included the following: age, ethnicity, home language, marital status, employed / unemployed, period for which the patient has been an out-patient service user and if the participant would like general feedback on the study. The responses to these questions aided in the selection of participants and ensured a comprehensive description of the sample.

5.6 Results of the Biographical Questionnaire

The following section presents the biographical variables that pertain to the information obtained from the biographical questionnaire which was completed by all participants.

5.6.1 Gender

Wissing and Van Eeden (1997), found that males have a higher level of subjective well-being than females in the South African context. In studies conducted by Myers and Diener (1997), they discovered that women were twice as likely as men to suffer from anxiety and depression and that their happiness depended on marital happiness whilst men’s happiness related to satisfaction at work. In the present study only female participants obtaining treatment from two out-patient clinics in the Nelson Mandela Metropole were selected for inclusion in the study.

5.6.2 Age

According to Diener and Suh (1997) a relationship exists between age and the components of subjective well-being, and that while pleasant affect declines with age, negative affect remained relatively unchanged and life satisfaction showed an increase. Since the study is not longitudinal, no comparison could be made between participants’ past and present levels of coping and subjective well-being. The age of the participants included in the study ranged from 20 to 71 in the patients with anxiety disorders and 25 to 73 in the patients with mood disorders. The mean and standard deviation of these groups is provided below.
Table 5.1: Mean and Standard Deviation of the Age Variable – Anxiety and Mood Disorders

<table>
<thead>
<tr>
<th>Disorder</th>
<th>n</th>
<th>Mean</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>30</td>
<td>42.17</td>
<td>20</td>
<td>71</td>
<td>12.19</td>
</tr>
<tr>
<td>Mood</td>
<td>30</td>
<td>45.45</td>
<td>25</td>
<td>73</td>
<td>13.14</td>
</tr>
</tbody>
</table>

Figure 5.1: Age Distribution – Anxiety Disorders

Figure 5.2: Age Distribution – Mood Disorders
5.6.3 Ethnicity

As indicated in Table 5.2 below, the greater proportion (57%), of the women diagnosed with anxiety disorders were White females (57%), followed by African (20%), and Coloured (13%) females, with only 10% of the sample being Indian females. In the sample of women diagnosed with mood disorders, 73% were White females, followed by Coloured females (23%), and African females (3%).

Table 5.2: Frequency Table of the Ethnicity Variable - Anxiety and Mood Disorders

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Ethnic Group</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>African</td>
<td>6</td>
<td>4</td>
<td>3</td>
<td>17</td>
<td>0</td>
</tr>
<tr>
<td>Anxiety</td>
<td>Percentage</td>
<td>20%</td>
<td>13%</td>
<td>10%</td>
<td>57%</td>
<td>0%</td>
</tr>
<tr>
<td>Mood</td>
<td>n</td>
<td>1</td>
<td>7</td>
<td>0</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Percentage</td>
<td>3%</td>
<td>23%</td>
<td>0%</td>
<td>73%</td>
<td>1%</td>
</tr>
</tbody>
</table>

5.6.4 Home language

The high percentage of English respondents in the sample may be attributed to the fact that the surveys were all conducted in English and therefore those whose home language was different to English needed to be conversant in English to participate. The frequency distributions of the biographical data for language are presented in Table 5.3:
As seen in Table 5.3 above, the main language spoken by women in the sample with anxiety disorders was English (40%) followed by Afrikaans (33%) as the second most frequent language. The amount of Xhosa-speaking women, as well as the combination of English and Xhosa-speaking women accounted for 10% in each of the samples. The language distribution of the sample of females diagnosed with mood disorders indicates that the main language spoken by these patients was Afrikaans (50%) followed by English (40%) with the remaining 10% distributed across the other categories.

5.6.5 Marital status

Studies have shown that married couples experienced a greater degree of happiness than their single counterparts who had never married or were divorced (Diener, 2000). In the female psychiatric out-patient sample with anxiety and mood disorders, the following marital categories were identified.
Table 5.4: Frequency Table of the Marital Status Variable – Anxiety and Mood Disorders

<table>
<thead>
<tr>
<th>Disorder</th>
<th></th>
<th>Marital Status</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Single</td>
<td>Co-</td>
<td>Habiting</td>
<td>Married /</td>
<td>Divorced</td>
</tr>
<tr>
<td>Anxiety</td>
<td>n</td>
<td>6</td>
<td>0</td>
<td>8</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Percentage</td>
<td>20%</td>
<td>0%</td>
<td>27%</td>
<td>30%</td>
<td>23%</td>
</tr>
<tr>
<td>Mood</td>
<td>n</td>
<td>8</td>
<td>0</td>
<td>13</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Percentage</td>
<td>27%</td>
<td>0%</td>
<td>44%</td>
<td>27%</td>
<td>3%</td>
</tr>
</tbody>
</table>

In Table 5.4 above, the marital status of the women diagnosed with anxiety disorders showed a fairly even distribution across all categories except the co-habiting category. The most frequently reported marital status for this group was divorced. In the group of women diagnosed with mood disorders, the majority (44%) of women were reported to be married or remarried, with 27% of the women falling within both the single and divorced categories. Only 3% of the sample were reported to be widowed.

5.6.6 Employment

It is clear from Table 5.5 below that the majority of the women in the sample diagnosed with anxiety disorders were unemployed, with only 27% of the women reporting some form of income-generating employment. In the group of women diagnosed with mood disorders, it is once again evident that the majority of the sample were unemployed (63%), with 37% of the women reporting some form of employment.
5.6.7 Diagnosis

As the sample for the study consisted of female psychiatric out-patients with mood and anxiety disorders, the diagnoses of the sample were limited to those listed on the inclusion form and excluded those with a psychotic features specifier and those which were considered to be the direct physiological effects of a general medical condition or substance. The diagnoses of the sample are depicted in Table 5.6.
**Table 5.6: Frequency Table of the Diagnosis Variable for Anxiety and Mood Disorders**

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>n</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Phobia</td>
<td>4</td>
<td>7%</td>
</tr>
<tr>
<td>Panic Disorder</td>
<td>5</td>
<td>8%</td>
</tr>
<tr>
<td>Panic Disorder</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>Major Depressive Disorder</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generalized Anxiety Disorder</td>
<td>17</td>
<td>28%</td>
</tr>
<tr>
<td>Generalized Anxiety Disorder</td>
<td>2</td>
<td>3%</td>
</tr>
<tr>
<td>Major Depressive Disorder</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generalized Anxiety Disorder</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>Panic Disorder</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major Depressive Disorder</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major Depressive Disorder</td>
<td>27</td>
<td>45%</td>
</tr>
<tr>
<td>Bipolar Mood Disorder</td>
<td>3</td>
<td>5%</td>
</tr>
</tbody>
</table>

5.6.8 Use of services

Literature indicates that the average period of psychiatric service use for patients with anxiety disorders is a minimum of six months to approximately two years (Kaplan & Sadock, 2003). The period of out-patient service use of the women in the sample diagnosed with anxiety and mood disorders is depicted in Table 5.7 below. The treatment of mood disorders on the other hand indicates that the average period of psychiatric service use for patients with mood disorders is approximately six months to three years (Kaplan & Sadock, 2003). The period of out-patient service use for the women in the sample diagnosed with a mood disorder is also depicted in Table 5.7 below.
Table 5.7: Frequency Table of the Service Use Variable for Anxiety and Mood Disorders

<table>
<thead>
<tr>
<th>Disorder</th>
<th>n</th>
<th>Mean</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>30</td>
<td>3.77</td>
<td>0.25</td>
<td>10</td>
<td>3.10</td>
</tr>
<tr>
<td>Mood</td>
<td>30</td>
<td>4.18</td>
<td>0.17</td>
<td>30</td>
<td>5.91</td>
</tr>
</tbody>
</table>

5.7 Measures

5.7.1 The Coping Resources Inventory (CRI)

The Coping Resources Inventory (CRI) was developed by Hammer and Marting (1988) to provide a tool that would identify resources that are currently available to individuals managing stress. The CRI was based on Hammer and Marting’s (1988) belief that, in identifying and acknowledging client’s resources and competencies, as well as their deficits and impairments, their self-esteem would be enhanced. The emphasis of the scale was thus placed on resources, as opposed to impairments (Hammer & Marting, 1988). The CRI consists of 60 items and takes approximately 10 minutes to complete. The inventory identifies resources across five domains, namely: cognitive, social, emotional, spiritual/philosophical, and physical. Hammer and Marting (1988) explained the five domains in more detail as follows:

1. Cognitive (COG): The cognitive domain measures the extent to which individuals maintain a positive sense of self-worth; which includes a positive outlook towards others, and optimism about life in general. Statements measuring this domain include (e.g., “I feel as worthwhile as anyone else”).

2. Social (SOC): The social domain measures the degree to which individuals are embedded in social networks that are able to provide support in times of stress. Statements measuring this domain include (e.g., “I am comfortable talking to strangers”).

3. Emotional (EMO): The emotional domain measures the degree to which individuals can accept and express a range of emotions. This is based on the proposition that an ability to express a range
of emotions will reduce the long-term effects of stress. Statements measuring this domain include (e.g., “I express my feelings to close friends”).

4. Spiritual / Philosophical (SP / PHI): The spiritual domain measures the degree to which actions of individuals are guided by stable and consistent values that are derived from religion, familial or cultural traditions, or a personal philosophy. Statements measuring this domain include (e.g., “I accept the mysteries of life and death”).

5. Physical (PHY): The physical domain measures the degree to which individuals enact health-promoting behaviours, which are believed to contribute to increased health and physical well-being. This domain also focuses on the degree to which individuals engage in health-promoting behaviours that are believed to contribute to increased levels of physical well-being. Statements measuring this domain include (e.g., “I have plenty of energy”).

In the administration of the CRI it was important to note that item no. 21 which speaks of pounds (51bs.) needed to be re-worded in kilograms for use with a South African sample. For the purpose of the study, this item was reworded. In terms of scoring, the CRI uses a four-point scale on which participants are required to indicate how often they have engaged in the behaviour over a period of six months. Once completed by the participant, the CRI was scored on an Excel computer program. A high score on this measure indicated that the participant had a wider range of coping resources from which he/she could draw (Hammer & Marting, 1988).

In terms of reliability and validity, the CRI has been investigated and tested on a number of subjects (Hammer & Marting, 1988). With regard to reliability, internal consistency was found to be fairly homogenous using Cronbach’s alpha, a test-retest reliability which was investigated over a six-week period proved to be reasonably stable over time and the item-to-scale correlations achieved fair homogeneity per scale (Hammer & Marting, 1988). Hammer and Marting (1988) indicated that in terms of validity, the CRI was found to have predictive, convergent, divergent, discriminant and concurrent validity as well as scale inter-correlations. Despite the fact that the CRI is normed on an
American sample, the inventory has been used successfully in a number of South African studies (Brown, 2002; Hatuell, 2004; Mahoo, 1999; Otto, 2002; Smith, 2005).

5.7.2 Sense of Coherence Scale (SOC-29) / Orientation to Life Scale

This questionnaire was developed by Antonovsky (1993) and assesses the theoretical concept of sense of coherence as a global life orientation. The SOC-29 is a measure of Antonovsky’s sense of coherence concept. Antonovsky (1993, p. 20) stated that “on the basis of a comprehensive theoretical model, a systematic questionnaire was developed, usable for both interview and self-completion”. The scale requires the participant to select an appropriate response that rates their position on a seven-point semantic differential scale which has two anchoring phrases at each end of the continuum. The scale consists of 29 items of which 11 items contribute to comprehensibility, 10 to manageability and 8 to meaningfulness. An individual’s sense of coherence is assessed according to these three elements. A brief description of each of these elements is presented below:

1. Comprehensibility

This concerns the degree to which the individual regarded internal and external stimuli as consistent, ordered and clear (e.g., When something unpleasant happened in the past, your tendency was: 1= “to eat yourself up about it” or 7= “to say its okay and I have to live with it and go on”).

2. Manageability

This concerns the belief by the individual that there existed available resources to deal with these stimuli (e.g., How often do you have feelings that you’re not sure you can keep under control: 1= “very often” or 7= very seldom / never).

3. Meaningfulness

This refers to the degree in which the individual perceived their stressors as “challenges worthy of investment and engagement” (e.g., How often do you have feelings that there’s little meaning in the things you do in your daily life?: 1= “very often” or 7= “very seldom / never”).
Antonovsky (1993) however, explicitly warned that the SOC scale measures global orientation and not the components of comprehensibility, manageability and meaningfulness. Other studies have also confirmed that the SOC is a unidimensional instrument with a single global factor that measures SOC (Frenz, Carey & Jorgensen, 1993; Holm, Ehde, Lamberty, Dix & Thompson, 1988). The participant’s rating of each statement on the 7-point Likert scale results in a score ranging from 29-203. The higher the participant’s score on the SOC-29, the stronger their SOC.

In terms of reliability and validity, the SOC-29 is said to cut across lines of gender, religion, social class and culture (Wissing & Van Eeden, 1997). It has been translated into 14 languages, and the test-retest studies included stability over time (Antonovsky, 1993; Thekiso, 1999). The SOC-29 has also been found to have high internal consistency with a Cronbach alpha of 0.93 (Frenz, Carey & Jorgensen, 1993). The SOC-29 has proven content, face and consensual validity along with construct and criterion validity (Antonovsky, 1993). The SOC-29 has been exposed to scrutiny in various countries and has been found to be valid and reliable (Frenz, 1990; Holm, 1988). Within the South African context, the SOC-29 has proven successful among youths between the ages of 12 and 20 (Ferreira, 1997, Links, 1999, Van der Wateren, 1997). The scale has further been used in the South African context by authors such as: Du Toit (2000), Smith (2005), and Walker (2000). There is thus substantial evidence that confirms the feasibility, reliability and validity of the SOC-29 both in the international and South African context.

5.7.3 Satisfaction with Life Scale (SWLS)

The Satisfaction with Life Scale (SWLS) is able, within two minutes to assess the participant’s evaluative judgement of her global life satisfaction. The purpose of the measure is to assess satisfaction with the participant’s life as a whole (Pavot & Diener, 1993). The scale does not assess life domains such as finances, but allows subjects to integrate and weight these domains in whatever way they choose (Pavot & Diener, 1993). The SWLS consists of 5 statements scored on a seven-point Likert scale where 1 is “strongly disagree” and 7 is “strongly agree”. The questions on the scale include
among others “I am satisfied with my life”. The statements included in the scale according to Pavot and Diener (1993), were generated on the basis of the guiding theoretical principal that life satisfaction represents a judgment by the participant of her life in comparison to her own standards. It is thus a judgmental process, in which individuals assess the quality of their lives on the basis of their own unique set of criteria (Pavot & Diener, 1993). In terms of scoring, a participant can score between 5 and 35 where 5 is indicative of being extremely dissatisfied and 35 indicates an elevated satisfaction with life.

In terms of reliability and validity, the SWLS has shown strong internal reliability and moderate temporal stability. Pavot and Diener (1993) reported a coefficient of alpha 0.87 for the scale and a two-month test-retest stability coefficient of alpha 0.82. The SWLS has been used internationally in studies such as: Diener, Scollon, Oishi, Dzokoto and Suh, 2000 and Suh, Diener and Fujita, 1996, while several South African studies have also utilized the scale (Wissing & Van Eden, 1997). In the Eastern Cape, the SWLS has been administered to diverse populations (Phillips, 2004; Smith, 2005; Vorster, 2002).

5.7.4 Affectometer-2 (AFM-2)

The Affectometer-2 was designed to measure general happiness and the sense of well-being by determining, through recent experience, the balance between positive and negative feelings (Kamman & Flett, 1983). This scale consists of 40-items and is estimated to take approximately five minutes to complete. The responses on the scale range from “not at all” to “all the time” and it is scored on a five-point Likert scale. The scale effectively indicates the quality of life as experienced on an affective level, with an overall level of well-being conceptualized as the extent to which positive feelings predominate over negative feelings. The AFM-2 is subdivided into two subscales which consist of 20 items each, with 10 positive and 10 negative items on each scale. Positive items refer to questions like: “My life is on the right track” and negative items include “I feel like a failure”. The timeframe referred to in the scale “over the last few weeks” is believed to comprise the sense of well-being (in the most
global meaning) and the choice of time period reasonable to recall (Kamman & Flett, 1983). According to Wissing and Van Eeden (1997), the AFM-2 aims to measure: Positive Affect (PA), Negative Affect (NA), and Positive-Negative Affect (PA-NA). A participant can score between 0 and 80 where a score of 40 represents the neutral point.

In terms of reliability and validity, Kamman and Flett (1983) reported that the AFM-2 has been shown to be a reliable and valid measure of subjective well-being. Research has shown the measure to have an alpha-reliability coefficient ranging from 0.88 to 0.93 and supports the validity of the scale. International studies with the use of the AFM-2 (Kamman & Flett, 1983; Dennerstein, Lehert & Guthrie, 2002) have proven successful. The AFM-2 has also been used in South African studies such as: Gal (2003); Jacobs (2006); Smith (2005); Vorster (2002).

5.8 Procedure

Prior to the commencement of the present study, it was imperative that the necessary approval be obtained from the Faculty’s Research, Technology and Innovations Committee (FRTI)) and the NMMU’s Ethics Committee (Human). Once permission was obtained, a meeting was held with two out-patient service providers in the Nelson Mandela Metropole to discuss the study and the use of the centres for data collection. The out-patient service providers were required to allocate which patients met the inclusion criteria and could be included in the study. Once permission was granted by the out-patient service providers, an information letter, as well as a biographical form (Appendix 2) in an enclosed envelope were sent to the prospective participant. The information letter (Appendix 3) was constructed to provide the prospective participant with a written description of the aims of the proposed study as well as their right to confidentiality and to withdraw from the study at any time if they so desired. The biographical questionnaire asked the prospective participant to provide basic demographic and background information (i.e., age, ethnicity, home language, marital status, employed / unemployed, period for which the patient had been an out-patient service user and if the participant would like general feedback on the study). Once this process was complete, the included participants
were informed of the dates and times of testing. The testing sessions were scheduled to take place in the form of small group sessions where participants were required to provide consent to testing by completing a consent form (Appendix 4).

Participants were required to complete: a Biographical Questionnaire, the Coping Resources Inventory, Satisfaction with Life Scale, Sense of Coherence Scale and Affectometer-2. These questionnaires were provided to each participant in an A4 envelope with their reference number on it. Participants, for the purpose of completing the questionnaires were required to have a grade 6 language and reading proficiency in English. The participants were then given approximately 45 minutes to 1 hour to complete the questionnaires. The researcher was present in all group sessions in order to be of assistance to those participants who experienced difficulties during the administration and completion of the questionnaires. No guidance or cues were purposefully or covertly provided with regard to the participant’s subjective view of their coping resources, satisfaction with life, happiness and sense of coherence. Participants who experienced problems with the understanding of questions / items were assisted only in regard to grammatical and/or language difficulties.

Once completed, the questionnaires were to be placed back in the envelope and sealed before returning them to the researcher. By doing this, the researcher ensured both a sense of privacy and confidentiality for the participants and ensured that all questionnaires completed by a specific participant were collated and sealed within a unified parcel (envelope). The returned information was then analyzed by the researcher and checked by an expert research consultant. The questionnaires were scored and re-scored by the researcher to eliminate the possibility of error. The data were analyzed with the assistance of an expert research consultant who cross-checked the scoring so as to ensure more auditability of the results. On completion of the study, general feedback, as well as a summary report of the study were provided to each participant. The methods of analysis are further discussed in the following section.
5.9 Data analysis

The data were analyzed, according to the three primary aims of the study. In terms of aim 1 (i.e., to explore and describe the coping of female psychiatric out-patients living with mood and anxiety disorders) and aim 2 (i.e., to explore and describe the subjective well-being of female psychiatric out-patients living with mood and anxiety disorders), the quantitative data collected from the objective measures were analyzed using descriptive statistics, which seek to describe the distribution, variety and trends in the responses of the sample as a whole. Huysamen (1994) provided useful guidelines for such descriptive statistical analysis. This analysis included the calculation of means, percentages, frequencies and standard deviations. The mean is a measure of central tendency, meaning that it provides numerical values referring to the centre of the distribution (Howell, 1989). The advantage of using the mean is that it is influenced by extreme scores (Harris, 1998; Howell, 1989). The standard deviation is a measure of variability (or spread in the distribution of scores) and measures distance (or the average deviations) of scores from the mean (Cozby, 1993; Harris, 1998). Inferential statistics (t Statistic and Chi-Square Statistics) refer to a set of techniques which allow us to study samples and then make generalizations about the populations from which they were selected. In the present study, inferential statistics were used to determine the significance based on the mean difference using t-test’s. In order to determine the significance based on frequency distribution, Chi² tests were calculated. In the present study, these generalizations are restricted to the sample under investigation. The threshold values for both practical and statistical significant are reported in Tables 5.8 and 5.9.
Table 5.8: Threshold values for practical and statistical significance of Cohen’s d

<table>
<thead>
<tr>
<th>Cohen’s d</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 0.2</td>
<td>Not Significant</td>
</tr>
<tr>
<td>0.21 - 0.5</td>
<td>Small</td>
</tr>
<tr>
<td>0.51 – 0.8</td>
<td>Moderate</td>
</tr>
<tr>
<td>0.81+</td>
<td>Large</td>
</tr>
</tbody>
</table>

Table 5.9: Threshold values for practical and statistical significance of Cramér’s V

<table>
<thead>
<tr>
<th>Cohen’s d</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 0.1</td>
<td>Not Significant</td>
</tr>
<tr>
<td>0.11 - 0.3</td>
<td>Small</td>
</tr>
<tr>
<td>0.31 – 0.5</td>
<td>Moderate</td>
</tr>
<tr>
<td>0.51+</td>
<td>Large</td>
</tr>
</tbody>
</table>

The third aim (i.e., to explore and describe the patterns of sense of coherence, coping resources, satisfaction with life and happiness of female psychiatric out-patients living with mood and anxiety disorders) was measured through the use of multivariate data analysis. More specifically, K-means cluster analysis was used to develop meaningful subgroups of individuals, the objective of which was to classify the sample of individuals (those with mood and those with anxiety disorders) into a smaller number of mutually exclusive groups based on the similarities among them (Hair, Anderson, Tatham & Black, 1992). Cluster analysis thus seeks to minimize “with-in group” variance and maximize “between-group” variance. The result of K-means cluster analysis is thus a number of heterogeneous groups with homogeneous contents (Hair, Anderson, Tatham & Black, 1992). The researcher employed
the services of an expert research consultant to assist with the analysis of the data obtained during the study.

5.10 Ethical Considerations

In any form of research, the researcher faces many ethical dilemmas and must decide how to act in an appropriate and ethical manner. De Vos (2000) reported that a number of unique ethical problems arise when human beings are the object of study in the social sciences. Codes of ethics and other researchers provide guidance but ethical conduct ultimately depends on the individual researcher to maintain a level of professionalism and accountability (Neuman, 2003). In order to achieve fair and ethical testing, the present study was submitted for approval by the Faculty’s Research, Technology and Innovations (FRTI) Committee and NMMU’s Ethics Committee (Human). Ethical considerations were strictly adhered to when undertaking this research to protect the participants (Strydom, 1998). Each participant was thus made aware of informed consent (Appendix 4), their right to withdraw, be informed concerning the nature and reasons for testing and be ensured of confidentiality and privacy. The nature of the present study is fortogenic in that it focuses on strengths rather than deficits. Should a situation however have arisen where a participant required further counselling, the researcher would have ensured that individual counselling was made available to the participant through the out-patient service providers on-site counsellors. The researcher of the present study took ethical considerations into account throughout the duration of the study. As previously mentioned, a research proposal of the present study was submitted to and accepted by the Faculty of Health Sciences and the Ethics Committee (Human) of the NMMU.

5.11 Conclusion

The research methodology and design used in the present exploratory-descriptive study was chosen on the basis of its aims and purpose. The data were gathered using a biographical questionnaire, two different measures for coping (CRI & SOC-29) and two different measures for subjective well-being (SWLS & AFM-2). A sample of female psychiatric out-patients with mood and anxiety disorders was
selected from two psychiatric community clinics and two support groups. The ethical guidelines outlined in the previous section were taken into account throughout the procedure. The data were statistically analyzed using descriptive statistics to determine the mean and standard deviations of the respondent’s coping and subjective well-being. Inferential statistics were used to provide generalizations about the sample under investigation. A cluster analysis was further performed to explore and describe patterns of subjective well-being and the coping of the researched sample. The results obtained are reported and discussed in the following chapter.
Chapter 6

Results and Discussion

6.1 Chapter Preview

The results presented in this chapter aim to explore and describe the psychofortology (i.e., the coping and subjective well-being) of a sample of female psychiatric out-patients living with mood and anxiety disorders. The first aim of the present study was to explore and describe the coping of female psychiatric out-patients living with mood and anxiety disorders. The conceptualization of the coping construct for the purpose of the present study entailed the exploration and description of: (a) the coping resources of these patients, and (b) the sense of coherence of these patients.

The second aim was to explore and describe the subjective well-being of female psychiatric out-patients living with mood and anxiety disorders. The conceptualization of the subjective well-being construct for the purpose of the study entailed the exploration and description of: (a) the satisfaction with life of these patients, and (b) the happiness of these patients. The third aim was to investigate the possible patterns between the participants scores on the Coping Resources Inventory (CRI), Sense of Coherence Scale (SOC-29), Satisfaction with Life Scale (SWLS) and the Affectometer-2. In the first section of this chapter, the results of the four measures (CRI, SOC-29, SWLS and AFM-2) are presented and discussed individually. Following this, the relationship between the four measures is examined and discussed.

6.2 Results of the measures

This section addresses the first two aims of the study, which are to explore and describe the coping and subjective well-being of female psychiatric out-patients diagnosed with anxiety and mood disorders. The results concerning the third aim are discussed in section 6.4. In the correlations used to determine reliability, a measure is considered reliable to the extent to which it produces stable and consistent measures. The reliability of the measures utilized in the present study are provided in Table 6.1.
Table 6.1: Reliability of measures used in the study

<table>
<thead>
<tr>
<th>Factor</th>
<th>Cronbach’s α</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Coping Resources Inventory</strong></td>
<td></td>
</tr>
<tr>
<td>Cognitive Scale</td>
<td>0.81</td>
</tr>
<tr>
<td>Social Scale</td>
<td>0.85</td>
</tr>
<tr>
<td>Emotional Scale</td>
<td>0.83</td>
</tr>
<tr>
<td>Spiritual / Philosophical Scale</td>
<td>0.81</td>
</tr>
<tr>
<td>Physical Scale</td>
<td>0.83</td>
</tr>
<tr>
<td>Coping Resources Total</td>
<td>0.89</td>
</tr>
<tr>
<td><strong>Sense of Coherence Total</strong></td>
<td>0.93</td>
</tr>
<tr>
<td><strong>Affectometer – 2</strong></td>
<td></td>
</tr>
<tr>
<td>Positive Affect (A)</td>
<td>0.86</td>
</tr>
<tr>
<td>Negative Affect (A)</td>
<td>0.89</td>
</tr>
<tr>
<td>Positive Affect (B)</td>
<td>0.90</td>
</tr>
<tr>
<td>Negative Affect (B)</td>
<td>0.87</td>
</tr>
<tr>
<td>Positive Affect</td>
<td>0.94</td>
</tr>
<tr>
<td>Negative Affect</td>
<td>0.93</td>
</tr>
<tr>
<td>Affect Difference</td>
<td>0.96</td>
</tr>
<tr>
<td><strong>Satisfaction with Life Total</strong></td>
<td>0.84</td>
</tr>
</tbody>
</table>

Note: α > 0.7 (reliable).

The results of the measures can thus be considered reliable and valid for interpretation in the study.

6.2.1 Coping and Coping Resources

For the purposes of this study, the construct of coping includes two levels, (a) coping resources, and (b) sense of coherence. The participant’s coping resources were measured by the Coping Resources Inventory (CRI) and their sense of coherence was measured by the Sense of Coherence (SOC) Scale.
which is also referred to as the Orientation to Life Scale. The results of the measures are presented in the following section.

6.2.1.1 Coping Resources

The means and standard deviations obtained on the CRI for both total scale scores and subscores are indicated in Table 6.2.

Table 6.2: Means and Standard Deviations of the Coping Resources Inventory – Anxiety and Mood Disorders

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Cognitive Std.Score</th>
<th>Social Std.Score</th>
<th>Emotional Std.Score</th>
<th>Spiritual Std.Score</th>
<th>Physical Std.Score</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>Mean</td>
<td>31.43</td>
<td>27.87</td>
<td>33.63</td>
<td>44.90</td>
<td>33.00</td>
</tr>
<tr>
<td></td>
<td>Minimum</td>
<td>17.00</td>
<td>7.00</td>
<td>17.00</td>
<td>31.00</td>
<td>21.00</td>
</tr>
<tr>
<td></td>
<td>Maximum</td>
<td>53.00</td>
<td>55.00</td>
<td>58.00</td>
<td>67.00</td>
<td>56.00</td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
<td>10.20</td>
<td>14.08</td>
<td>10.32</td>
<td>9.48</td>
<td>9.72</td>
</tr>
<tr>
<td>Mood</td>
<td>Mean</td>
<td>36.87</td>
<td>34.07</td>
<td>37.33</td>
<td>43.87</td>
<td>40.43</td>
</tr>
<tr>
<td></td>
<td>Minimum</td>
<td>21.00</td>
<td>7.00</td>
<td>17.00</td>
<td>20.00</td>
<td>19.00</td>
</tr>
<tr>
<td></td>
<td>Maximum</td>
<td>62.00</td>
<td>57.00</td>
<td>63.00</td>
<td>69.00</td>
<td>67.00</td>
</tr>
</tbody>
</table>

The mean raw scores obtained by the current sample for each of the five subscales, as well as for the total Coping Resources Inventory were converted to a standard score having a mean of 50 and a
standard deviation of 10 points. Since the subscales have different numbers of items, direct comparisons between scales based on raw scores is not possible. Standard scores are thus indicated in Table 6.2 in order to facilitate comparisons of the various subscales. Table 6.2 also indicates the maximum and minimum standard score obtained by the sample for each subscale and for the total Coping Resources Inventory.

According to Hammer and Marting (1988), approximately 95% of individuals will have standard scores that fall between 30 and 70. Therefore, scores below 30 are considered below average, while scores above 70 are considered above average. Before addressing the findings of the current study with regard to the CRI, it is necessary to refer back to the definition of coping resources provided in Chapter 2. Hammer and Marting (1988, p. 2), defined coping resources as: ‘those resources inherent in individuals that enable them to handle stressors more effectively, to experience fewer or less intense symptoms upon exposure to a stressor, or to recover faster from exposure’. In terms of the appraisal process, as outlined by Lazarus and Folkman (1984), coping resources come into play during both primary and secondary appraisals. During primary appraisal a person with high levels of coping resources would be less likely to make the initial appraisal that a demand is in fact threatening. However, should a demand be perceived as a stressor, secondary appraisal takes place. In this stage of the coping process an individual assesses his / her resources in terms of the stressor; if the individual has higher levels of coping resources better coping would be facilitated. The mean of the total coping resources scale for women with anxiety disorders (M= 29.17) was significantly below the mean of 50 established for the CRI by the test developers (Hammer & Marting, 1988). The mean of women with mood disorders (M= 34.80) on the CRI was within the average range (30-70) established by the test developers. With regard to South African studies, no specific norms for the CRI on female psychiatric out-patients with anxiety and mood disorders exist at present.

The means of the spiritual/philosophical subscale was found to be slightly below the mean of 50 for both women living with anxiety (M= 44.90) and those living with mood disorders (M= 43.87). The
other subscales of the CRI were all clustered between one and two **standard deviations** below the mean. The results for women with anxiety disorders on the social subscale, as well as total score, were significantly below the mean. These results indicate a relatively consistent picture of below average to average coping across all dimensions of coping.

In terms of the difference between the female psychiatric out-patients living with mood disorders and those living with anxiety disorders, no significant difference in mean scores was identified on the Coping Resources Inventory except for a significant mean difference on the Physical Scale ($t_{(58)} = 2.60$, $p = 0.012$ *(p < 0.05 significant) , $d = 0.67$). The difference based on frequencies for female psychiatric out-patients living with mood and anxiety disorders indicated a significant difference on the Social Scale ($X^2_{(2)} = 6.57$, $p = 0.37$, Cramér’s $V = 0.33$). When relating these findings to literature, it can be speculated that several factors might have impacted on the current samples level of coping resources, as described in Chapter 2. This includes the role of women as wives, mothers and carers of others, lack of social support, being an essential part of the labour force, and in one-quarter to one-third of households, the primary source of income (World Health Organization, 1995).

Research by Lu and Chen (1996) also highlights the fact that social support is related to the greater use of all kinds of coping behaviour. In terms of this finding, the fact that the social resource subscale of the sample of female psychiatric out-patients living with anxiety disorders was identified as the lowest mean score ($M= 27.87$) of the subscales may have been a contributing factor in lowering the mean scores on the other subscales. The mean scores for the female psychiatric out-patients living with mood disorders can be described as average. The highest mean score obtained by both psychiatric out-patients with anxiety and those with mood disorders was the spiritual/philosophical resource scale. It is not known whether the reliance on the spiritual/philosophical coping resource is in response to a stressful situation or whether the present sample was particularly spiritual to begin with. Religion, a facet of this particular subscale, has been viewed as playing an integral part in the coping process. It can mediate the relationship between life events and outcomes, as well as being a product of that
process (Bourjolly, 1998). In contrast, research, in Chapter 3 by Anson (1993), found that personal resources (i.e., SOC) were a better resource for avoiding the negative effects of recent life events than collective resources (i.e., belonging to a religious community). The results of the Sense of Coherence Scale are presented and discussed in the following subsection.

6.2.1.2 Sense of Coherence

The means and standard deviations of Antonovsky’s SOC-29 Sense of Coherence Questionnaire (i.e., The Orientation to Life Questionnaire) are presented in Table 6.3.

Table 6.3: Means and Standard Deviations of the Sense of Coherence Scale – Anxiety and Mood Disorders

<table>
<thead>
<tr>
<th>Disorder</th>
<th>n</th>
<th>Mean</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>30</td>
<td>83.77</td>
<td>43.00</td>
<td>148.00</td>
<td>27.12</td>
</tr>
<tr>
<td>Mood</td>
<td>30</td>
<td>91.17</td>
<td>35.00</td>
<td>168.00</td>
<td>37.14</td>
</tr>
</tbody>
</table>

Before addressing the findings of the present study with regard to the SOC-29, it is necessary to refer back to literature concerning the SOC construct described in Chapter 2. Antonovsky’s (1987) sense of coherence construct was defined as a global, dispositional orientation that develops over the life-span and crystallizes in early adulthood. The sense of coherence may further be described as an affective and cognitive process of finding meaning in an event, making sense of it, and perceiving available resources to confront the situation (Post-White, 1996). A person with a strong SOC will choose the most effective resources and coping strategies and will confront the stressor whereas a person with a low SOC will focus on the overwhelming emotional response (Antonovsky, 1987). As discussed in Chapter 2, the actual mobilization and utilization of a resource or a combination of resources to confront a given stressor is the real strength of the person with a high SOC. The ability to perceive situations as manageable, meaningful and comprehensible reduces the tension that is created
by stressors and improves the health status and quality of life of the individual by preventing an overwhelming stress response.

Table 6.3 reflects the mean SOC for the current sample of female psychiatric out-patients living with mood and anxiety disorders and thus provides information about the coping abilities of this group. Antonovsky (1987) did not provide standard scores or normative samples for the SOC-29. However, a number of published studies exist which provide normative data for a variety of samples (Antonovsky, 1993). With regard to South African studies, no specific norms for the SOC of female psychiatric out-patients living with mood and anxiety disorders exist at present. However, the statistics presented in Table 6.3 can be tentatively compared with those obtained in similar research studies, as discussed in Chapter 2.

In a study by Wissing and Van Eeden (1997) using a South African mixed sample group, the mean (M = 136.52, SD = 21.68) was found to be higher than the current sample (anxiety disorders: M = 83.77, SD = 27.12; mood disorders: M = 91.17, SD = 37.14). Wissing and Van Eeden’s (1997) sample size was much greater (n=550), with the majority of the sample mainly clustered in the 18-35 year age group. The sample used in the author’s study were not individuals faced with a specific stressor, but were largely composed of the average layperson and psychology students. The researcher is thus unable to make any definite causal inferences regarding the difference in the results of the two studies as many variables may impact as possible independent variables on the sample’s sense of coherence.

In terms of the difference between the female psychiatric out-patients living with mood disorders and those living with anxiety disorders, no significant difference in mean scores was identified on the Sense of Coherence Scale (t_{(58)} = 0.88, p = 0.38 *(p < 0.05 significant) ). The difference based on frequencies for female psychiatric out-patients living with mood and anxiety disorders did not indicate a significant difference (X^2_{(2)} = 2.02, p = 0.37) on any of the scales.

It appears that the mean obtained by the current sample is below average when compared with international and national research findings (see Table 6.3). This indicates that individuals in the
current sample have a below average SOC. With regard to the present sample of female psychiatric out-patients with mood and anxiety disorders, the multiple roles of women, poverty, gender inequality and a number of other factors may be playing a role in lowering the SOC of female psychiatric out-patients living with mood and anxiety disorders. As the individual moves into early adulthood, many factors contribute to shaping their SOC. During adulthood the individual’s location on the SOC continuum becomes more or less fixed. Adulthood demands of the individual commitments of a more long-range nature, such as commitment to persons, social roles, and work. Sagy, Antonovsky and Adler (1990) have indicated that SOC is crystallized somewhere around the age of 30. Various studies referred to in Chapter 2 have highlighted that individuals with a high SOC report better levels of physical and mental health and are able to cope more effectively with life stressors (Levert, Lucas & Ortlepp, 2000). A strong SOC is promoted by life experiences which are the result of available GRRs (Antonovsky, 1987). As the present sample has a below average SOC, they may be prone to lower levels of physical and mental health which result in difficulties in coping with stressors.

Research reviewed in Chapter 2 also noted the relationship between SOC and work (Antonovsky, 1987). It is especially the experience gained from work, as a life role, that reinforces or reverses the strength of SOC that developed during adolescence (Antonovsky, 1987). Antonovsky’s (1987) references to work are in the context of work experiences that strengthen the SOC. However, it seems evident that the SOC must also impact significantly on how work is approached and performed (Strümpfer, 1993). Of course, the SOC on its own, without the appropriate ability, skills, training and development, would be to no avail. In the present study the biographical questionnaire revealed that the majority of the female psychiatric out-patients included in the study were unemployed. As the relationship between work and SOC were not the primary focus of the study, one could only speculate as to the role of unemployment in the lowering of the included samples’ SOC.
6.2.2 Subjective Well-being

6.2.2.1 Satisfaction with Life

The means and standard deviations of the Satisfaction with Life Scale are presented in Table 6.4.

Table 6.4: Means and Standard Deviations of the Satisfaction with Life Scale – Anxiety and Mood Disorders

<table>
<thead>
<tr>
<th>Disorder</th>
<th>n</th>
<th>Mean</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>30</td>
<td>13.47</td>
<td>5.00</td>
<td>34.00</td>
<td>7.39</td>
</tr>
<tr>
<td>Mood</td>
<td>30</td>
<td>16.80</td>
<td>5.00</td>
<td>32.00</td>
<td>7.71</td>
</tr>
</tbody>
</table>

Before addressing the findings of the present study with regard to the Satisfaction with Life Scale, it is necessary to refer back to the literature concerning the construct of satisfaction with life. As discussed in Chapter 2, the Satisfaction with Life Scale measures global satisfaction with life (Pavot & Diener, 1993). Satisfaction with life refers to a cognitive, judgmental process in which individuals assess their life quality based on their own unique set of criteria (Diener, Emmons, Larsen & Griffen, 1985; Pavot & Diener, 1993). Satisfaction with life differs from happiness as it does not possess the same spontaneous ‘lift-of-the-spirits’ quality that happiness does (Campbell, 1981, p.16). Satisfaction also entails the use of judgment, as people constantly compare what they have with what they expect or think they deserve. Satisfaction with life is thus the individual’s total contextual estimate of life quality in several areas of life, such as family life, housing, income, health and social security (Strack, Argyle & Swartz, 1991).

With regard to general international research, Pavot and Diener (1993) found the mean score of the SWLS to be 23.5, with a standard deviation of 6.43. In national research conducted by Odendaal (1999) on the satisfaction with life of heart patients in rehabilitation, a mean score of 25 was established, with
a standard deviation of 7. It should be noted that Odendaal (1999) investigated the satisfaction with life of a clinical sample (i.e., chronic heart disease patients). Another national study by Wissing and Van Eeden (1997) investigated the satisfaction with life of a mixed South African sample (i.e., Caucasian and African males and females ranging from ages 18 to 65 and older) and found the mean score to be 23.45, with a standard deviation of 6.32. The present sample’s mean scores for both female psychiatric out-patients with anxiety (M = 13.47) and those with mood disorders (M = 16.80) on the SWLS was found to be lower than all the abovementioned studies and the standard deviations slightly bigger (anxiety disorders: SD = 7.39, mood disorders: SD = 7.71). These results indicate that the present sample perceived themselves as having satisfaction with life levels below the neutral point. According to Pavot and Diener (1993), considerable variability in life satisfaction, as reported on the SWLS, has been observed between and within a number of diverse populations. The findings of the present study are not in agreement with the frequent findings in Western countries where a preponderance of respondents report well-being above the neutral point on a variety of measures (Andrews & Withey, 1976; Veenhoven, 1984, 1991).

In terms of the difference between the female psychiatric out-patients living with mood disorders and those living with anxiety disorders, no significant difference in mean scores was identified on the Satisfaction with Life Scale (\[ t_{58} = 1.71, p = 0.09 ^* (p < 0.05 \text{ significant}) \]). The difference based on frequencies for female psychiatric out-patients living with mood and anxiety disorders did not indicate a significant difference (\[ \chi^2(2) = 2.05, p = 0.36 \]) on any of the scales.

Tait (1989) found that the relationship between satisfaction with life and job satisfaction has grown stronger for women in recent decades, as their roles in society have changed and the careers available to them have expanded. Work may thus be related to subjective well-being because it provides for: an optimal level of stimulation that individuals find pleasurable; positive social relationships; and a sense of identity and meaning (Csikszentmihalyi, 1990). The fact that the majority of the female out-patients in the sample were unemployed could thus be speculated to be a possible contributing factor to the
sample’s lower scores. Table 6.5 below indicates the level of satisfaction with life experienced by the sample.

Table 6.5: Participants’ Level of Satisfaction with Life- Anxiety and Mood Disorders

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Extremely Dissatisfied</th>
<th>Dissatisfied</th>
<th>Slightly Dissatisfied</th>
<th>Neutral Satisfied</th>
<th>Slightly Satisfied</th>
<th>Satisfied</th>
<th>Extremely Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>11</td>
<td>8</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Mood</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: Numbers refer to the number of participants in each category

The majority of the sample of female psychiatric out-patients included in the study were identified as having satisfaction with life levels within the extremely dissatisfied to slightly dissatisfied category. In the sample of females with anxiety disorders, 73% of the sample were identified as having satisfaction with life levels ranging from extremely dissatisfied to slightly dissatisfied. The remaining 27% of the sample had satisfaction with life levels within the neutral to extremely satisfied range. In the sample of females with mood disorders, 60% of the sample were identified as having satisfaction with life levels below the neutral category, with the other 40% distributed across the remaining categories. When comparing these findings to the normative data provided by Pavot and Diener (1993) who found that most groups fall in the slightly satisfied to satisfied range, it is evident that a significant difference exists in the results obtained in their study compared with those obtained in the present study.

In a South African study, Odendaal (1999) investigated the subjective well-being (i.e., satisfaction with life and general happiness) of a sample of cardiac patients in rehabilitation. Key findings from the study indicated that participants’ satisfaction with life ranged from slightly dissatisfied to satisfied with
life. In another South African study that examined the satisfaction with life of the retired elderly, Vorster (2002) found that most participants experienced satisfaction with life levels ranging from satisfied to extremely satisfied. The results of the Affectometer-2 are presented and discussed in the following section.

6.2.2.2 Happiness

The means and standard deviations of the Affectometer-2 Scale are presented in Table 6.6.

Table 6.6: Means and Standard Deviations of the Affectometer-2 – Anxiety and Mood Disorders

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Mean</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Affect (A)</td>
<td>16.10</td>
<td>6.00</td>
<td>31.00</td>
<td>6.56</td>
</tr>
<tr>
<td>Negative Affect (B)</td>
<td>26.50</td>
<td>11.00</td>
<td>37.00</td>
<td>6.15</td>
</tr>
<tr>
<td>Positive Affect (A)</td>
<td>16.30</td>
<td>4.00</td>
<td>32.00</td>
<td>7.24</td>
</tr>
<tr>
<td>Negative Affect (B)</td>
<td>26.73</td>
<td>9.00</td>
<td>39.00</td>
<td>6.15</td>
</tr>
<tr>
<td>Positive Affect</td>
<td>32.40</td>
<td>12.00</td>
<td>63.00</td>
<td>13.33</td>
</tr>
<tr>
<td>Negative Affect</td>
<td>53.23</td>
<td>20.00</td>
<td>73.00</td>
<td>11.70</td>
</tr>
<tr>
<td>Affect Difference</td>
<td>20.83</td>
<td>60.00</td>
<td>43.00</td>
<td>24.18</td>
</tr>
<tr>
<td>Mood</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Affect (A)</td>
<td>17.60</td>
<td>2.00</td>
<td>33.00</td>
<td>7.84</td>
</tr>
<tr>
<td>Negative Affect (B)</td>
<td>24.27</td>
<td>0.00</td>
<td>40.00</td>
<td>9.54</td>
</tr>
<tr>
<td>Positive Affect (A)</td>
<td>19.07</td>
<td>0.00</td>
<td>33.00</td>
<td>7.62</td>
</tr>
<tr>
<td>Negative Affect (B)</td>
<td>23.87</td>
<td>4.00</td>
<td>40.00</td>
<td>8.14</td>
</tr>
<tr>
<td>Positive Affect</td>
<td>36.67</td>
<td>2.00</td>
<td>66.00</td>
<td>15.03</td>
</tr>
<tr>
<td>Negative Affect</td>
<td>48.13</td>
<td>8.00</td>
<td>80.00</td>
<td>16.81</td>
</tr>
<tr>
<td>Affect Difference</td>
<td>11.47</td>
<td>78.00</td>
<td>54.00</td>
<td>30.13</td>
</tr>
</tbody>
</table>
Before addressing the findings of the present study with regards to the AFM-2 Scale, it is necessary to refer back to the literature concerning the construct of happiness. The AFM-2 assesses quality of life on an affective level, with overall well-being conceptualized as the extent to which positive feelings predominate over negative feelings (Kamman & Flett, 1983). As discussed in Chapter 2, the AFM-2 is a five-minute brief inventory designed to measure general happiness and sense of well-being by determining, through recent experiences, the balance between positive and negative feelings (Kamman & Flett, 1983).

Happiness, on the other hand, can be referred to as the positive judgment outcome when an individual weighs up his / her negative versus positive affects (Hatuell, 2004). Happy people are likely to experience more desirable events and have the propensity to interpret, and recall, ambiguous events as good (Hatuell, 2004). Seligman (2002) coined the term authentic happiness, as described in Chapter 2. Seligman described authentic happiness as finding one’s fundamental strengths and using them every day. These strengths would then over time become identifiable positive character traits for the individual. According to Seligman (2002), it is not merely the events of an individual’s life that result in happiness or unhappiness, but rather how those events are interpreted by the individual (Crompton, 2005).

Table 6.6 reflects the mean score of Positive Affect, Negative Affect, Positive-Negative Affect and the mean difference for each group (i.e., anxiety and mood disorders). The mean score of the Positive-Negative Affect-Balance (i.e., global happiness) for the female psychiatric out-patients living with anxiety disorders was 20.83, which is significantly below the neutral level (40) of Positive Affect. Scores above 40 indicate positive subjective well-being (i.e., happiness), while scores lower than 40 indicate lower levels of subjective well-being (i.e., unhappiness). In the sample of female psychiatric out-patients with mood disorders, the Positive-Negative Affect-Balance was 11.47 which is also significantly below the neutral level of Positive Affect. This score is obtained by subtracting the subtotal of Negative Affect (NA) from the subtotal for Positive Affect (PA) (Wissing & Van Eeden,
Both the scores for the females with anxiety disorders and those with mood disorders perceived themselves to be experiencing relatively low levels of global happiness. The lowest score indicating a level slightly lower than neutral (40) for Negative Affect was a score of minus 78, while the highest score was 54 out of a maximum score of 80 for Positive Affect, indicating a range of 132 for this study.

In terms of the difference between the female psychiatric out-patients living with mood disorders and those living with anxiety disorders, no significant difference in mean scores was identified on the Affectometer – 2: Positive Affect ($t_{(58)} = 1.16, p = 0.25$), Negative Affect ($t_{(58)} = 1.36, p = 0.18$), and Affect difference ($t_{(58)} = 1.33, p = 0.19$). The difference based on frequencies for female psychiatric out-patients living with mood and anxiety disorders did not indicate a significant difference on any of the scales: Positive Affect ($X^2_{(2)} = 4.52, p = 0.10$), Negative Affect ($X^2_{(2)} = 1.38, p = 0.50$) and Affect difference ($X^2_{(2)} = 3.33, p = 0.19$).

The current study does not compare favourably to the study conducted by Wissing and Van Eeden (1997) on 550 male and female South Africans from multi-cultural backgrounds. In their study, Wissing and Van Eeden reported a total global happiness mean of 29.5 and a standard deviation of 19.68. Using their study as a norm for the present study, it appears that the female psychiatric out-patients in this study experienced lower levels of global happiness than the respondents in the study conducted by Wissing and Van Eeden. It could be speculated that given the previous below average results on the CRI, the SOC and the SWLS, it would be expected that the respondent’s global levels of happiness would be below average as well. One could also speculate as to the role that the experience of a mood or anxiety disorder has on the two main components assessed when individuals are asked about their happiness, namely: emotional state and how the individual feels about the world and themselves.

6.3 Conclusion

In this section the results of the standardized measures such as the CRI, SOC, SWLS and AFM-2 have been presented and discussed. The findings have been linked to theory and previous studies which
have been reviewed in the previous chapters. Some of the findings in this study confirm theoretical and earlier research findings, while others appear unique to this particular sample. The next section discusses the results of the cluster analysis used in the study to classify the present sample in terms of their scores on the different measures and as two groups (anxiety and mood disorders).
6.4 Cluster Analysis

K-means cluster analysis was used to develop meaningful subgroups of the participants, the objective of which was to classify the sample (those with mood and those with anxiety disorders) into a smaller number of mutually exclusive groups based on the similarities among them (Hair, Anderson, Tatham & Black, 1992). The aim of cluster analysis was thus to minimize within-group variance and maximize between-group variance. The five measures (i.e., CRI, SOC, SWLS and AFM-2) had different scoring systems and maximum scores. Tests with a greater variance influence the cluster analysis results more than tests with smaller variances. The mean scores of the measures of the whole sample are plotted in Figure 6.1.

Figure 6.1: Plot of Mean Scores of Measures by Cluster - All data
The whole sample consisted of 60 female psychiatric out-patients living with mood and anxiety disorders. The out-patients were clustered into three groups, as identified in Figure 6.1. The first cluster consisted of 17 out-patients, which accounted for 28% of the sample. The second cluster consisted of 23 out-patients, accounting for 33% of the sample; and the third cluster consisted of 20 out-patients and accounted for 33% of the sample. The three clusters consisted of both out-patients living with anxiety disorders and those living with mood disorders. The means and standard deviations of the whole sample are provided in Table 6.7.

<table>
<thead>
<tr>
<th>Measure</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Coping Resources Inventory</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cognitive Scale</td>
<td>34.15</td>
<td>12.04</td>
</tr>
<tr>
<td>Social Scale</td>
<td>30.97</td>
<td>13.37</td>
</tr>
<tr>
<td>Emotional Scale</td>
<td>35.48</td>
<td>11.35</td>
</tr>
<tr>
<td>Physical Scale</td>
<td>44.38</td>
<td>10.93</td>
</tr>
<tr>
<td>Spiritual / Philosophical Scale</td>
<td>36.72</td>
<td>11.62</td>
</tr>
<tr>
<td><strong>Sense of Coherence Scale</strong></td>
<td>87.47</td>
<td>32.61</td>
</tr>
<tr>
<td><strong>Affectometer -2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Affect</td>
<td>34.53</td>
<td>14.25</td>
</tr>
<tr>
<td>Negative Affect</td>
<td>50.68</td>
<td>14.59</td>
</tr>
<tr>
<td><strong>Satisfaction with Life Scale</strong></td>
<td>15.13</td>
<td>7.68</td>
</tr>
</tbody>
</table>

Having identified the three main clusters and providing a description of the whole sample, a description of the sample according to each cluster and disorder is provided in the section that follows.
6.4.1 Cluster One

Cluster 1 consisted of 20% (n = 6) of the out-patients living with anxiety disorders, as well as 37% (n = 11) of patients living with mood disorders. This cluster was thus referred to as ‘of relatively high psychofortology’. If one were to speculate as to the reason patients in this cluster obtained higher scores on the measures than the other patients in the sample, one would need to take into consideration that the possibility exists that some of the patients in this cluster may have a distress-resistant personality pattern, have more coping resources available to them to draw on in times of stress, be more satisfied with their lives at the present time and be experiencing a greater sense of happiness. Distress-resistant personality patterns are characterized by learned optimism, hardiness, the survivor personality and the Type C pattern. Individuals with learned optimism experience events as internal,
permanent and pervasive. They respond to adversity with internal control and maintain better health. Individuals who present with hardiness enjoy challenges, are committed to life and have a strong sense of internal control. Individuals with a hardy personality pattern turn change and difficulty into opportunity. Individuals with a survivor personality surmount any challenges through personal effort and emerge from the experience with previously unknown strengths. The descriptive statistics for Cluster 1 are represented in Table 6.8.

Table 6.8: Descriptive statistics of measures for Cluster 1

<table>
<thead>
<tr>
<th>Measure</th>
<th>Mean (M)</th>
<th>Standard Deviation (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Coping Resources Inventory</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cognitive Scale</td>
<td>48.12</td>
<td>7.39</td>
</tr>
<tr>
<td>Social Scale</td>
<td>43.41</td>
<td>9.03</td>
</tr>
<tr>
<td>Emotional Scale</td>
<td>45.29</td>
<td>12.11</td>
</tr>
<tr>
<td>Physical Scale</td>
<td>56.88</td>
<td>6.25</td>
</tr>
<tr>
<td>Spiritual / Philosophical Scale</td>
<td>47.65</td>
<td>9.72</td>
</tr>
<tr>
<td>Sense of Coherence Scale</td>
<td>127.00</td>
<td>18.00</td>
</tr>
<tr>
<td>Affectometer -2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Affect</td>
<td>50.00</td>
<td>6.79</td>
</tr>
<tr>
<td>Negative Affect</td>
<td>36.82</td>
<td>15.64</td>
</tr>
<tr>
<td>Satisfaction with Life Scale</td>
<td>24.24</td>
<td>5.83</td>
</tr>
</tbody>
</table>

The results obtained in this study are slightly lower than those produced by other studies where the interrelationship between coping and subjective well-being were investigated (Wissing & Van Eeden,
1997; Madhoo, 1999; Hatuell, 2004). According to the results presented in this cluster, the profile of patients in this cluster is characterized by high scores for coping and subjective well-being which result in a higher level of psychofortology compared to the other two clusters. This cluster can thus be referred to as ‘high psychofortology’.

6.4.2 Cluster Two

Cluster 2 consisted of 43% (n = 13) of the out-patients living with anxiety disorders as well as 33% (n = 10) of patients living with mood disorders. The descriptive statistics for cluster 2 are represented in Table 6.9 below.

Table 6.9: Descriptive statistics of measures for Cluster 2

<table>
<thead>
<tr>
<th>Measure</th>
<th>Mean (M)</th>
<th>Standard Deviation (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Coping Resources Inventory</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cognitive Scale</td>
<td>33.39</td>
<td>8.38</td>
</tr>
<tr>
<td>Social Scale</td>
<td>32.26</td>
<td>10.05</td>
</tr>
<tr>
<td>Emotional Scale</td>
<td>35.43</td>
<td>8.34</td>
</tr>
<tr>
<td>Physical Scale</td>
<td>43.96</td>
<td>5.36</td>
</tr>
<tr>
<td>Spiritual / Philosophical Scale</td>
<td>36.13</td>
<td>10.12</td>
</tr>
<tr>
<td><strong>Sense of Coherence Scale</strong></td>
<td>89.13</td>
<td>12.05</td>
</tr>
<tr>
<td><strong>Affectometer -2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Affect</td>
<td>34.74</td>
<td>9.75</td>
</tr>
<tr>
<td>Negative Affect</td>
<td>51.04</td>
<td>7.38</td>
</tr>
<tr>
<td><strong>Satisfaction with Life Scale</strong></td>
<td>13.78</td>
<td>5.04</td>
</tr>
</tbody>
</table>
According to the results presented in this cluster, the profile of patients in this cluster is characterized by average scores for coping and subjective well-being, which result in an average level of “psychofortology” compared to the other two clusters. This cluster can thus be referred to as “of relatively average psychofortology”.

6.4.3 Cluster Three

The third cluster consisted of 37% (n = 11) of the out-patients living with anxiety disorders as well as 30% (n = 9) of patients living with mood disorders. If one were to speculate as to the reason patients in this cluster obtained lower scores on the measures than the other patients in the sample, one would need to take into consideration that the possibility exists that some of the patients in this cluster may have a distress-prone personality pattern, have fewer coping resources available to them to draw on in times of stress, are less satisfied with their lives at the present time and are experiencing a lower sense of happiness. Distress-prone personality patterns are characterized by enduring habits of thinking, feeling and acting that contribute to personal distress. These patterns include: Type A, perfectionism, Type E and learned helplessness. The descriptive statistics for cluster 3 are represented in Table 6.10.
Table 6.10: Descriptive statistics of measures for Cluster 3

<table>
<thead>
<tr>
<th>Measure</th>
<th>Mean (M)</th>
<th>Standard Deviation (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Coping Resources Inventory</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cognitive Scale</td>
<td>23.15</td>
<td>4.46</td>
</tr>
<tr>
<td>Social Scale</td>
<td>18.90</td>
<td>8.70</td>
</tr>
<tr>
<td>Emotional Scale</td>
<td>27.20</td>
<td>6.14</td>
</tr>
<tr>
<td>Physical Scale</td>
<td>34.25</td>
<td>7.56</td>
</tr>
<tr>
<td>Spiritual / Philosophical Scale</td>
<td>28.10</td>
<td>5.96</td>
</tr>
<tr>
<td><strong>Sense of Coherence Scale</strong></td>
<td>51.95</td>
<td>11.36</td>
</tr>
<tr>
<td><strong>Affectometer -2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Affect</td>
<td>21.15</td>
<td>8.88</td>
</tr>
<tr>
<td>Negative Affect</td>
<td>62.05</td>
<td>9.16</td>
</tr>
<tr>
<td><strong>Satisfaction with Life Scale</strong></td>
<td>8.95</td>
<td>2.91</td>
</tr>
</tbody>
</table>

The results in Table 6.10 above appear to be much lower than the other two clusters and the profile of patients in this cluster is characterized by low levels of coping and subjective well-being. This cluster can thus be referred to as ‘of relatively low psychofortology’.

A chi-test of independence was conducted to determine whether or not there was a relationship between the clusters. The results of the chi-test ($\chi^2 = 2.06$, d.f. = 2, p = .357) indicate that no significant relationship exists between the clusters.

6.5. Conclusion

In this chapter the results of the present study in relation to the three aims of the research were presented and discussed. Additionally, a detailed description of the sample was provided. The results
were linked to previous studies conducted in South Africa where possible and the results were further linked to relevant literature in earlier chapters. The test performance of the sample in this study was below that of other national and international studies. The cluster analysis identified three distinct groups of test performance. The performance of one group indicated a relatively high level of psychofortology (i.e., coping and subjective well-being). The test scores of the second group indicated a relatively average level of psychofortology, and the third group indicated a relatively lower level of psychofortology. The following chapter focuses on the conclusions, limitations and recommendations of the study.
Chapter 7
Conclusions, Limitations and Recommendations

7.1 Chapter Preview

Having presented and discussed the results of the study, it is necessary to draw certain conclusions based on these findings. This chapter provides a summary of the main findings along with a discussion of the contributions and limitations of the study. Recommendations for future research are also included in this chapter.

7.2 Objectives of the study revisited

In general, this study aimed to explore and describe the coping resources, sense of coherence, satisfaction with life and happiness of female psychiatric out-patients living with mood and anxiety disorders. The aims are expanded on below.

4. To explore and describe the coping (i.e., coping orientation (SOC) and coping resources) of female psychiatric out-patients living with mood and anxiety disorders. This aim specifically entails the following:

   To explore and describe the sense of coherence of these patients.

   To explore and describe the coping resources of these patients.

5. To explore and describe the subjective well-being of female psychiatric out-patients living with mood and anxiety disorders. This aim specifically entails the following:

   To explore and describe the satisfaction with life of these patients.

   To explore and describe the happiness of these patients.

6. To explore and describe the patterns of coping resources, sense of coherence, satisfaction with life and happiness of female psychiatric out-patients living with mood and anxiety disorders.

7.3 Conclusions based on the present study

The conclusions drawn from this study are addressed in terms of the abovementioned aims.
7.3.1 Description of the Coping and Coping Resources of the Sample

The first aim of this research was to explore and describe the coping of female psychiatric out-patients living with mood and disorders. Coping was further subdivided into two categories, (a) coping resources, and (b) sense of coherence. The coping resources of the female psychiatric out-patients living with mood and anxiety disorders was assessed using the Coping Resources Inventory (CRI), and the sense of coherence was assessed using the Sense of Coherence Scale (SOC-29).

On the CRI, the female psychiatric out-patients living with anxiety disorders obtained mean scores on the cognitive, emotional, and spiritual / philosophical subscales which were all clustered within the below average to average range for the CRI. The female psychiatric out-patients with mood disorders mean scores were all clustered within the average range with the highest mean score on the spiritual / philosophical subscale and the lowest mean score on the social subscale. A high mean score on the spiritual / philosophical subscale suggested that for the current sample, religion and spirituality played an important role in the coping process. The low social subscale mean obtained by the sample could be considered as a contributing factor in lowering the other subscales. This conclusion was based on literature which outlined the lack of social support received by those living with mood and anxiety disorders. In turn, research has indicated that received social support is related to greater use of all kinds of coping behaviour. Results of the CRI thus indicate that the female psychiatric out-patients with anxiety disorders experience a below average level of coping resources and those with mood disorders experience average levels of coping resources. A substantive difference was found on the mean scores on the physical subscale. In terms of the frequencies, a significant difference was identified on the social subscale.

According to the results obtained on the SOC-29, the sample of female psychiatric out-patients with anxiety disorders has a below-average level of sense of coherence when compared to South African research conducted by Wissing and Van Eeden (1997). The sample of female psychiatric out-patients with mood disorders also appears to have a below-average level of sense of coherence. As there are no
established mean scores for the sense of coherence of female psychiatric out-patients living with mood and anxiety disorders it is difficult to assess whether this mean score is generalizable for the large population of South Africa. However, when compared to the means obtained by similar research studies outlined in international and national literature on the SOC-29, the mean obtained for this sample was below average. No significant difference was obtained on the SOC-29 between the mean scores for female psychiatric out-patients living with anxiety and those with mood disorders. In terms of the frequencies for female psychiatric out-patients living with anxiety and those with mood disorders, no significant difference was obtained on the SOC-29.

Literature has noted that adulthood demands individual commitments of a more long-range nature, such as commitment to individuals (i.e., spouses and children), social roles and work, all of which are factors contributing to shaping an individual’s sense of coherence. From this finding it can be concluded that stressors and life events unique to those of female psychiatric out-patients with mood and anxiety disorders may have influenced the sense of coherence of the present sample. It can also be deduced from literature that the tendency of individuals with a low sense of coherence is to end up in more stressful situations, or even to create stressors. According to Lazarus and Folkman (1984), individuals with a low sense of coherence appear to experience difficulties in the appraisal process. Individuals with a low sense of coherence tend to interpret situations in the primary appraisal process as extremely threatening or as overwhelming where they lack the available resources to cope with the stressor. This can result in a stressor being perceived as more stressful than it really is, or exasperating an already stressful situation. The present samples sense of coherence may thus have been established subsequent to their exposure to environmental and other stressors. In this regard, reference has been made to the comprehensibility and manageability components of the sense of coherence construct as vital in determining the strength of the present sample’s sense of coherence. Thus it could be argued that the lower sense of coherence of the present sample compared with the studies reviewed in the literature (Chapter 2) may be a consequence of participants perceiving stressors as less comprehensible
and less manageable. Meaning is most central to the sense of coherence concept and it provides the motivational component. One of the positive outcomes that have been shown to emerge from stressful events is the ability to find meaning in life. The meaning attached to life events can thus act as a buffer and promote well-being. In the section that follows, a description of the subjective well-being of the female psychiatric out-patients living with mood and disorders is provided.

7.3.2 Description of the Subjective Well-being of the Sample

The second aim of the study was to explore and describe the subjective well-being of female psychiatric out-patients living with mood and disorders. Subjective well-being for the purpose of this study was further subdivided into two categories (a) satisfaction with life and, (b) happiness. Satisfaction with life was assessed using the Satisfaction with Life Scale (SWLS). Happiness was assessed using the Affectometer -2.

The results on the SWLS for the sample of female psychiatric out-patients living with anxiety disorders indicated that the mean score was below average when compared to other national studies. The female psychiatric out-patients living with mood disorders were also identified as having below average satisfaction with life. The overall results of the study thus indicate a below average level of subjective well-being. Once again, as there are no established norm scores for the SWLS for South African female psychiatric out-patients living with mood and anxiety disorders at this stage, it is difficult to determine whether or not the mean score for this sample is generalizable to the larger population of female psychiatric out-patients with mood and anxiety disorders. In terms of the seven categories of satisfaction with life identified by the test developers, the majority of female psychiatric out-patients living with anxiety disorders that were included in the study were identified as having levels of satisfaction with life below the neutral point (extremely dissatisfied to slightly dissatisfied). Most of the female psychiatric out-patients living with mood disorders also reported satisfaction with life levels ranging from extremely dissatisfied to slightly dissatisfied. No significant difference was obtained between the mean scores for female psychiatric out-patients living with anxiety and those with
mood disorders. In terms of the frequencies for female psychiatric out-patients living with anxiety and those with mood disorders, no significant difference was obtained.

7.3.3 Description of the patterns of coping resources, sense of coherence, satisfaction with life and happiness of the Sample

The third aim of the study was to explore and describe the patterns of coping resources, sense of coherence, satisfaction with life and happiness of the sample. However, due to the exploratory-descriptive nature of the present study, no causal or explanatory links could be established. The results indicated three clusters based on all the data obtained in the study. The first cluster consisted of out-patients with mood and anxiety disorders who obtained high scores across all the measures indicating high levels of psychofortology. This cluster was thus referred to as ‘of relatively high psychofortology’. If one were to speculate as to the reason patients in this cluster obtained higher scores on the measures than the other patients in the sample, one would need to take into consideration that the possibility exists that some of the patients in this cluster may have a distress-resistant personality pattern, have more coping resources available to them to draw on in times of stress, be more satisfied with their lives at the present time and be experiencing a greater sense of happiness.

The second cluster also consisted of female psychiatric out-patients with mood and anxiety disorders. This cluster was characterized by patients with average results across all five measures and for the purpose of the study was named ‘of relatively average psychofortology’. The third cluster was characterized by female psychiatric out-patients with mood and anxiety disorders who obtained low scores across all five measures. This group for the purpose of the study was referred to as ‘of relatively low psychofortology’. If one were to speculate as to the reason patients in this cluster obtained lower scores on the measures than the other patients in the sample, one would need to take into consideration that the possibility exists that some of the patients in this cluster may have a distress-prone personality pattern, have fewer coping resources available to them to draw on in times of stress, be less satisfied
with their lives at the present time and be experiencing a lower sense of happiness. The next section discusses the value of the research.

7.4 The value of the research

The study contributes to the research of coping and subjective well-being of female psychiatric out-patients living with mood and anxiety disorders. According to Folkman and Moskowitz (2000), psychologists need to understand more clearly the adaptational significance of positive affect in the midst of stress, and they need to learn how individuals generate and sustain positive affect under such conditions. Concepts like coping resources, sense of coherence, satisfaction with life, and happiness provide productive theories for research into these issues. The present study thus contributes to the body of research rooted in the positive psychology paradigm which investigates the possible positive aspects of stressful situations and emphasizes mental health rather than mental illness.

In response to Sheldon and King (2001), who reported that psychologists know relatively little about human thriving, it is hoped that the present study will contribute to the basic understanding and promotion of some of the factors that allow individuals, in this case, female psychiatric out-patients living with mood and disorders, to cope better with stressors. As mentioned earlier in Chapter 3, women are throughout the world regarded as central to caring for families and communities, to production and reproduction (Health Systems Trust, 2000) and are thus likely to play an important and essential role in the further and future transformation of the South African society.

The present study gathered information regarding the coping resources, sense of coherence, satisfaction with life and happiness of the participants. The value of this study is that it may contribute to a stronger scientific basis which in turn could provide clear recommendations to female psychiatric out-patients living with mood and anxiety disorders regarding ways to increase their coping resources, sense of coherence, satisfaction with life and happiness. In addition, participants in this study also received feedback on the general aims of the study and their personal results on the questionnaires. Feedback consisted of recommendations based on: (a) the dimensions of the CRI (i.e., cognitive, social,
emotional, spiritual / philosophical and physical), and (b) the elements of the SOC (i.e., comprehensibility, manageability and meaningfulness) and, (c) subjective well-being. By addressing the previously mentioned dimensions and elements, the psychofortology of female psychiatric out-patients with mood and anxiety disorders can be improved. This assists in increasing the participants’ awareness of their own perceptions of stressful situations and their coping with stressors. It also empowers them in the sense that they can identify and change areas of their lives that are detracting from their ability to cope with stress, and thus lead a more satisfying life.

As the female psychiatric out-patients living with mood and anxiety disorders in this study were generally having difficulty coping with stressors and experienced poor subjective well-being emphasis was placed on alerting the female psychiatric out-patients included in the study of the services available to them in the community psychiatric clinics, as well as support groups in the community. Despite the value of the research mentioned in the previous section, there are various limitations to this study that require further attention. The limitations of the research are discussed in the following section.

7.5 Limitations of the research

There are various limitations of this study which can be highlighted. Due to the sampling method employed in the study and the small sample size, the gathered data and its results are not necessarily a true reflection of the broader public and no generalizations to the larger population can be made. A further limitation to the study is that due to the voluntary nature of the study, only psychiatric out-patients who were willing to attend the clinic participated in the study. This could have had an impact on the results obtained in the study. The fact that the sample consisted mainly of English and Afrikaans speaking individuals and were derived from two community psychiatric clinics, further limits the generalisability of the study to other language groups, cultural groups and other community clinics. The number of components to data collection, which included the biographical questionnaire and four measures administered in the form of questionnaires could also be considered as a limitation in the study, as feedback from participants was that the package took too long to complete and was tiring to
fill in. The exploratory-descriptive nature of the study could also be considered as a limitation in the present study as no causal explanation could be clearly established on whether a relationship between coping, sense of coherence, satisfaction with life and happiness had been identified. A further contributing factor could be the small sample size and the limited nature of the sample used.

According to Lazarus (2000), longitudinal studies are essential in the study of coping; affect and stress, since measuring these constructs at one point in time may not reflect the value given to each of the components. Since the present study was not longitudinal in nature, the fluctuations experienced by the participants in their coping and subjective well-being could not be measured over time. Schwarz and Strack (1999) have shown in their research that situational variables may also exert significant impact upon life satisfaction and mood reports. They claim that respondents use currently important information to construct life satisfaction judgments. Suh, Diener, Oishi and Triandis (1998) showed that certain information is salient to some individuals, while the same information is considered unimportant to others. Diener and Diener (1995) reported that people in individualistic nations based their life satisfaction judgments on the extent to which they experience high levels of self-esteem, while in collectivist cultures life satisfaction is based on the opinions of others. In South African samples, such as the one in this study, the role of individualistic and collectivist cultures needs to be considered, as South Africa itself is characterized by more than one cultural view.

The lack of a baseline data-base of coping and subjective well-being for the female psychiatric outpatients living with mood and anxiety disorders was another limitation in the study. Due to this limitation, the researcher was unable to conclusively state that the levels of coping and subjective well-being are due to the patients’ psychiatric disorder since the patients levels of coping and subjective well-being may have existed prior to the diagnosis of a disorder. If coping resources, sense of coherence, satisfaction with life and happiness are indeed dynamic and changing, measuring these constructs at one point in time may not accurately reflect the value given to each of the components.
The use of self-report measures in the present study also posed a limitation, due to the fact that Snyders and Lopez (2005) question whether self-report measures are valid, since respondents may report they are happy when they are not really experiencing high levels of subjective well-being. Bearing the limitations of the self-reporting in mind, the researcher has chosen to use a multi-method battery of assessments to assess coping and subjective well-being. This includes using more than one measure to assess facets of the same domain.

According to Snyders and Lopez (2005) individuals use different strategies in seeking information about their levels of satisfaction. People also differ according to the degree to which they access their moods and emotions (Suh & Diener, 1999). Life satisfaction therefore may vary across individuals by reflecting different information for different people and may vary depending on what is important at that moment of reporting (Snyders & Lopez, 2005). This may have been the case for the sample in this study and could possibly have affected the results of the study.

Snyders and Lopez (2005) state that an individual’s estimates of happiness and reports of affect over time are likely to be influenced by the person’s current beliefs about happiness, and reports of affect over time are likely to be influenced by the person’s current mood, their beliefs about happiness, and the ease with which they are able to retrieve positive and negative information. This creates another limitation in the study, as individuals have to rate their global well-being and in so doing, need to form judgments about their well-being. These judgments may however, not correspond to the average mood or life satisfaction across many different moments. This possibly contributed to the resulting poor level of subjective well-being obtained in this study.

The role of culture also needs be considered as a limitation in the present study. Suh and Diener (1999) reported that cultural differences in subjective well-being have been explored in recent years and it has been discovered that there are profound differences in what makes people happy. Snyders and Lopez (2005) found that amongst collectivist cultures, the extent to which one’s life accords with the wishes of significant others, is more important than the emotions that the person feels in predicting
his / her life satisfaction. Since it is assumed that the sample in this study is representative of both collectivist and individualistic cultures, one may speculate that those participants in the sample from the collectivist cultures may have ‘faked good’ regarding their coping and subjective well-being, as they may have believed it to be the group norm.

Since the aims of the research were only to explore and describe the scores obtained on the different measures, the abovementioned limitations appear justified.

7.6 Recommendations

Firstly, it is recommended that the management of the two community psychiatric clinics included in the study for data collection, as well as the group facilitators of the two support groups, be provided with feedback on the results of the study. Information should also be provided as to how the clinics and the support groups can incorporate these finding into the future management and care of female psychiatric out-patients living with mood and anxiety disorders. It is important to assist the management of the two clinics and the support group facilitators to address concepts such as coping resources, sense of coherence, satisfaction with life and happiness in the interaction between the service provider and the patient. With greater emphasis placed on these constructs, and the strengths rather and deficits of the patients, improved coping with stressors will become evident, as well as higher levels of psychofortology. The female psychiatric out-patients would also benefit from the implementation of ongoing workshops at the community clinics with the goal of attainment of higher levels of sense of coherence, satisfaction with life and happiness, rather than merely the eliminating the stress response. Patients should also be taught how to manage their stressors with limited but more effective coping resources.

Secondly, it is recommended that the mental health needs of women be addressed as unique, and that interventions, such as those mentioned above, consider the specific mental health needs of women across the life cycle. It is therefore recommended that greater insight be obtained into the mental health
needs of female psychiatric out-patients living with mood and anxiety disorders through consultation with the patients at the clinic and the use of a functional follow-up system to monitor patients.

Thirdly, it is recommended that the study be replicated in the future with a larger and more representative sample which includes both genders and other diagnostic categories so that the results are more generalisable to the larger psychiatric out-patient population in South Africa. The use of longitudinal research designs could also be employed to investigate the consistency of coping resources, sense of coherence, satisfaction with life and happiness across time. The most important reason for research of this nature is the applicability and relevance of this research to different cultural groups in South Africa.

Fourthly, the different measures used in the study should be translated and standardized for all the main language groupings in South Africa. This will assist in the development of a broader knowledge base on the psychofortology of other cultures and language groups within the South African context. The chapter is concluded in the following section.

7.7 Conclusion

This study is an initial attempt to explore and describe the coping resources, sense of coherence, satisfaction with life and happiness of a sample of female psychiatric out-patients living with mood and anxiety disorders. The low level of generalisability of these results is a limitation to the study. However, the average mean scores on all four measures, as well as the relationship between the measures provide valuable information regarding the sample under discussion.

The present study with its focus on the coping and subjective well-being of female psychiatric out-patients living with mood and anxiety disorders provides guidance for future research in the area of positive psychology and the emerging field of psychofortology. Wissing and Van Eeden (1997, p.6) referred to psychofortology, as: “a psychology of survivorship, resiliency, encouragement and strength with a prevailing focus on the nature, dynamics and enhancement of psychological well-being”. From the present study it is evident that future research in this field should utilize larger samples, as well as
longitudinal designs, to investigate the coping resources, sense of coherence, satisfaction with life and happiness of female psychiatric out-patients, thereby enriching this relatively new field of study. It is hoped that the present study will also contribute to a more general acceptance of the strengths perspective in all areas of human functioning, as studied by various disciplines and sub-disciplines of the social and health sciences. The value of developing a paradigm geared towards the better understanding of psychological well-being and strengths lies in the opportunities for capacity building, prevention and the enhancement of the quality of life for all.

This is summarized in the words of Helen Keller, who is revered in history as a woman with deep inner strength and resilience: “Although the world is full of suffering, it is full also of the overcoming of it” (1904, p.7).
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Appendices

Appendix 1: Inclusion Criteria

Appendix 2: Biographical Questionnaire

Appendix 3: Information Letter

Appendix 4: Consent Form
# Appendix 1: Inclusion Criteria

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<thead>
<tr>
<th>Inclusion Criteria</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Participant is female.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. The participant has been diagnosed with a mood or anxiety disorder or both*.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Mood disorder**
- Major Depressive Disorder
- Dysthymic Disorder
- Bipolar I Disorder
- Bipolar II Disorder
- Cyclothymic Disorder

**Anxiety Disorder**
- Panic Disorder Without Agoraphobia
- Panic Disorder With Agoraphobia
- Agoraphobia Without History of Panic Disorder
- Specific Phobia
- Social Phobia
- Obsessive-Compulsive Disorder
- Generalized Anxiety Disorder

**Inclusion in study**

**Biographical obtained**

*or co-morbid mood and anxiety disorder*
<table>
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<tr>
<td>1. The participant’s diagnosis is better accounted for by another mental disorder (comorbid).</td>
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<table>
<thead>
<tr>
<th>2. Mood disorder</th>
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<tr>
<td>Depressive Disorder Not Otherwise Specified</td>
</tr>
<tr>
<td>Bipolar Disorder Not Otherwise Specified</td>
</tr>
<tr>
<td>Mood Disorder due to a General Medical Condition</td>
</tr>
<tr>
<td>Substance-Induced Mood Disorder</td>
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<tr>
<td>Mood Disorder Not Otherwise Specified</td>
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<tr>
<th>3. Anxiety disorder</th>
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</thead>
<tbody>
<tr>
<td>Posttraumatic Stress Disorder</td>
</tr>
<tr>
<td>Acute Stress Disorder</td>
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<tr>
<td>Anxiety Disorder due to a General Medical Condition</td>
</tr>
<tr>
<td>Substance-Induced Anxiety Disorder</td>
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<tr>
<td>Anxiety Disorder Not Otherwise Specified</td>
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<tr>
<th>4. The participant has an Axis II diagnosis</th>
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<table>
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<tr>
<th>5. The participants’ diagnosis has:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• a psychotic features specifier</td>
</tr>
<tr>
<td>• manic features</td>
</tr>
<tr>
<td>• hypomanic features</td>
</tr>
</tbody>
</table>

| 6. If the participant meets any of the exclusion criteria they should not be included in the study |
Appendix 2: Biographical Questionnaire

Instructions:
1. Please complete the following by marking “X” in the appropriate block or by filling in the blank spaces provided.
2. You are encouraged to answer the questions as honestly as you can as all responses will be kept private and confidential.

Personal details:
1. Age (in completed years): ___________
2. Ethnicity:
   - African
   - White
   - Coloured
   - Indian
   - Other ___________
   If other please specify: ……………………………………..
3. Home Language:
   - English
   - Afrikaans
   - Xhosa
   - Other ___________
   If other please specify: ……………………………………..
4. Marital Status:
   - Single
   - Married / Remarried
   - Divorced
   - Widowed
   - Co-habiting
5. Employed / Unemployed:
   - Employed
   - Unemployed
6. How long have you been using the out-patient services of this service provider? 
   ………….. (in years)
7. Would you like to receive feedback regarding the results of the study?
   - Yes
   - No

Thank you for completing this biographical questionnaire.
Appendix 3: Information Letter

Dear Participant

**RE: PSYCHOFORTOLOGY RESEARCH**

As part of the course requirements for the Masters Degree in Clinical Psychology, I am required to complete a research treatise. The study I will be undertaking is: The psychofortology of female in-patient psychiatric users living with mood and anxiety disorders in the Nelson Mandela Metropole. The aim of this research is to investigate your own as well as others’ coping with life and general, subjective well-being. If you decide to be part of this study, you will be forwarded a biographical form which you are to complete and return to the centre. Once the biographical forms of those who are interested in the study have been collected, you will be notified if you are part of the study. You will then need to attend a group testing session in which you will be provided with an envelope which will have your number on it to help the researcher keep all your information together. In the envelope you will find the following documents: a covering letter and consent form, the Coping Resources Inventory, the Satisfaction with Life Scale, the Sense of Coherence Scale and Affectometer-2. The researcher will then explain what the research is about and allow for a time of questions. If there are any questions at this point you can raise them with the researcher. The researcher will then ask you to complete the consent form by initialing it at the relevant places. You will be given instructions on how to complete the questionnaires and instructed to begin. It will take approximately 45 minutes to complete the questionnaires. All responses on the questionnaires are confidential and you are encouraged to respond as honestly as possible. Once you have completed, you can place the tests in the envelope provided and seal it. You may then return it to the researcher who will be available during the test session if you have any questions or concerns.

Thank you for your interest in this study.

Kind Regards,

Ms. Chantelle Steyn
(Researcher)

Prof. Greg Howcroft
(Supervisor)

Prof. Paul Fouché
(Co-Supervisor)

Prof. Mark Watson
(HOD Psychology)
# Appendix 4: Consent Form

## NELSON MANDELA METROPOLITAN UNIVERSITY

### INFORMATION AND INFORMED CONSENT FORM

<table>
<thead>
<tr>
<th><strong>Title of the research project</strong></th>
<th>The psychofortology of female psychiatric out-patients living with mood and anxiety disorders</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reference number</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Principal investigator</strong></td>
<td>Chantelle Steyn</td>
</tr>
<tr>
<td><strong>Address</strong></td>
<td>NMMU Psychology Clinic</td>
</tr>
<tr>
<td><strong>Postal Code</strong></td>
<td>South Campus</td>
</tr>
<tr>
<td><strong>Contact telephone number</strong></td>
<td>041-5042330</td>
</tr>
</tbody>
</table>

## A. DECLARATION BY OR ON BEHALF OF PARTICIPANT

(Person legally competent to give consent on behalf of the participant)

<table>
<thead>
<tr>
<th><strong>I, the participant and the undersigned</strong></th>
<th>(full names)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I.D. number</strong></td>
<td></td>
</tr>
</tbody>
</table>

OR

| **I, in my capacity as**                  |              |
| **I.D. number**                           |              |
| **Address (of participant)**              |              |

## A.1 I HEREBY CONFIRM AS FOLLOWS:

1. I, the participant, was invited to participate in the above-mentioned research project that is being undertaken by Chantelle Steyn of the Department of Psychology in the Faculty of Health Sciences of the Nelson Mandela Metropolitan University.

2. The following aspects have been explained to me, the participant:

   2.1 **Aim:** The investigators are studying: The psychofortology (coping and subjective well-being) of female psychiatric out-patients living with mood and anxiety disorders.
### The information will be used to/for:
To learn more about the psychofortology of female psychiatric out-patients living with mood and anxiety disorders. To contribute to research in this field and encourage further research in this area.

#### 2.2 Procedures: I understand that
I will be required to complete a biographical form and return it to the out-patient service provider. I will then be contacted to participate in the study and be required to complete 4 questionnaires (the Coping Resources Inventory, the Sense of Coherence Scale, Satisfaction with Life Scale and Affectometer-2).

#### 2.3 Confidentiality:
My identity will not be revealed in any discussion, description or scientific publications by the investigators.

#### 2.4 Voluntary participation/refusal/discontinuation:
| My participation is voluntary | YES | NO |
| My decision whether or not to participate will in no way affect my present or future care/employment/lifestyle | TRUE | FALSE |

#### 3. The information above was explained to me/the participant by
Chantelle Steyn
in
| Afrikaans | English | Xhosa | Other |

and I am in command of this language/it was satisfactorily translated to me by

(name of translator)

I was given the opportunity to ask questions and all these questions were answered satisfactorily.

#### 4. No pressure was exerted on me to consent to participation and I understand that I may withdraw at any stage without penalisation.

#### 5. Participation in this study will not result in any additional cost to myself.

### A.2 I HEREBY VOLUNTARILY CONSENT TO PARTICIPATE IN THE ABOVE-MENTIONED PROJECT

<table>
<thead>
<tr>
<th>Signed/confirmed at</th>
<th>on</th>
<th>20</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Signature or right thumb print of participant</th>
<th>Signature of witness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full name of witness</td>
<td></td>
</tr>
</tbody>
</table>
C. IMPORTANT MESSAGE TO PATIENT/REPRESENTATIVE OF PARTICIPANT

Dear participant/representative of the participant

Thank you for your/the participant's participation in this study. Should, at any time during the study:

- an emergency arise as a result of the research, or
- you require any further information with regard to the study, or
- the following occur

(indicate any circumstances which should be reported to the investigator)

Kindly contact at telephone number

Chantelle Steyn
Work: 041 5042330