SPOTLIGHT ON COMMUNITY WORKERS: EXPLORING THE RELATIONSHIPS AMONG STRESS RELATED VARIABLES AND EVALUATING THE EFFECTS OF A WELL-BEING INTERVENTION.

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ABSTRACT

The current research is conducted in two phases. Phase one investigates 223 community workers in terms of stress related variables. Phase two evaluates "Thriving in the Stress Place", a well-being intervention designed for community workers to enhance well-being and coping resources and decrease dysfunctional thinking.

Community workers are an under researched sector of society and the economy. The limited previous research suggests that they are vulnerable to negative stress related effects, including burnout. A survey questionnaire was used to collect quantitative data at 3 time periods over 4 months. The variables of burnout, personality, well-being, coping resources, and dysfunctional attitudes were investigated using the data obtained from the first survey. Results indicated that the community workers were experiencing high burnout in the form of reduced personal accomplishment. Community workers have never been profiled in terms of personality. Personality profiles generated from the NEO-FFI (Costa & McCrae, 1989) showed that they were high in openness to experience, suggesting an unconventional orientation, and low in conscientiousness, suggesting a relaxed attitude towards pursuing goals. Levels of cognitive well-being, specifically life satisfaction and domain satisfaction were slightly low and levels of affective well-being, coping resources, and dysfunctional attitudes were average.

The current research provided preliminary support for the three dimensional model of well-being, consisting of life satisfaction, positive affect, and negative affect, measured by the Satisfaction With Life Scale (Diener et al., 1985) and the Positive and Negative Affect Schedule (Watson, Clark, & Tellegen, 1988) respectively. Factor analysis provided confirmatory evidence of the orthogonality of the three scales. Correlational analyses revealed different patterns of relationships between each well-being aspect and specific variables. Regression analyses demonstrated that different predictors were significant for each aspect of well-being. This suggests that all three aspects are needed to fully understand the complex construct of well-being.

The well-being intervention adhered to the transactional model of stress and coping (Lazarus, 1966) and focused on the role of appraisal in stressful situations and the enhancement of coping resources. A quasi-experimental design was used. The experimental group consisted of 159 community workers and a further 77 community workers formed the control group. Quantitative data were collected at pre-training, post-training, and follow-up. Significant pre-intervention differences were detected between the experimental and control group. A series of repeated measures analyses of variance detected no significant differences between the experimental and control group over time as a result of the intervention. Significant differences were also not found when controlling for neuroticism. However, when the experimental group was separated into a group that implemented the strategies learnt in the workshop and a group that did not attempt to do so, the intervention significantly reduced negative affect and dysfunctional attitudes for the group who implemented the strategies. This finding highlights the need for researchers to pay more attention to assisting participants with enhancing and maintaining post-training effects.

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1: INTRODUCTION

The current research is conducted in two phases. Phase one investigates community workers, a previously under-researched sector of society and the economy, in terms of burnout, personality, well-being, coping resources, and dysfunctional attitudes. Phase two involves evaluating "Thriving in the Stress Place", a two day well-being intervention designed to enhance the well-being and coping resources and decrease the dysfunctional thinking of the community workers who attended.

Community workers are a subset of human service workers. Internationally there is limited research on human service workers, and even less that pertains directly to community workers (Balloch, Pahl, & McClean, 1998). In New Zealand, with very few exceptions (e.g. Bennett & Marsh, 1999; O'Driscoll & Schubert, 1988), this population has been overlooked. However, the small amount of research that has been done internationally, suggests that human service or community work can be highly stressful and highlights a number of specific issues that can impact on well-being. The most frequently cited issue involves the imbalance between the heavy demands placed on community workers and the limited resources at their disposal (Brown & O' Brien, 1998; Edelwich & Brodsky, 1980; Prosser et al., 1997; Satyamruti, 1981). Other frequently cited stressful issues include work overload, unrealistic work targets, uncertainties about the future, coping with service users' pain and distress, and difficulties working in isolation (Brown & O' Brien, 1998; Collings & Murray, 1996; Edelwich & Brodsky, 1980; Oberlander, 1990; Prosser et al., 1997; Satyamruti, 1981).

One would expect that these issues are also relevant to New Zealand community workers. However, it is difficult to make a definitive statement because of the scarcity of empirical research. In fact, in New Zealand in general, there is a dearth of current figures on occupational stress, and the research that has been done has focused primarily on traumatic stressful incidents, such as bank robberies (Sullivan, 1995).

In recent years there has been increasing acknowledgment that those involved in human service work can be particularly vulnerable to various negative stress related

informal support networks that used to operate within communities have declined, creating an increasing need for human service professionals, such as community workers, to fill the gaps (Cherniss, 1980; Farber, 1983; Schaufeli, Maslach, & Marek, 1993). At the same time, the expectations the public has of helping professionals have increased so that now more is expected of them than ever before (Cherniss, 1995).

In addition, the fundamental resource that most community organisations offer to the public is their staff. Community workers who are stressed and experiencing low well-being are likely to be less able to provide an effective service to the public (Oberlander, 1990). Communities simply can't risk losing community workers to stress, particularly as individuals dissatisfied with their work in one community organisation may be more likely to withdraw from working in the community sector altogether (Hargrove, Fox, & Goldman, 1991).

The "Thriving in the Stress Place" workshop was developed to assist community workers to manage stress and enhance their well-being. Many stress researchers (e.g. Bennett & Rigby, 1995; Cooper & Cartwright, 1996; Ellis et al., 1997; McHugh & Brennan, 1992; Murphy, 1995a, 1995b, 1996; Sutherland, 1993) state that to maximize effectiveness, intervention studies need to include three stages; an assessment of stress in the work environment, design of an intervention based on the findings of the assessment, and an evaluation of the intervention. The current research comprises stages two and three of this process.

The information for stage one of this process comes from a stress audit conducted by Bennett and Marsh (1999) who surveyed 110 community workers from 28 small social service community organisations in Auckland, New Zealand. The key findings from this stress audit were that most of the respondents reported experiencing moderate levels of occupational role strain and personal strain and many respondents did not have a satisfactory level of personal resources. In particular, many of the community workers reported that they rarely engaged in recreational or self-care activities. The most frequently cited stressful issues were lack of resources and funding, increasing work loads, increasing responsibilities for others, lack of personal development, and difficulties working in isolation. The findings of the Bennett and

effects including burnout (Fagin et al., 1996; Maslach, 1999; Rabin, Feldman, & Kaplan, 1999; Sauter, Murphy, & Hurrell, 1992). Therefore, burnout is one of the variables investigated in phase one of the current research. The other variables include personality, coping resources, dysfunctional attitudes, and well being reflected by positive affect, negative affect, life satisfaction, domain satisfaction, and psychological distress.

It is possible that people who choose to engage in community work share certain personality traits. As early as 1974, Kadushin described social workers, who are also a subset of human service workers, as people who are responsive to a "dedicatory ethic; that is, they view their work as a calling, and reward is considered to be inherent in the act of giving" (p. 706). Remarkably, human service workers have not been investigated in terms of personality. A unique contribution of the current research is that the community workers are profiled according to the five-factor model of personality. In addition, the role of personality in the occupational stress process is investigated, in particular, the part played by negative affectivity. Many researchers have highlighted this as a complex area needing further investigation (e.g. Spector, Zapf, Chen, & Frese, 2000).

The second phase of the current research involves the evaluation of a well-being intervention. The enhancement of psychological well-being at work has been described as "....one of the most significant issues of the times" (Keita & Hurrell, 1994, p. xiii). At the beginning of the twenty-first century, there is increasing recognition that occupational stress is an important occupational and social health concern (Murphy, 1995a; Reynolds, 1997; Sauter, 1992; Swanson, Piotrkowski, Keita, & Becker, 1997). In addition, research on stress and burnout is economically relevant. Both phenomena have a considerable impact on individual and organisational health and performance (Maslach, 1999; Rudow, 1999).

Enhancing the well-being of individual community workers is a worthy objective because community workers play a pivotal role in the mental health of the community. Especially in recent decades, the service community workers provide has become increasingly valuable. This is primarily because the social fabric of Western society is changing towards a more individual orientation. As a result, many of the

Marsh stress audit confirmed that community work in New Zealand is inherently stressful and provided the basis for the design of the well-being intervention evaluated in the current research.

A criticism frequently leveled at stress management interventions is that they are only weakly grounded in theory (Auerbach, 1989; Ivancevich et al., 1990; Ivancevich & Matteson, 1987; Murphy, 1995b). The well-being intervention implemented in the current research is an attempt to translate the theory of stress, coping, and well-being into practice by integrating findings from the literature and making them available to the participants in a practical form. In particular, the intervention is guided by the integrative transactional model of stress and coping (Milner & Palmer, 1998) based on the original work of Lazarus (Lazarus, 1966; Lazarus & Folkman, 1984; Lazarus & Launier, 1978). Another unique contribution of the current research is that few researchers (for an exception see Dewe, 1991, 1992) have taken the transactional approach beyond the conceptual level. Finally, this is applied research with the aim of enhancing the well-being of an under-researched and possibly under-valued sector of society.

CHAPTER 2: STRESS AND COPING

2.1 Chapter overview

The following chapter provides an overview of the stress management literature including a discussion of the elusive construct of stress and a summary of the most common stress models, with a particular focus on the transactional model of stress and coping. This is followed by an assessment of levels and costs of occupational stress, types of stress management interventions, and an evaluation of the efficacy of stress management interventions at an individual and organisational level.

The purpose of the intervention described in phase two of the current research is to enhance individual well-being, not to eliminate stress. Given the working conditions of most community workers, stress is considered almost a permanent occupational fixture. Therefore, the primary aim of the intervention is to take into account the stressful issues involved in community work and provide the participants with information and strategies to enable them to work towards enhancing their well-being.

As the overall focus of the intervention is on enhancing well-being, it may seem counter-intuitive to include a chapter on stress. However, the intervention has drawn widely from the stress and coping literature and the reduction of stress is used as one of the primary mechanisms to promote well-being. In addition, the well-being intervention implemented in the current research is open to all community workers and not only those exhibiting signs of stress. As such, it is offered in a preventative rather than curative context, which implies a closer allegiance with health promotion than stress reduction (Murphy, 1988, 1995b). In reality both stress management and health promotion sit on the cusp of many boundaries. As Bond and Bunce (2000) note, "Worksite stress management interventions provide the point at which theory and practice in clinical, health, and organizational psychology meet" (p. 156).

2.2 What is stress?

The term "stress" is relatively new. Fifty years ago the word was rarely heard. Now it is one of the most commonly used words of this generation (Kagan, Kagan, & Watson, 1995; Lazarus, 1999; Pollock, 1988). Few concepts have such wide ranging appeal, attracting the interest of the general public and researchers alike (Burke & Richardsen, 2000; Cox, 1993; Ivancevich, Matteson, Freedman, & Phillips, 1990; Lazarus, 1999; Matheny, Aycock, Pugh, Curlette, & Cannella, 1986; Reynolds, Taylor, & Shapiro, 1993). However, the fact that stress remains a difficult construct to define is possibly one of the only statements most stress researchers agree upon (Beehr, 1995; Brief & Atieh, 1987; Cooper, Dewe, & O'Driscoll, 2001; Cox, 1978; Ellis et al., 1997; Fontana, 1989; Gaines & Jermier, 1983; Heaney & van Ryn, 1990; Ironson, 1992; Ivancevich et al., 1990; Kasl & Rapp, 1991; Monat & Lazarus, 1991; Palmer & Dryden, 1994; Pierce, 1995; Pollock, 1988; Quick, 1989; Reichel & Neumann, 1993; Roskies, 1991; Schuler, 1980; Winsborough & Allen, 1997). Little progress has been made since 1967, when Soderberg (cited in Newton, 1989) stated that "stress is the most grandly imprecise term in the dictionary of science" (p. 442). Ilgen (1990) sums the situation up with his comment that stress is not a construct "to be addressed by those with a low tolerance for ambiguity" (p. 276).

Several researchers (e.g. Ader, 1980; Elliot & Eisdorfer, 1982) suggest that the term stress has been used so widely and imprecisely in the literature that it has outlived its usefulness. Wagenaar and La Forge (1994) call stress the "modern day equivalent of the medieval demon" (p. 23) referring to the fact that it can function as a catchall for a variety of mental and physical problems. Abbott (1990) also notes that the term "stress" is perfect for labeling purposes because it is "ambiguous, ambivalent and over-inclusive" (p. 435). Lazarus and Folkman (1984) have long stated that the term stress should be used as a heading for a range of phenomena, however it is still consistently viewed as a single phenomenon. This may be one of the reasons why most stress models suffer from a lack of precision (Murphy, 1995b). Perhaps the implication is that no one theory can hope to explain the complexity of the stress phenomenon (Briner & Reynolds, 1999).

Given the difficulties inherent in attempting to define the construct of stress, no generic definition will be attempted. Instead, an overview of the main aspects of stress will be provided according to the most widely recognized models in the stress field. Stress models can be roughly categorized into three areas: those which treat stress as a stimulus, a response, and as a transaction (Heaney & van Ryn, 1990). Accordingly, conceptualizations of stress tend to vary depending on the extent to which they emphasize stressful events, responses, or individual appraisals of events as the key focus of stress. These will be discussed in turn.

2.3 Models of stress

2.3.1 Stimulus models

Stimulus models view stress as a psychosocial demand that leads to personal strain and emphasize the precipitating role of environmental factors, such as major life events (Matheny et al., 1986). Stimulus models state that stress in the form of clustering life events leads to stress symptoms such as illness. For example, the Stressful Life Events Model was developed by Holmes and Rahe (1967) on the basis that a stress reaction occurs whenever an individual experiences something (positive or negative) that requires an adaptive response or coping behaviour. They proposed that the effects of stressful life events are additive and the overall size of the effect determines the amount of work an individual must do to cope. This led to the Social Readjustment Rating Scale where scores of 300 or more can indicate a major heath crisis. However, the critical flaw in the stimulus based stress definition is that it does not take into account individual differences, specifically that the same event may invoke different stress levels in different people (Hart, 1995; Lazarus, 1999).

2.3.2 Response models

The primary theorist associated with the response model is Selye (1974, 1976). His theory is based on the premise that stress is a generalized physical response which occurs when any demand is made on the body. Selye (1974) states that the

physiological stress response is universal and does not depend on the nature of the stressor. He refers to the process as adaptive because it involves a standard pattern of defense reactions that prepare an individual to cope with danger. If the defense response progresses, for example, with repeated exposure to stressors, Selye states that the individual will proceed through the three stages of alarm, resistance, and exhaustion that comprise his General Adaptation Syndrome (GAS). The final stage of exhaustion occurs when the body has used up all of its resources and is characterized by what Selye calls the "diseases of adaptation" which include health problems such as narrowing of the coronary arteries and ulcers (Hart, 1995; Sapolsky, 1994).

Several criticisms have been leveled at the response based stress model. One of the primary criticisms involves difficulties isolating the stress response. For example, physiological responses, such as heart rate, can be associated with situations that are not stressful, such as smoking or exercise. In addition, some aversive stimuli, such as heat, do not necessarily trigger the stress response (Milner & Palmer, 1998). Selye's approach also does not specify which physiological responses will occur with which environmental stressors (Fried, Rowland, & Ferris, 1984). Other criticisms include the fact that the stress response may be dissociated in time from the actual event and a stressor may evoke more than one response with various responses masking each other (Fisher, 1984). However, the main limitation of Selye's model is that although it can provide an accurate description of a rat's physiological responses to a toxin, it overlooks the factor of cognition. This model cannot provide any explanation for why one student prepares for an exam by making study notes while another is immobilized with panic (Matheny et al., 1986; Roskies, 1991).

Overall, Selye has made a huge contribution to the stress literature. Berglas (1984) states that Selye's model "caused the most significant shift of paradigms in stress research known to science" (p. 387). In addition, his model is considered revolutionary for several reasons: he was the first to highlight the role of the endocrine system in the stress response, the first to make the distinction between eustress and distress, and the first to describe the process of stress-related illness

(Cooper, 1994). Currently, Selye's views are still influential, but the general consensus is that alternative approaches are needed (Gregson & Looker, 1996).

2.3.3 Transactional models

Transactional models view stress as neither a stimulus, nor a response, but as the product of a transaction between a person and the environment (Heaney & van Ryn, 1990; Matheny et al., 1986). The transactional approach has largely developed through the work of Richard Lazarus and his colleagues (Lazarus, 1966; Lazarus & Launier, 1978; Lazarus & Folkman, 1984) and is influential (David & Suls, 1999) and well regarded (Beck, 1984; Meichenbaum, 1985; Pierce, 1995).

Lazarus (1990) states that stress is a "continually changing relationship between the person and the environment" (p. 4). He makes it clear that there is nothing specific that can be identified as stress because the entire stress process is part of a complex whole that is linked by cognitive processes. In summary, the transactional model states that stress occurs when perceived demands (either internal or external) tax or exceed the resources that an individual has available (Lazarus & Folkman, 1984). The dual processes of cognitive appraisal and coping influence the relationship between the person and the environment. Cognitive appraisal determines the meaning of the person-environment relationship and the person's emotional response. Lazarus and Folkman (1984) distinguish between primary appraisal where an individual assesses the immediate significance of the situation and secondary appraisal where an individual assesses his or her ability to cope successfully. Coping is the process through which the person alters or manages the person-environment relationship.

This reduction of stress and coping to a three step process of perceiving a threat (primary appraisal), identifying a potential response to the threat (secondary appraisal), and executing that response (coping) is useful for descriptive purposes, but may make the process appear overly simplistic. The reality is much more dynamic and far less linear than this description. The transactional process is very fluid involving constant appraisal and reappraisal of the significance of the

situation, the demands inherent in the situation, and the available levels of coping resources. Each new appraisal generates new emotions and coping behaviours that in turn change the relationship. For example, if a coping response is less effective than expected, the level of threat may be reappraised or a new coping response may be implemented (Carver et al., 1989; Dewe, 2000; Lazarus, 1999). Lazarus and Folkman (1984) describe the interaction between the person and the environment as a "mutually reciprocal, bi-directional relationship" (p. 325).

The role of the individual is critical in transactional models. Unlike previous theories, individuals are not viewed as the passive victims of outside forces or of their own body. Instead, they are actively involved in the relationship with their environment. In addition, because both the individual and the environment are amenable to change, there is acknowledgment that individuals are not bound by the past, but can change their cognitions and behaviour from one stressful situation to another or even during a stressful situation (Roskies, 1991).

2.3.3.1 The cognitive appraisal process in the transactional model

Lazarus and Folkman (1984) state that "separate person and environment elements join together to form new meanings through appraisal" (p. 326). This suggests that individual differences and environmental factors are not treated as separate constructs but come together under the global construct of appraisal (Newton, 1989).

For convenience the appraisal process is subdivided into primary appraisal and secondary appraisal. In reality the distinction may not be this precise or linear (Lazarus, 1999). Primary appraisal refers to an initial assessment of an event in terms of its personal significance and how it might affect well-being. Essentially an individual asks, "What do I have at stake in this encounter?" (Lazarus & Folkman, 1991). Primary appraisal assesses the potential for the situation to provide a negative outcome and allows an evaluation of the demands that must be

met and the degree of threat these demands pose (Dewe, 1992; Folkman et al., 1991).

In the primary appraisal process a situation can be evaluated as irrelevant, positive, or stressful. Irrelevant transactions have no significance for well-being and positive transactions offer a good fit between demands and resources. Stressful appraisals take three forms: harm/loss, where the damage has already been done, threat, which refers to the potential for harm or loss, and challenge which refers to the opportunity for growth, mastery, or gain. In general, harm/loss and threat appraisals evoke negative emotions, such as fear, whereas challenge appraisals trigger positive emotions, such as excitement (Matheny et al., 1986). In theory both the appraisals of a stressful situation and the emotions that accompany the appraisals are distinct. However, the actual process is more complex. Appraisals can result in conflicting emotions. For example, a person might experience a combination of both fear and excitement when proposing marriage. In addition, appraisals of challenge are often mixed with appraisals of harm/loss and threat because inherent in the appraisal of challenge is also the possibility for harm or loss (Folkman et al., 1991; Lazarus, 1999).

Secondary appraisal involves an evaluation of coping resources and an assessment of their relevance to the particular stressful encounter. Effectively an individual asks, "What are my options for coping?" (Lazarus & Folkman, 1991). The answer determines whether stress occurs and the types of strategies that will be used to cope with the situation. Stress only results from the judgment that a disturbance has occurred in the person-environment relationship. Specifically stress results from a perception of challenge, threat, or harm, when resources are not considered adequate to manage the disruption and the outcome is evaluated as important to well-being (Lazarus & Folkman, 1984).

One of the key points in the transactional model is that stress is not located in an environmental trigger, or in a person's physiological response. Instead, it is located in the person's conscious appraisal of the disturbance. Without an appraisal of challenge, threat, or harm, there can be no psychological stress, even

when the situation may actually be harmful or dangerous. The converse also applies; an individual may experience acute stress in a situation that appears to pose little threat or simply by anticipating potentially harmful circumstances (Auerbach & Gramling, 1998). The transactional model does not assume that particular events are inherently stressful. In each case it is the subjective and not the objective assessment of any situation that triggers the stress response (Folkman & Lazarus, 1985; Monat & Lazaurus, 1991).

2.3.3.2 Coping in the transactional model

The transactional theory of stress is also effectively a theory of coping because the continuous appraisal of coping resources and strategies is equally as critical as the appraisal of challenge, threat, or harm. In terms of evaluating a stressful situation, an appraisal of the environment is critical, but an assessment of the resources an individual has to meet the demands of the environment is just as important (Roskies, 1991). In fact, it is misleading to presume that the components of the stress process are separate (Lazarus, 1999). Stress and coping are intertwined concepts which means that separating them into categories effectively only creates an artificial distinction (Dewe, 2000; Monat & Lazaurus, 1991; Pearlin, 1991). However, this distinction is perpetuated in the current research because it is useful for organisational purposes and clarity of emphasis.

There is increasing recognition that coping is an essential part of stress management (Dewe & Guest, 1990; O'Driscoll & Cooper, 1994; Parkes, 1994). In particular, the process of coping is pivotal in the relationship between the experience of stress and enhancing and maintaining physical and psychological well-being (Bunce & West, 1996; Dewe, 1992; Dewe & Guest, 1990; Endler & Parker, 1994; Lazarus, 1995; Matheny et al., 1986; Oakland & Ostell, 1996; O'Driscoll & Cooper, 1994; Parkes, 1994).

There is a dearth of research on coping using a population of community workers. However, studies from related human service fields highlight the importance of

coping in terms of well-being. For example, Koeske, Kirk, and Koeske (1993) investigated coping styles of case managers working with seriously and persistently mentally ill clients. They noted that successful coping increased the likelihood of managing the stressors inherent in human service work. In particular, individuals who coped successfully were more likely to stay in their job, have better physical and mental health, and deliver a higher quality of service to their clients.

2.3.3.3 Defining coping in transactional terms

As with many areas of stress, there is lack of agreement on a precise definition of coping (Dewe, 1992, 2000; Eckenrode, 1991; Newton, 1989). One of the primary reasons for this is that it is difficult to conceptualize an area that covers such a wide range of cognitive and behavioural techniques (Oakland & Ostell, 1996). In addition, although recent years have seen a surge of research interest in coping (Carver et al., 1989; Dewe, 2000), in comparison with research on stress, the construct of coping has been neglected and overlooked (Dewe, 1992; Monat & Lazarus, 1991; O'Driscoll & Cooper, 1994). This is reflected in the literature. The field of coping in general is characterized by an overall lack of coherence and confusion (Lazarus & Folkman, 1991). Taylor (1984) describes it as a "three car garage filled to the rafters with junk" (p. 2313). Dewe (2000) summarizes the state of coping literature as "diverse, difficult to organize and fraught with problems" (p. 3).

In contrast to the general construct of coping, the transactional definition of coping is clearly defined. This definition states that coping involves "constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person" (Lazarus & Folkman, 1984, p. 141).

This definition is useful for several reasons. Firstly, it is relational reflecting the relationship between the individual and the environment and reinforcing the

importance of appraisal as a major factor in the coping process. Secondly, this definition is integrative linking the other components of the stress process (Cox & Ferguson, 1991; Dewe, 2000; Schuler, 1980). Thirdly, inherent in this definition is the assumption that coping refers to attempts to manage both the problem itself and/or the emotions experienced as a result of the problem. Research suggests that people rely on both forms of coping to manage the demands of stressful situations therefore definitions of coping must emphasize both types (Lazarus, 1999; Lazarus & Folkman, 1991).

In addition, the transactional definition emphasizes management rather than mastery of stress. A key point is that the term 'coping' when used in the stress literature does not imply successful coping. It refers to coping in general including potentially adaptive and maladaptive strategies (Beehr, 1995; Parkes, 1994). Therefore, it is essential that any definition of coping include *efforts* to manage stressful demands irrespective of the outcome.

Finally, this definition is process oriented as opposed to the more traditional trait-oriented approaches. Therefore, this definition refers to what a person actually thinks or does as a situation unfolds, as opposed to what they usually do. This is particularly useful because it highlights the fact that coping is not static and that cognitive and behavioural efforts are dynamic and continuously changing as a result of continuous appraisals and reappraisals of the also dynamic person-environment relationship (Lazarus, 1999; Lazarus & Folkman, 1991).

In the transactional model the process of coping is always relevant to the context. This is essentially the contextual approach to coping that takes the view that individuals have a choice of coping options available to them and they consciously choose the most effective option for the situation (Bolger, 1990; Lazarus & Folkman, 1984). Coping is seen as a flexible collection of processes that can vary between situations and within situations. This suggests that people are likely to appraise and respond differently to the same stressor over time depending on their current level of resources (Lazarus, 1999; Lazarus & Folkman, 1984; Roskies, 1991). Folkman and Lazarus (1985) found support for this when they investigated

students studying for an exam. They found that even with this sort of acute, time limited stressor, coping strategies varied during the course of the episode. Before the exam, many students coped by studying and searching for social support. After the exam and while waiting for the results, many of the same students coped by using emotional detachment and wishful thinking.

The contextual approach is in contrast to the other fundamental approach to coping, the dispositional approach. In this approach coping is viewed as a stable personality disposition and individuals are assumed to have a reasonably consistent coping style that they use in various situations (Parkes, 1994). This approach suggests that coping responses are primarily determined by personal characteristics and minimizes the importance of situational and environmental factors.

Lazarus and Folkman (1984) are critical of the dispositional approach. They state that it oversimplifies the complex coping process. McCrae and Costa (1986) note that personality traits are enduring dispositions, but coping efforts are specific behaviours. Cohen (1991) also states that the dispositional approach assumes consistency in coping behaviour but that in general empirical evidence finds that coping dispositions are not predictive of actual coping in specific situations. The evidence suggests that individuals employ different methods of coping with various sub-areas of a particular stressful situation and at different stages throughout the stressful event. However, Mayes and colleagues (2000) recently investigated the relationships among job stressors, job level, personality, and coping resources. They found support for both the dispositional and contextual approaches to coping. In his cybernetic model of stress, coping, and well-being in organisations, Edwards (1992) also states that both personal and situational factors moderate the relationship between job stress and coping.

2.3.3.4 Problem focused and emotion focused coping in the transactional model

The transactional theory of stress and coping states that stressful situations that are perceived by an individual as amenable to change will result in direct attempts to

tackle the situation, while events perceived as unalterable are more likely to lead to attempts to regulate the emotions associated with the situation (Folkman & Lazarus, 1980, 1985; Lazarus & Folkman, 1984). This approach distinguishes between problem focused coping and emotion focused coping. Problem focused coping involves the person trying to change the situation, usually by some form of planned action (Bunce & West, 1996; Moos & Billings, 1982; Singer & Davidson, 1991). Emotion focused coping involves the person trying to change his or her thoughts and feelings about the situation. For example, by trying to learn something from it, looking on the bright side, or expressing negative emotions (Moos & Billings, 1982; Singer & Davidson, 1991).

This distinction between problem focused coping and emotion focused coping is the most widely accepted conceptualization of coping strategies (Auerbach & Gramling, 1998; Bunce & West, 1996; David & Suls, 1999; Dewe, 2000; Erera-Weatherley, 1996; Folkman et al., 1991; Lazarus & Folkman, 1984). However, it is not the only taxonomy that is available (Beehr, 1995). For example, Endler and Parker (1990) and Cox and Ferguson (1991) suggest the addition of a third category called avoidance which involves strategies such as trying to avoid a problem by suppressing thoughts about it, using distraction with other activities, or by actively disengaging from the stressful situation. O'Brien and Delongis (1996) also include a category called relationship focused coping that is aimed at managing and preserving relationships during stressful incidents.

Folkman and Lazarus (1985) note that both types of coping strategies are frequently used when responding to stressful situations. It appears that coping almost always involves a complex combination of problem focused and emotion focused strategies. Currently the factors determining coping methods are largely unknown but are thought to depend on the situation being faced, the various options available, and personality factors (Eckenrode, 1991; Lazarus & Folkman, 1984; Monat & Lazarus, 1991). In addition, it is thought that the efficacy of any strategy depends on the type of stressor and the individual's ability to implement the strategy successfully within a given context (Carver et al., 1989; Lazarus, 1999;

Lazarus & Folkman, 1984, 1991; McCrae & Costa, 1986; Monat & Lazarus, 1991; Oakland & Ostell, 1996; Pearlin, 1991).

2.3.3.5 Coping resources

In the current research, coping resources are assessed as opposed to coping strategies. Coping strategies are techniques adopted during a stressful event that are intended to reduce the effects of stress. Eckenrode (1991) defines coping strategies as "a multidimensional set of cognitions and behaviours called upon to help the person manage or tolerate the demands imposed by chronic or acute stressors" (p. 3). Examples of coping strategies include the huge varieties of techniques that can be categorized as either problem focused or emotion focused.

In comparison, coping resources are factors that are in place before the stressful event occurs and that influence the choice of strategy (Moos & Billings, 1982). Resources are a critical variable in the coping process (Monat & Lazarus, 1984). Hammer & Marting (1988, p. 2) define them as "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". Examples of coping resources include psychological characteristics, such as self-esteem, the extent to which a person can accept and express a range of emotional responses, and characteristics of the person's social environment including available levels of social support. In essence, coping strategies are what people *do* and coping resources are what people *have* available to them in developing their coping repertoire (Matheny et al., 1986).

Coping resources are assessed in the current research because to date the coping literature has been dominated by research on coping styles and strategies and coping resources have been overlooked (Carver et al., 1989; Folkman & Lazarus, 1980). However, there are several other good reasons to focus on coping resources.

The first reason is that coping resources are an integral part of the transactional model of stress and coping adhered to in the current research. According to transactional theory, the stress response is triggered by an imbalance between the perceived demands of a situation and an individual's perceived resources. Characteristics of the demand, such as the intensity and perceived consequences of failing to deal adequately with it, and characteristics of an individual's resources, including their appropriateness and sufficiency, are all considered in the appraisal of the situation (Lazarus & Folkman, 1984). The outcome of the appraisal is critical in determining if the demand will become a stressor. If personal resources are perceived to be approximately equal to demands, the situation will be viewed as routine. If the demand slightly outweighs resources, the situation may be seen as a challenge. In either case it is unlikely that the stress response will be triggered. However, when resources and demands are not perceived to be equal, stress will result. Demands that heavily outweigh resources will be seen as threats. Demands that are far below resources can also result in stress because of the lack of challenge. The key factor is not the actual demands or resources, but an individual's perception of them (Lazarus, 1999; Matheny et al., 1986).

The second reason for assessing coping resources is that there have been methodological issues associated with measuring coping strategies. There is no doubt that coping is a complex area to measure (Dewe, 2000). For example, Parkes and Endler (1992) state that coping research has "produced few psychometrically sound or theoretically relevant instruments" (p. 339). One issue with the majority of self-report measures of coping styles is that they can only assess the coping strategies that an individual is consciously aware of and that they are prepared to report. This means that unconscious defense mechanisms or strategies that an individual deems socially unacceptable, such as excessive use of alcohol, are not likely to be assessed (Parkes, 1994). In addition, typical coping items often suffer from a lack of conceptual clarity (Carver et al., 1989). For example, an item such as "talked with others about the problem" can be classified as seeking emotional support, information seeking, or direct action problem solving.

A considerable methodological limitation in the measurement of coping strategies is that most studies have been cross-sectional and many have asked participants to recall coping strategies they used at various times in the past (O'Brien & Delongis, 1996). The longest time frame is probably McCrae and Costa (1986) who asked participants to recall a stressful situation that could have occurred up to 21 months prior to the study. Asking participants to recall how they coped some time ago introduces potential memory biases. In particular, as the time between the incident and assessment increases, participants become more likely to give a dispositional assessment of their behaviour, which inflates the relationship between personality and coping strategy (David & Suls, 1999; O'Brien & Delongis, 1996). When participants are asked to cast their minds back in time, any cognitive errors that occur are likely to be systematically related to personality. For example, a consistent finding is that individuals high in neuroticism are more likely to recall negative information (Bolger & Schilling, 1991; Larsen, 1992). Accuracy can be increased if the coping measure is administered shortly after the stressful incident (Bolger, 1990). For example, few studies have measured daily coping. However, those that have, have sometimes found results that conflict with the larger body of research. Notably, Bolger and Zuckerman (1995) identified that in terms of interpersonal conflicts, neuroticism is associated with more, rather than less, problem focused coping.

Similar issues have emerged with studies that require participants to make a judgment about how they usually cope with stress (e.g. Endler & Parker, 1990; Watson & Hubbard, 1996). The results of these types of studies may also be more reflective of an individual's disposition than his or her typical coping style (David & Suls, 1999). There are many sources of retrospective contamination that can occur when people have to average their coping responses over various occasions to come up with a "usual" coping style (O'Brien & Delongis, 1996). It has long been recognized that assessments of "typical" coping are only weakly related to the ways people actually cope in particular situations (Folkman & Lazarus, 1980).

To date the most common way of assessing coping has been to measure the frequency with which a particular coping strategy is used (Dewe, 2000). Oakland

and Ostell (1996) in their review of research on measuring coping strategies, state that qualitative analysis reveals that it is the efficacy of a particular technique and the adequacy of resources, not the frequency with which the technique is used, that are critical factors in the coping process. Erera-Weatherley (1996) and Dewe and Guest (1990) also suggest that the exclusive reliance on quantitative methods has delayed understanding of the construct of coping. Oakland and Ostell (1996) conclude that many of the inconsistencies and analytical problems frequently found in studies of coping are likely to result from the fact that coping strategies can be used in different ways, by individuals with a variety of intentions, and with varying degrees of success.

Measuring coping resources provides a different perspective and overcomes some of the measurement problems. For example, the process of appraisal, which is critical to transactional theories of stress and coping, has been overlooked in much of the research on coping (Dewe, 1992; Gunthert, Cohen, & Armeli, 1999). However, the appraisal process is inherent in an individual's assessment of his or her perceived level of resources.

According to Hobfoll's (1989) conservation of resources model, individuals are constantly striving to maintain, protect, and enhance their coping resources to the extent that they experience threat when they perceive loss or potential loss of resources. Hobfoll states that measuring coping resources will be more predictive of stressful reactions than measuring demands.

However, this is not to suggest that the measurement of coping strategies is fraught with problems and the measurement of coping resources is free of problems. The interaction between resources and the constructs of stress, coping, and well-being is complex. In certain situations even when levels of coping resources are adequate, they may not be fully utilized because of a poorly understood mix of cultural values and beliefs combined with individual vulnerability. For example, although people might have access to a resource, such as social support, they may not seek or accept support because this might imply that they were inadequate or needy (Folkman et al., 1991). In addition, consistent with the transactional model,

it appears that it is the perception of the availability of interpersonal resources, rather than the actual amount of resources, that is most closely related to how well an individual deals with stress (Sarason, Sarason, & Pierce, 1990). Finally, there is a degree of overlap between coping resources and coping strategies. For example, depending on the context social support can function as both a strategy and a resource (Taylor, 1991; Watson & Hubbard, 1996).

Coping resources can take the form of environmental or individual factors. Environmental resources refer to what is available to individuals in their environment. Individual resources refer to an individual's capacities and abilities. In the current research, coping resources are measured by the Coping Resources Inventory (CRI, Hammer & Marting, 1988) which was developed to provide a standardized measure of identifying the coping resources available to an individual for managing stress. The CRI measures resources in five domains including cognitive, social, emotional, spiritual, and physical.

The cognitive domain provides an indication of a person's sense of self-worth, his or her orientation towards others and how optimistic he or she is about life in general. A positive self-concept is an advantage in managing stress (Auerbach & Gramling, 1998). The social domain measures whether an individual feels connected to supportive social networks. The role of social support in reducing the negative effects of stress is widely recognized (Eckenrode, 1991; Ganster, Mayes, Sime, & Tharp, 1986). The emotional domain gives an indication of an individual's ability to accept and express a range of emotions. This is based on the rationale that expressing emotions can reduce long-term negative consequences of stress (Auerbach & Gramling, 1998). The spiritual domain measures the extent to which an individual's actions are guided by stable and consistent values. This domain is very broad and goes beyond traditional Western religious definitions of spirituality. The values may be derived from religious, familial, or cultural traditions or from a personal philosophy. In terms of stress management, an individual who espouses a set of particular values is more likely to be in a position to define the meaning of potentially stressful events and to generate effective coping strategies (McKay, Davis, & Fanning, 1981). The physical domain

measures whether an individual engages in health-promoting behaviours, such as exercising and eating well. Engaging in behaviours that increase physical well-being can decrease the level of negative response to stress (Sapolsky, 1994).

Very little is known about community workers in general and even less about their levels of coping resources. One of the aims of the current research is to compile information on the health and well-being of community workers. One aspect involves generating a profile of their levels of coping resources.

2.3.3.6 Coping resources and well-being

Ten years ago Folkman (1991) highlighted the lack of a model linking coping and well-being. Currently, this situation still has not been remedied. In addition, there is a distinct lack of research on the role coping resources play in well-being.

The research that has investigated this area has primarily focused on the role of coping strategies in well-being. Coping strategies are not the focus of the current research so this research will only be summarized. In general, avoidance-focused coping methods tend to be associated with lower levels of well-being, while problem-focused coping methods tend to be more frequently associated with higher levels of well-being, although the effects are not strong (Guppy & Weatherstone, 1997). Folkman (1997) found that problem focused coping, positive reappraisal, and spiritual beliefs were related to higher well-being in people caring for sufferers of HIV. McCrae and Costa (1986) found that individuals who used the coping responses of rational action, seeking help, drawing strength from adversity, and faith reported higher levels of subjective well-being and that this relationship endured even after personality variables were controlled. Dewe (1991) noted that the effects of coping on well-being may be dependent on the appraisal of each encounter. In addition, he highlighted the possible interactions between appraisal, coping, and well-being as an important area for further investigation.

On the basis of the limited research linking coping resources and well-being, it is hypothesized that

Coping resources will be directly related to well-being and inversely related to psychological distress.

2.3.3.7 Evaluation of the transactional model

The transactional model has been very influential (David & Suls, 1999) and is currently viewed as the most comprehensive, accurate, and productive model of the origin of stress (Beck, 1984; Meichenbaum, 1985; Pierce, 1995). The main advantage of the transactional model is that it takes account of situations that other models cannot explain. For example, the transactional model allows an understanding of how one individual can withstand large amounts of stress while another is distressed by a seemingly minor event. In particular, the transactional perspective acknowledges that people differ widely in their appraisal and interpretation of stressful situations and in how they appraise their own resources and capabilities, which in turn influences their choice of coping strategy (Pearlin, 1991; Singer & Davidson, 1991). However, this model does not provide a perfect fit for all situations. For example, on some occasions stress is experienced even when sufficient coping skills appear to exist, such as when driving a car in a snow storm (Pierce, 1995). The primary disadvantage with this model is that very few researchers (for an exception see Dewe, 1991, 1992) have taken the transactional approach beyond the conceptual level.

2.4 Levels of occupational stress

Work has always played an integral role in an individual's psychological development and well-being. However, the work environment is changing in several major ways that may contribute to an increase in the stress experienced in the workplace (Keita & Hurrell, 1994). These changes include technological developments, increased competition (Anderson & King, 1993; Levi, 1994), and changes in the structure of the workforce, such as the surge in numbers of women,

older workers, and minority group members (Keita & Hurrell, 1994; Sauter et al., 1992). It is thought that collectively these changes are resulting in a worldwide increase in the level of work related stress (Levi, 1994; Loo, 1996). Murphy (1995b) claims that half of the non-institutionalized US population experience "moderate" or "a lot of" stress and an estimated 11 million workers report that occupational stress is the primary work condition endangering their health. New Zealand is not immune from this phenomenon. A survey of 7000 public and private sector New Zealand workers found that forty-one percent said their stress had worsened in the past three years (McGregor, 1994, cited in Sullivan, 1995).

2.5 Costs of occupational stress

The substantial direct costs of occupational stress to the individual and organization are widely documented (Cooper, 1994; Cooper & Cartwright, 1994; Dolan, 1994; McHugh & Brennan, 1992; Murphy, 1995a; Rogins, Waters-Marsh, Cacioppe, & Millet, 1994). For example, in 1992 the International Labour Office stated that "the economic impact of stress on society is large and growing" (p. 15). In the United States, it is estimated that occupational stress costs employers in excess of $200 billion per year in absenteeism, reduced productivity, medical expenses, and compensation claims (International Labour Office, 1993). In the United Kingdom, the cost of stress-related absenteeism is estimated at more than five billion pounds per year, which equates to approximately 10 percent of the Gross National Product (Cooper, Liukkonin, & Cartwright, 1996). Although, as Murphy (1988) cautions, many of the estimates of the costs of occupational stress are impressive and alarming, except that the precise components of the estimation formulas are generally unavailable.

The direct costs of occupational stress are substantial. However, perhaps of even more concern are the indirect costs. These costs represent the body of a huge financial iceberg and are thought to be at least two to three times greater than direct costs (Hart, 1995). Costs to an organisation include factors such as staff turnover, lowered productivity (Jex, 1998), poor quality work, impaired decision making ability, workplace accidents, and premature retirement (Auerbach & Gramling,

1998; Cooper & Cartwright, 1996; McHugh & Brennan, 1992; Schaufeli & Enzmann, 1998).

In addition, there are costs to the individual. Over 20 years of occupational stress research suggests a link between stress and impaired physical and mental health (Auerbach & Gramling, 1998; Bunker, 1994; Cox, 1993; Ellis et al., 1997; Ganster & Schaubroeck, 1991; House, Strecher, Metzner, & Robbins, 1986; Jex & Beehr, 1991; Heaney & van Ryn, 1990; Levi, 1994; Loo, 1996; Nicholson et al., 1998; Niemcryk, Jenkins, Rose, & Hurst, 1987; Pierce, 1995; Sapolsky, 1994). Acute stress reactions can be psychological including affective and somatic responses, such as job dissatisfaction and tension headaches (Cooper & Cartwright, 1996), behavioural including sleep problems, absenteeism, and accident involvement (Savery & Wooden, 1994), or physical such as changes in blood pressure (Cooper, 1994). Chronic health outcomes resulting from prolonged stress can include psychological illnesses, such as depression, and physical illnesses, including one of Western societies greatest killers, coronary heart disease (Bennett & Carroll, 1996; Cooper, 1994; Hammar, Alfressson, & Theorell, 1994; Hart, 1995). Stress can also manifest itself in indirect ways that can impair mental and physical health. For example, individuals under stress can show an increased predisposition to abuse substances such as drugs and alcohol (Cooper, 1994).

However, it must be noted that the relationship between occupational stress and ill health remains controversial (Ironson, 1992; Kasl, 1981; Pollock, 1988). There is no shortage of reports of dramatic relationships between occupational stress and various measures of physical and mental ill health. For example, Gibson (1993) reports that in the US stress contributes to an estimated 90 percent of all medical disorders. Unfortunately, the majority of these studies are correlational which means that causality cannot be determined (Burke & Richardsen, 2000). An additional reason for caution is that there is a great deal of individual variation in stress related responses and some confusion over the exact psychological and physiological processes involved (Auerbach & Gramling, 1998; Swanson et al., 1997). Cohen and Manuck (1995) state that "convincing evidence that stress

contributes to the pathophysiology of human disease is sparse, and, even where evidence exists, relatively small proportions of variance are explained" (p. 423).

Organisations are paying increasing attention to the fact that stress may be impacting on organisational healthcare costs (Matteson & Ivancevich, 1987). For example, Elkin and Rosch (1990) state that in the USA, approximately 550 million working days are lost annually to absenteeism and that about half of these absences are stress related. A large survey of a wide variety of workers in the UK found that stress and depression were the second most common reasons used to explain absence from work (Hodgson et al., 1993). The most common reason was musculoskeletal disorders and stress is also thought to be a factor in the development of these disorders (Griffiths, 1994; Hopkins, 1990).

Currently, the newest indirect cost is looming on the New Zealand horizon; stress related workers' compensation. Employees in the US and UK have been successfully litigating against their employers for job related stress or "cumulative trauma" (Ivancevich et al., 1990; Reynolds & Briner, 1994). In the US, compensation claims for work related stress tripled between 1980 and 1985 (Bordwin, 1996) and stress related disability claims are now the most rapidly growing form of occupational illness within the workers' compensation system (King, 1995; Murphy, 1995). The California Labour Code states that workers compensation is allowable for disability or illness caused by "repetitive mentally or physically traumatic activities extending over a period of time, the combined effect of which causes any disability or need for medical treatment" (Cooper & Cartwright, 1996, p. 89). In New Zealand the Health and Safety in Employment Act (1993) requires that organizations identify then eliminate, substitute, or reduce all potential hazards in the workplace. It is thought to be only a matter of time before stress related litigation has a substantial impact in New Zealand (Sullivan, 1995).

2.6 What is stress management?

There is growing recognition and concern that stress is a major occupational health problem (Murphy, 1995a; Quick, 1989; Sauter et al., 1992; Sullivan, 1995). Several researchers have stated that there is currently an unequivocal need to manage stress and this need is increasing (Murphy, 1995a; Swanson et al., 1997). For example, Ilgen (1990) called the health of a nation's workers one of the most significant issues of the times. This concern is not altruistic. Preserving and enhancing human resources is becoming widely recognized as a practical necessity for economic success. It is therefore no surprise that recent times have seen an explosion of interest in stress management programmes (Auerbach & Gramling, 1998; DeFrank & Cooper, 1987; Dolan, 1994; Heaney & van Ryn, 1990; Ivancevich et al., 1990; Monat & Lazarus, 1991; McHugh & Brennan, 1992; Murphy, 1995b; Nicholson et al., 1988; Rose et al., 1998). There is now a wide range of interventions offered under the heading of stress management making the treatment of stress both a "popular and profitable activity" (Roskies, 1991, p. 411).

However, there has been some controversy over what exactly stress management entails. Firstly, as Pierce (1995) aptly notes, there are questions over what exactly is managed in stress management given the confusion surrounding definitions of stress. Secondly, Murphy (1995b) suggests that the research has been dominated by very specific individual oriented interventions, such as relaxation training. He argues that stress management should be defined much more broadly, but does not provide a definition himself. Roskies (1991) also advocates a broad description. She states that stress management is not one specific technique that can be applied to a specific illness called stress. Instead, she suggests that it is more accurate to characterize stress management as a "general treatment approach applied to a broad category of adaptational and health problems" (p. 412).

There is currently no one model that integrates all of the techniques offered under the heading of "stress management". This is mainly due to the diversity of techniques offered. In general terms, stress management interventions are defined as any procedures that enhance the ability of people to cope with stress or with the

negative emotions associated with stress (Auerbach & Gramling, 1998; Monat & Lazarus, 1991). Stress management is suitable for individuals who are well adjusted but facing a difficult situation rather than those with more serious mental health problems (Roskies, 1991). Most stress management interventions have some degree of behavioural orientation and are generally short-term and focused on producing change as quickly and efficiently as possible. There is also frequently an element of self-monitoring involved with an expectation that the participants will establish and work towards their own goals (Auerbach & Gramling, 1998). Given that most people spend much of their time at work, workplaces are logical and appropriate places for developing and sustaining stress management programmes and health promotion practices (Heaney & van Ryn, 1990).

2.7 Classification of stress management interventions

There are a variety of options for classifying interventions to reduce occupational stress. Generally interventions can be targeted at the level of the individual, the individual/organisation interface, or the organisation (De Frank & Cooper, 1987; Ivancevich & Matteson, 1990).

The primary focus of interventions targeted at the individual level is to reduce the negative effects of stress on the individual. Common individual level strategies include psychological changes, such as planning ahead, physiological changes, such as relaxation methods, behavioural changes, such as time management, and changes in the environment, such as moving to a less demanding job or organization (Burke, 1993; Teasdale & McKeown, 1994).

The second level concerns the individual/organisation interface. Approaches at this level are focused on the individual in the context of the organisation. For example, training focused on balancing work and home life (Cherniss, 1995). The third level is that of the organisation. The rationale for organisational interventions is that by altering the work situation the problem is addressed at the source (Burke, 1993; Newman & Beehr, 1979). Frequently the purpose of organisational

interventions is to increase productivity or reduce costs (Schaufeli & Enzmann, 1998).

Intervention strategies can be further classified as being primary, secondary, or tertiary in nature (Lazarus, 1993). The purpose of primary prevention is to reduce or eliminate risk factors or causal factors before they develop into problems (Reynolds, 1997). An example of an intervention of this type at an individual level could include training to promote a healthy lifestyle (Maslach, 1984). At the level of the individual/organisation interface it could include training focused on reducing stress at home (Cherniss, 1995) and at the organisational level it could include corporate fitness and wellness programmes (Gebhardt & Crump, 1990; Schaufeli & Enzmann, 1998) or programmes providing opportunities for employees to take more control over their work (Reynolds, 1997).

Secondary prevention aims to alter the ways an individual responds to stressors and/or to reduce the severity or duration of stressors to avoid the development of more serious disorders (Reynolds, 1997). For example, cognitive behavioural techniques are frequently taught at an individual level for people identified as "at-risk" (Ellis, 1997). Peer support groups can be utilized at the level of the individual/organisation interface (Cherniss, 1980) and organisational development interventions can be implemented at an organisational level (Schaufeli & Enzmann, 1998).

Tertiary prevention is primarily aimed at assisting those who have suffered negative consequences as a result of exposure to stressors. Tertiary prevention activities are required to deal with existing problems. The purpose may be to cure the disorder or to limit the extent that it is disabling for the individual (Reynolds, 1997). Examples of interventions of this type at the individual and individual/organisation interface level can include specialized counseling such as the provision of debriefing sessions for staff who have been exposed to traumatic experiences. An example at the organisational level could include an Employee Assistance Programme (Schaufeli & Enzmann, 1998). It is important to note that

the range and variety of interventions often blurs the boundaries between categories of intervention (Beehr, 1995; Schaufeli & Enzmann, 1998).

2.8 Efficacy of stress management interventions

The reduction of occupational stress is now a billion dollar industry. Any cursory review of the literature reveals a positive and dynamic field. However, a more thorough inspection suggests that many questions remain over the efficacy of stress management interventions (Palmer & Dryden, 1996). For example, Reynolds and Briner (1994) state that occupational stress reduction may be "one of the many fads that are initiated by academics, commercialized by consultants and embraced by managers but that ultimately fail to deliver the panacea-like solutions which they promise" (p. 75). Bunker (1994) also cautions researchers that stress management is not as simple or as easily implemented as it might appear. He states, "For every complex problem there is a simple solution..... and it's wrong" (p. 59).

Some of the disillusionment with occupational stress reduction results directly from the fact that the treatment of occupational stress has outpaced research (Beehr, 1995; Murphy, 1995b; Wagenaar & La Forge, 1994). Overall, the industry has developed in response to demand rather than empirically supported research so that many interventions have proceeded without any empirical validation of their effectiveness (Beehr, 1995; Nicholson et al., 1988; Monat & Lazarus, 1991; Pelletier & Lutz, 1991).

Two issues have made it particularly difficult to get a clear sense of the efficacy of stress management interventions. Firstly, the majority of research and writing on the topic is not neutral. Briner and Reynolds (1999) note a strong tendency for researchers to want interventions to work and to make every attempt to write positively about the slightest indication of improvement. Cox (1993) also comments on this phenomenon. He states that conclusions about the effectiveness of interventions are "based more on moral and strategic reasoning than on empirical data" (p. 74).

Secondly, much of the research that has been done has been substandard. Many researchers have raised the issue of methodological problems. For example, in their review of stress management interventions, Ivancevich et al. (1990) conclude, "present knowledge about stress management interventions is largely based on anecdotes, testimonials, and methodologically weak research" (p. 259). Others who have reviewed the literature have come to similar conclusions (e.g. Cox, 1993; DeFrank & Cooper, 1987; Murphy, 1984; Nicholson et al., 1988). The most frequently raised issues include absent or inadequate control groups, small samples, lack of objective assessment measures, poor evaluation procedures, and limited long term monitoring of effects (Burke & Richardsen, 2000; Ivancevich & Matteson, 1987; Monat & Lazarus, 1991; Murphy, 1995b; Nicholson et al., 1988; Pierce, 1995; Reynolds & Briner, 1994). In addition, very little research has been done using theoretical models for guidance and consequently most intervention strategies are only weakly grounded in theory (Auerbach, 1989; Ivancevich et al., 1990).

Murphy (1987) notes that a careful evaluation of the literature suggests that even the dominant and accepted approaches to dealing with occupational stress have been shown to be wanting when evaluated rigorously. In particular, Murphy (1987) states that there is a negative relationship between the rigor of past research on occupational stress and the success of the treatments being evaluated. His findings indicate that overall studies with a low level of rigor report success with nearly any type of individually targeted intervention, whereas studies using true experimental methodology reveal more ambiguous results.

For clarity of emphasis when evaluating the efficacy of interventions, it is practical to separate interventions into those that target the individual and those that target the organisation. The bulk of empirical research to date has investigated individual-focused stress management programmes (Bond & Bunce, 2000; Cooper et al., 2001; DeFrank & Cooper, 1987; Heaney & van Ryn, 1990; Ivancevich & Matteson, 1987; Murphy, 1984, 1995b; Newman & Beehr, 1979; Reynolds, 1997; Rose et al., 1998). These interventions have had a positive impact on outcomes such as reductions in anxiety, depression, hostility (Ganster et al., 1982), pulse rate,

blood pressure (Bruning & Frew, 1987), anxiety, muscle tension, self-reported negative emotions, subjective well-being, psychophysiological arousal (Auerbach, 1989; Murphy, 1987), and absenteeism (Murphy & Sorenson, 1988). However, it appears that these changes are frequently small to moderate, not always significant, and not particularly enduring (Heaney & van Ryn, 1990; Ganster et al., 1982; Ivancevich et al., 1990; Murphy, 1988; 1995b; Reynolds, 1997).

The most frequently cited reason for the lack of enduring effects in individual level stress management interventions is that once individuals return to the demands of their unchanged occupational environment, it becomes increasingly difficult to maintain the benefits of the intervention (Ganster et al., 1982). Several researchers have found that individuals who try to use stress management techniques in an unsupportive environment are greatly disadvantaged (Dewe, 1994; Pelletier & Lutz, 1991). In fact it is possible that individuals who find that their new techniques are ineffective against unchanged social, organizational, and physical conditions may experience increased stress because the experience inadvertently increases their perceptions of lack of control (Heaney & van Ryn, 1990). Other studies have found that brief stress management programmes may increase frustration and anxiety by raising issues and expectations and failing to deliver (Murphy, 1987).

An additional criticism of interventions at the individual level is that the implicit focus on changing the worker can lead to a "blame the victim" type of mentality. This is particularly the case when most of the emphasis is placed on the need for individuals to change without any equivalent emphasis on the need to eliminate unnecessary stress due to organisational factors, such as work rules and supervisory practices (Martin, 1997; Murphy, 1995b). Effectively this can perpetuate the idea that stress is strictly an individual problem. For researchers in this field, this also raises a potential ethical dilemma whereby they may end up training employees to better tolerate poorly designed organizations (Ivancevich & Matteson, 1987). In addition, there is a danger that by offering stock solutions to what are complex and individual problems, an individual's distress could be trivialized (Lazarus, 1984).

Stress management interventions may also produce unanticipated outcomes for organisations. For example, Dolan (1994) cautions that stress management interventions are not a panacea to all organisational problems. He states that that poorly conceived stress management programmes may or may not benefit the individual, but there is a risk that they may be counterproductive for the organisation. Dolan conducted a stress management intervention in 30 hospitals (60 wards). He randomly assigned participants to an experimental group that received stress management training, a semi-experimental group that received stress management information and feedback, and a control group. He found that the two groups that received some sort of intervention reported the highest increases in job dissatisfaction. In addition, participants in the experimental group were more likely to quit in the year after the intervention. He hypothesized that these results might be due to a poor quality intervention, but he also suggested that the training had made the participants more aware of their limited chances of changing their work environments, which made them more dissatisfied and more likely to quit.

There is a common perception in the literature that interventions directed at the level of the organisation are more effective and enduring than individual level interventions (Briner & Reynolds, 1999; Burke & Richardsen, 2000; Kline & Snow, 1994; Sutherland, 1993). This is usually based on the premise that prevention is better than cure (Reynolds, 1997). This logic has intuitive appeal in that reducing the number and strength of occupational stressors should result in less stress for each individual (Burke & Richardsen, 2000; Murphy, 1995b; Rose et al., 1998). However, there is currently a lack of evidence for the effectiveness of organisational level interventions (Briner & Reynolds, 1999). This is primarily because interventions at this level are rare and very few have been systematically evaluated (Beehr, 1995; Bond & Bunce, 2000; Briner & Reynolds, 1999; Murphy, 1995b). For example, a review by Ivancevich et al. (1990) found only four reports of organizationally targeted occupational stress treatment programmes. Although interventions targeted at individuals have increased in recent years, organizationally targeted approaches are still a rarity (Beehr, 1995). Murphy

(1995b) suggests that this is because individual level interventions are relatively easy to implement and evaluate and do not involve major structural changes in an organisation. In contrast, interventions at the level of the organization are expensive, time consuming to implement, and organisations are frequently resistant to change (Beehr, 1995; Heaney & van Ryn, 1990; Murphy, 1988).

Just as with the data on individual level interventions, the limited evaluative data for organisational interventions is riddled with methodological problems. This was first noted by Ivancevich and Matteson in 1987, when they stated that there was no evidence that organizational level interventions were any more effective than individual level interventions. Burke and Richardsen (2000) have recently reconfirmed this conclusion.

Reynolds (1997) found similar findings when she compared an organizational intervention aimed at improving staff levels of control over their work with a brief individual counseling intervention (three one hour sessions) aimed at identifying a problem and developing strategies for resolving the issue. The results showed that the organizational intervention did not have any impact on psychological or physical well-being or absence from work. In comparison, the individual counseling intervention improved psychological well-being (operationalized as psychological distress and somatic symptoms) for those who used the service. However, neither intervention had any impact on perceptions of work characteristics, physical symptoms, or absenteeism. Reynolds came to the provocative conclusion that there is currently no established causal relationship between any work environment and psychological well-being.

Many organisational level interventions to reduce occupational stress have focused on increasing the amount of control that individuals have over their work environment. For example, Jackson (1983) investigated the effects of increasing participation in decision making in a hospital out-patient clinic. He found that although the employees did report reduced role conflict and role ambiguity, they were also more likely to be looking for another job. Wall, Kemp, Jackson, and Clegg (1986) assessed the impact of introducing autonomous work groups in a

manufacturing organisation. They found that job satisfaction increased but that job motivation, organisational commitment, mental health, performance, and voluntary turnover were unchanged. Heaney and colleagues (1993) used participatory action research where employees identified areas of difficulty at work and set up working groups to address the issues. They found no changes in any outcomes.

Reynolds (1997) suggests that the lack of success typically associated with organsiational level interventions may be because the interventions themselves are ineffective so that employees do not actually gain any more control over their environment. However, she also notes that a possible side effect of these interventions is that expectations are increased regarding the level of control available to individuals with the result that even if objective levels of control do increase, the impact of this is negated by the accompanying rise in expectations.

Some researchers (e.g. Bennett & Rigby, 1995; Cooper & Cartwright, 1995b; Davis, 1996; De Frank & Cooper, 1987; Hart, 1995; Ivancevich et al. 1990; Murphy, 1987; Sutherland, 1993; Sutherland & Davidson, 1993) propose that the ideal situation is an intervention that targets both individual and organisational levels. However, although combinations of individual and organizational level interventions have intuitive appeal, there is also a lack of evaluative data for this option (Beehr, 1995).

2.9 Chapter summary

This chapter begins with a discussion regarding the difficulties involved with defining an elusive construct like stress, followed by an overview of three of the most prominent stress models. Primary focus is given to the transactional model of stress and coping as this is the model adhered to in the current research. Coping resources are also discussed in the context of the transactional model. In addition, an assessment of levels and costs of occupational stress is provided, along with an overview of stress management interventions including the most common ways of categorizing these. The chapter concludes by exploring the effectiveness of stress management interventions at an individual and organisational level. Overall, the

evidence for efficacy is disappointing and the literature reports a lack of carefully designed, theory based, methodologically sound interventions.

2.10 Chapter aim and hypothesis

2.10.1 Aim

One of the aims of the current research is to compile information on the health and well-being of community workers. In the current chapter, the main aim is to generate a profile of the levels of coping resources for the community workers in the sample and investigate the links between coping resources, well-being, and burnout.

2.10.2 Hypothesis

H 1. Coping resources will be directly related to well-being and inversely related to psychological distress.

CHAPTER 3: BURNOUT

3.1 Chapter overview

This chapter begins with a short history of the burnout construct and a discussion of the four main theoretical perspectives on burnout. This is followed by an overview of the issues involved in defining the construct of burnout, culminating with an explanation of the definition adhered to in the current research. This definition espouses the three dimensional model of burnout, which although widely accepted is not without controversy. Issues relevant to the three dimensional model are discussed including a description of the process of burnout, recovery from burnout, and the transmission of burnout from person to person. Next the differences between the similar constructs of stress and burnout are evaluated and the issues pertaining to burnout and coping are summarized, as are the demographic characteristics that have links with burnout. In addition, the implications of burnout for community workers and the wider community are discussed. This is followed by a summary of some of the possible causes of burnout including work overload, unrealistic expectations, and reciprocal relationships. The chapter concludes with an overview of the research aims and hypotheses associated with this chapter.

3.2 Background

Bradley (1969) was the first person to identify burnout, although Herbert Freudenberger (1974) is more widely known and is usually given credit for first using the term. Coincidentally his initial observations of the burnout phenomenon took place with community workers. Freudenberger, who personally experienced burnout twice, took a term that had been used colloquially in the 1960s to refer to the effects of chronic drug abuse and used it to describe a phenomenon he observed working with volunteers in an alternative health care setting assisting drug addicts. He noticed that over time the volunteers showed signs of emotional depletion and loss of motivation and commitment (Schaufeli & Enzman, 1998). As a result, Freudenberger defined burnout as a syndrome that includes symptoms of exhaustion, a pattern of neglecting one's own needs, being committed and dedicated to a cause, working too long and too intensely, feeling pressures from within oneself, and giving too much to

needy clients. Freudenberger's key point is that working on the basis of enthusiasm alone will eventually exhaust an individual's emotional energy.

Independently and almost simultaneously Christina Maslach came across the term burnout in California. In the process of interviewing health care workers about the stress and emotional arousal they experienced in their jobs, she discovered three themes that consistently emerged. Firstly, many of those interviewed said they felt emotionally exhausted and drained of all feeling. Secondly, they described developing negative feelings about their patients and thirdly, many described a crisis of professional competence as a result of the emotional turmoil. Maslach was told that poverty lawyers called this phenomenon "burnout" and she subsequently adopted the term (Cordes & Dougherty, 1993; Maslach, 1993; Maslach & Jackson, 1984; Schaufeli & Enzman, 1998). Maslach has been active in the burnout arena for over twenty years and is credited with giving this phenomenon legitimacy as a critical social issue (Farber, 1983).

Once the term "burnout" was coined, it was incorporated into common use very rapidly (Freudenberger, 1989; Piedmont, 1993; Schaufeli & Enzman, 1998) and the concept quickly attracted attention (Kantas & Vassilaki, 1997). This level of recognition and sustained interest suggests that the concept has continued relevance for contemporary society (Gillespie, 1989; Schaufeli, Maslach, & Marek, 1993).

3.3 Theoretical perspectives on the construct of burnout

Perhaps because it has always been perceived as a social problem as opposed to a scholarly construct, the concept of burnout has evolved empirically rather than theoretically (Maslach & Jackson, 1984; Maslach, 1999). As a result there is currently no comprehensive theoretical framework of burnout. Schaufeli and Buunk (1996) maintain that it is unlikely that one with ever be forthcoming due to the complexity of the burnout phenomenon. To date the construct of burnout has been shaped by four overlapping perspectives (Byrne, 1999).

The first of these is the clinical perspective, which is essentially Freudenberger's (1974) approach to burnout. He states that burnout represents a state of exhaustion

resulting from an individual working too intensely and without regard for his or her own needs. Freudenberger considers that individuals who experience burnout are paying a high price for an overzealous desire to help others.

The second perspective, and the most widely recognized, is that of Maslach and Jackson (1981). Their approach is more research-oriented, involving identifying conditions of work that are conducive to burnout. In particular, they note how role-related stress, such as work overload, can cause an individual to experience mental fatigue, treat clients callously, and experience a crisis of confidence on the job. These factors emerged as the three crucial aspects of burnout: emotional exhaustion, depersonalization, and reduced personal accomplishment. This approach differs from that of Freudenberger (1974) because he perceives burnout as a state that causes an individual to engage in increasingly vigorous efforts to help others, whereas Maslach and Jackson (1981) see burnout as a process that causes people to withdraw and respond to the recipients of their care in an increasingly detached manner.

The third perspective is more organizational. Cherniss (1980) is also interested in investigating links between burnout and features of the work environment, but his main focus is on learning how organizations and their socio-cultural environments affect a person's response to work. Cherniss states that instead of emotional exhaustion, depersonalization, and reduced personal accomplishment being caused by organizational stressors, they are in fact attempts to cope with frustrating, stressful, or monotonous work.

The social-historical perspective of Sarason (1983) reduces the impact of the individual or the organisation and highlights the impact of society on burnout. The essence of this argument is that when social conditions are not conducive to concern for others, for example in a society that embraces the philosophy of individualism over a sense of community, then it is difficult to maintain a commitment to human service work and burnout will inevitably result.

3.4 Defining burnout

Despite the popularity of the term "burnout", there is a lack of consensus as to what burnout actually is (Farber, 1991; Freudenberger, 1989; Gaines & Jermier, 1983; Handy 1988; Jackson, Schwab, & Schuler, 1986; Piedmont, 1993; Maslach, 1982; Maslach & Jackson, 1984; Shirom, 1989). Schaufeli and Enzmann (1998) liken burnout to pornography in the sense that "....nobody can define it but everybody recognizes it instantly!" (p. 186). It may be the case that a construct such as burnout will always be "fuzzy" and difficult to define because it is essentially a subjective feeling state (Meier, 1984).

Maslach (1999) highlights one of the dangers of an inclusive term like burnout when she notes that "almost every personal problem imaginable has been described as 'burnout' at some point" (p. 212). For example, Schaufeli and Enzmann (1998) list 132 affective, physical, cognitive, behavioural, and motivational symptoms that have been associated with burnout. They call it their A (anxiety) to Z (lack of zeal) of burnout.

An additional difficulty involved in defining burnout is that it is not an "either or" phenomenon (Schaufeli & Enzmann, 1998). There is no clearly defined moment at which a person experiences burnout. Instead it is a "gradual eroding process" (Cordes, Dougherty, & Blum, 1997, p. 699) that is further complicated by being different for each person (Farber, 1983; Maslach, 1999).

Although there is currently no universally agreed upon definition of burnout, the definition of Maslach and Leiter (1986) is widely accepted (Byrne, 1993; Evans & Fischer, 1993; Firth & Britton, 1989; Frieson & Sarros, 1989; Golembiewski & Boss, 1992; Huberman & Vandenberghe, 1999; Kantas & Vassilaki, 1997; Manlove, 1993; Schaufeli & Beata, 1994; Schaufeli & Enzmann, 1998; Schaufeli & van Dierendonck, 1993; Turnipseed, 1994, 1998). This definition states that "burnout is a syndrome of emotional exhaustion, depersonalisation and reduced personal accomplishment that can occur among individuals who do 'people work' of some kind" (p. 1).

This definition refers to a three dimensional model of burnout. The first dimension is emotional exhaustion and involves feelings of being emotionally overextended and depleted of energy resources. There is widespread agreement that this is the key dimension of the burnout experience (Evans & Fischer, 1993; Lee & Ashforth, 1986; Maslach, 1982, 1999; Schaufeli & Enzmann, 1998; Shirom, 1989). This dimension is also known as "compassion fatigue", and describes the affective, feeling states of the individual. It is thought to be the result of chronic circumstances of high activation or arousal (Maslach, 1982; Shirom, 1989). A common symptom is waking with feelings of dread at the prospect of having to return to work (Cordes & Dougherty, 1993).

The second dimension refers to an individual's assessment of others. Depersonalization involves a negative, callous, or detached response towards the recipients of one's service or care. It is marked by the treatment of clients as objects rather than people (Cordes & Dougherty, 1993). It is commonly agreed that depersonalization is an attempt to cope with the emotional stresses of work and is self-protective at first but can turn into dehumanization (Ashforth & Lee, 1997; Cordes et al., 1997; Wright & Bonett, 1997).

The third component is reduced personal accomplishment. This refers to individuals' negative perceptions of how competent and successful they are in their work (Maslach, 1982, 1999). It can involve an individual feeling that that they are losing their effectiveness and potential to develop as a professional. Feelings of diminished personal accomplishment are conceptually related to self-efficacy (Bandura, 1989). Effectively it is not just energy resources which are depleted in burnout, but also an individual's assumption of professional efficacy (Leiter, 1990).

The final component of Maslach and Leiter's (1986) definition refers to "people work". Traditionally burnout has been considered an issue for anyone involved in "people work". Those working in occupations such as care giving, where large amounts of time are spent with the problems of others, have been considered particularly at risk (Leiter & Maslach, 1988; Pines & Aronson, 1981). In fact, burnout has been called the "occupational hazard of the helping professions" (Courage & Williams, 1989, p. 7). However, it is now recognized that many other occupational groups are at risk of burnout (Cordes & Dougherty, 1993; Huberman &

Vandenberghe, 1999; Maslach, Jackson, & Leiter, 1996) including non-occupational areas of life (Maslach, 1999).

Due to its wide acceptance Maslach and Leiter's (1986) definition is used in the current research. However, there is recognition that the popularity of this definition is most likely because this is exactly what is measured by the Maslach Burnout Inventory (Maslach et al., 1997), which is the most frequently used measure of burnout (Schaufeli & Enzmann, 1998).

3.5 Models of burnout

There is increasing recognition that the essence of burnout is encompassed by the model of burnout advocated by Maslach et al. (1997) consisting of three conceptually distinct yet empirically related dimensions: emotional exhaustion, depersonalization, and feelings of reduced personal accomplishment (Bakker, Schaufeli, Sixma, Bosveld, & van Dierendonck, 2000; Byrne, 1993; Evans & Fischer, 1993; Firth & Britton, 1989; Frieson & Sarros, 1989; Golembiewski & Boss, 1992; Huberman & Vandenberghe, 1999; Kantas & Vassilaki, 1997; Leiter & Maslach, 1988; Manlove, 1993; Maslach & Jackson 1986; Piedmont, 1993; Schaufeli & Beata, 1994; Schaufeli & Enzmann, 1998; Schaufeli & van Dierendonck, 1993; Turnipseed, 1994, 1998). These are the dimensions measured by the Maslach Burnout Inventory (MBI, Maslach et al., 1997).

The MBI is the most widely used measure of burnout (Cordes et al., 1997; Evans & Fischer, 1993; Kantas & Vassilaki, 1997; Leiter, 1990; Manlove, 1993; Turnipseed, 1998). For example, Schaufeli and Enzman (1998) analyzed 498 journal articles that investigated burnout and found that 93 percent of them used the MBI. (For a review of other burnout inventories, see Arthur, 1990 and Schaufeli et al., 1993). The three dimensional model has been so dominant in burnout research that it has been suggested that unidimensional interpretations of burnout are no longer meaningful (Byrne, 1994). However, according to Maslach (1993, 1999) the three-dimensional model is not at odds with the unidimensional approach. Instead the three dimensional model incorporates the single dimension of exhaustion and extends it by considering

an individual's response to others (depersonalization) and an individual's evaluation of themselves (personal accomplishment).

There is a great deal of support for the three dimensional model. For example, this model appears to be valid across a variety of occupations including teachers (Schaufeli, Daamen, & van Mierlo, 1994; Kantas & Vassilaki, 1997), school-based administrators (Friesan & Sarros, 1989), nurses (Schaufeli & van Dierendonck, 1993), and supervisors and managers from a public welfare agency (Lee & Ashforth, 1990). In addition, there is evidence of cross-cultural validity for the three dimensional model (Kantas & Vassilaki, 1997; Schaufeli & van Dierendonck, 1993).

However, there are critics of the three dimensional model of burnout. For example, Koeske and Koeske (1989) state that moderate to high correlations between emotional exhaustion and depersonalization indicate that alternative models should be considered. Some researchers propose an integrative approach, such as the stage model of Golembiewski and Boss (1992). Others (e.g. Brookings, Bolton, Brown, & McEvoy, 1985; Dignam, Barrera, & West, 1986) support a two-factor model consisting of emotional exhaustion/depersonalization and personal accomplishment. Kalliath, O'Driscoll, Gillespie, and Bluedorn (2000) state that several studies that have found support for the three factor model using structural equation modelling (e.g. Lee & Ashforth, 1990; Schaufeli & van Dierendonck, 1993) have suffered from methodological limitations. Kalliath et al. claim to have overcome these limitations and their results support a two-factor model consisting of emotional exhaustion and depersonalization.

Some researchers (e.g. Diener, 1984; Headey & Wearing, 1989) have expressed concerns about what the MBI actually measures. They state that the MBI may be tapping the same underlying construct that measures of well being assess. For example, Meier (1984) found high correlations between burnout and depression and suggested that the MBI may actually be measuring the latter, in effect making it more of a measure of the broader construct of well-being. However, it must be noted that Meier used total burnout scores, summing the responses of all three sub-scales which is not the recommended treatment of the MBI.

Maslach et al. (1997) point out that there are important differences between burnout and depression. Specifically, they state that depression is a clinical syndrome that is global and pervades every aspect of a person's life, whereas burnout, although it has repercussions in an individual's personal life, is linked to the work domain. Leiter and Durup (1994) tested this using a confirmatory factor analysis of scores of the MBI and several measures of depression. They found that the sub-scales for burnout and for depression loaded on separate second order factors confirming burnout as a complex three factor syndrome with each factor more closely tied to one another than to any aspect of depression. In addition, Glass and McKnight (1996) reviewed 18 studies of burnout and depression covering over 4800 participants and concluded that although there is a strong association between the emotional exhaustion component of burnout and depression, the two constructs remain distinct.

The most controversial factor in the three dimensional model appears to be personal accomplishment. Cordes et al. (1997) state that it is still unclear whether feelings of diminished personal accomplishment are an outcome rather than a component of burnout. As discussed, a comprehensive recent study using structural equation modelling to examine the factor structure of the MBI found support for a two-factor model of burnout consisting of emotional exhaustion and depersonalization, with emotional exhaustion the stronger factor (Kalliath et al., 2000). This study, which claimed to overcome many of the methodological problems found in previous assessments of the psychometric properties of the MBI, reinforces the fact that personal accomplishment may be the "weak link" in the burnout construct (Lee & Ashforth, 1993).

Others have suggested that it is the depersonalization sub-scale that is problematic. For example, Schaufeli et al. (1993) have raised concerns about the psychometric soundness of this scale and Garden (1987, 1989) questions whether it has relevance outside of human service populations. In support of this, Evans and Fischer (1993) found that the depersonalization sub-scale did not form a coherent factor for a population of computer company employees who were involved in non-people oriented work (analysts and programmers), where as it did form a meaningful factor for a sample of teachers. This means that the participants in the non-human service jobs did not develop the detached, hard, and callous attitudes that are typical of

depersonalization, towards their clients or co-workers. Paradoxically, in this study the accomplishment sub-scale did generalize to the non-human service population possibly indicating that regardless of people's formal job demands, interpersonal relationships with co-workers, supervisors, and clients are an important part of how individuals feel about their jobs.

The controversy over the subscales of the MBI does expose the archilles heel of burnout research, which is the overwhelming dominance on the MBI. Kalliath et al. (2000) claim that many of the original MBI items were flawed. Maslach (1999) also notes that many of the original items were less than ideal, but claims that these items were modified in the latest version of the MBI. Regardless of the actual MBI items, it does appear that burnout research is at risk of becoming circular and limited. On the one hand, having a widely used and well validated measure is an advantage to researchers and allows for comparisons across studies (Cordes & Dougherty, 1993). On the other hand, the phenomenon of burnout and the Maslach Burnout Inventory are now so tightly linked that there is a danger that burnout has been reduced to what the MBI measures (Schaufeli & Enzmann, 1998). It does appear that burnout is a much richer and complex construct than is currently understood or measured.

3.6 The process of burnout

There is no consensus about the exact pathway that leads to burnout (Cherniss, 1980; Golembiewski & Munzenrider, 1988; Leiter, 1993). However, a commonly accepted (e.g. Ashforth & Lee, 1997; Cordes et al., 1997) process model explaining the sequencing between the three burnout dimensions was proposed by Leiter and Maslach (1988). In essence this model suggests that a person confronted by a steady stream of problems requiring some emotional connection or interaction on their part may begin to feel overwhelmed and depleted and start to feel that they have nothing left to give emotionally. In order to save their emotional energy, the exhausted person then distances himself or herself physically or psychologically from everyone wanting help. Ultimately the consequence of erecting this form of emotional buffer and of devoting less time and energy to professional interactions leads to a lack of confidence and a reduced sense of personal accomplishment at work. The end result of these feelings of exhaustion, hostility, and incompetence is that it becomes

increasingly more difficult for the person to function well at work. This may lead to a vicious self-perpetuating cycle where problems in professional functioning lead to burnout, which leads to even more problems functioning, which increases the burnout and so on. This is a possible explanation for why burnout is so frequently a chronic condition (De Heus & Diekstra, 1999; Maslach, 1999; Schaufeli & Enzmann, 1998).

Leiter (1990, 1993) later adapted this model. He now advocates a mixed sequential and parallel process model of burnout. In this model, burnout is partly sequential in that emotional exhaustion is thought to lead to depersonalization, as in the original Leiter and Maslach (1988) model, but parallel in that lack of personal accomplishment arises somewhat independently of the other two processes. Support for this model comes from a longitudinal study (Lee & Ashforth, 1993) and a cross-sectional study (Koeske & Koeske, 1989).

3.7 Recovery from burnout

Long term recovery from early career burnout has been studied by Cherniss (1992) who investigated human service professionals from the fields of public service law, public health nursing, teaching, and mental health. Cherniss states that recovery from burnout is possible and does not have to be accompanied by significant negative long-term consequences. However, this study was exploratory in nature, based on a small number (N = 25) of participants, and had relatively weak statistical power. In addition, this study focused on the long-term results of early career burnout. It is possible that burnout at other points of an individual's career requires a different recovery process.

Another study that investigates recovery and is applicable to community workers is that of Bernier (1998) who studied severely burnt out Canadian human service volunteers, all of whom had taken at least one month of sick leave as a result of burnout. She found that recovering from burnout is a complex process that may take months or even years. In particular, she found that with individuals recovering from severe burnout, much of the recovery process takes place outside of the work setting, making many of the usual coping measures for work stress irrelevant. Bernier identified a six stage recovery process including emotional aspects such as crying,

cognitive elements including analysing the work experience, and interactions with the environment, such as withdrawal from work and exploring work possibilities. Bernier concluded that rest alone is insufficient to recover from severe burnout. For enduring recovery, elements that make the job stressful must be analyzed and modified. Cooper et al. (2001) also note that organisational change is required for long-term alleviation of burnout.

3.8 Transmission of burnout

Working with colleagues who are experiencing burnout may put an individual at greater risk of suffering burnout themselves. De Hues and Diekstra (1999) call burnout a "professional disease" (p. 269). This metaphor is apt because it appears that once one worker in an organisation begins to suffer from burnout, others are also at risk. As Edelwich and Brodsky (1980) quipped, "Burnout in human services agencies is like staph infection in hospitals: it gets around.....Perhaps it should be called staff infection" (p. 25).

Several researchers have described a phenomenon that can help to explain how burnout spreads once it has developed. This is the principle of "emotional contagion" (Schaufeli & Enzmann, 1998). Essentially this refers to the process where individuals who are experiencing burnout symptoms become motivated to search for social comparison information by discussing their work problems with similar others. Sullins (1991) found that especially when individuals are uncertain about their emotions, they are more likely to take on the emotions of those they are with, particularly negative emotions. Geurts, Schaufeli, and De Jonge (1998) demonstrated this when they investigated burnout and intention to leave with workers from a community residential facility and a community mental health centre in the USA. They found that as emotional exhaustion increased, people showed a stronger desire to engage in negative communication with their co-workers. In addition, nurses who affiliated with co-workers showing burnout symptoms reported more burnout symptoms themselves.

These findings suggest a vicious burnout cycle where emotional exhaustion induces a desire to compare (predominantly negative) experiences with other colleagues that

may strengthen and enhance negative feelings, leading to a greater desire to compare experiences. As a result burnout symptoms, negative attitudes to work, and desire to leave the organisation can increase along with increased desire to share these thoughts with colleagues (Ashforth & Lee, 1997; Geurts et al., 1998).

A related phenomenon is "response contagion" which is a process where individuals entertain thoughts about leaving their organisation on the assumption that these thoughts are normal given their undesirable work situation (Buunk & Schaufeli, 1993; Guerts et al., 1998; Hatfield, Caacioppo, & Rapson, 1992, Kirschenbaum & Weisberg, 1990). For community workers the danger is that individuals may take on burnout symptoms that they see in their colleagues on the assumption that these symptoms are normal and appropriate considering the stressful nature of the work.

3.9 Stress and burnout

There is a great deal of confusion regarding the relationship between stress and burnout (Gold & Roth, 1993). The similarities are such that the words 'stress' and 'burnout' are often used interchangeably. The constructs are also similar in that both stress and burnout are broadly seen as the product of a transaction between an individual's needs and resources and the various demands and constraints of the environment. In addition, both phenomena are highly subjective so that the actual situation is less important than the individual's perception of the situation (Maslach, 1999). Finally, the popular conceptualization of stress and burnout is that they are both detrimental to individual and organizational efficiency and any move to reduce them is considered to be beneficial to the individual and organisation (Handy, 1988).

Perhaps the closest parallel to burnout in the stress literature is with Selye's (1967) exhaustion phase of the general adaptation syndrome. Selye states that exposure to stress leads to what he calls the General Adaptation Syndrome consisting of three phases: alarm, resistance, and exhaustion. In the final phase after long-term exposure to stress, all the individual's resources are depleted so that they eventually experience irreversible damage (Maslach, 1999; Sapolsky, 1994).

However, stress and burnout are distinct, although related phenomena. One of the key differences between the two constructs is that stress can be acute or chronic but burnout is inherently chronic in nature. Maslach (1982) states that "the burnout syndrome appears to be a response to chronic, everyday stress rather than to occasional crises..... what changes over time is one's tolerance for this continual stress, a tolerance that gradually wears away under the never-ending onslaught of emotional tensions" (p. 11). Farber (1983) concurs, stating, "burnout is not just the result of stress, but of unmediated stress" (p. 3).

Burnout is more than the end product of chronic stress (Manlove, 1993). Although many of the detrimental effects of stress and burnout are the same, the unique thing about burnout is that it is considered to be a special type of prolonged stress that results particularly from interpersonal demands (Schaufeli & Enzman, 1998; Shirom, 1989). The key is that burnout results primarily from stress arising from the social interaction between a helper and recipient (Maslach, 1982). In addition, stress is generally considered to be unidimensional, whereas burnout is a multidimensional construct (Cordes & Dougherty, 1993; Schaufeli & Buunk, 1996). Of the three dimensions, the variable most closely linked to stress is emotional exhaustion (Jackson et al., 1986; Maslach et al., 1997). However, the other two dimensions add additional information over and above traditional notions of stress. Depersonalization has typically been considered unique to those in the helping professions and has received very little research attention in the stress area (Jackson et al., 1986). The concept of feelings of low personal accomplishment is also relatively new in stress research, although concepts such as self-esteem and self-efficacy are recognized as relevant to the experience of occupational stress (Cordes & Dougherty, 1993; Jackson et al., 1986).

Another critical difference between stress and burnout is that almost anyone can experience stress, but some theorists suggest that burnout is more likely to be experienced by a person with high occupational goals and expectations (Brill, 1984; Cherniss, 1980; Schaufeli & Enzmann, 1998). The implications of adopting this perspective are that an individual who does not expect to derive any sense of significance from his or her work will be more likely to experience stress than

burnout. However, this means that burnout and stress can effectively only be discriminated retrospectively (Schaufeli & Enzmann, 1998).

It appears that burnout is best understood as one manifestation of stress consequences that typically develops after an extended period of stress (Schwarzer & Greenglass, 1999). Maslach (1993) sums it up neatly by describing burnout as an "individual stress experience embedded in a context of complex social relationships, involving the person's conception of both self and others" (p. 20). According to the transactional model of stress and coping (Lazarus, 1991, 1993, 1995), these consequences depend on a number of factors. The first factor involves antecedents of stress. The most common antecedents include some combination of overwhelming job demands combined with a lack of coping resources (Hobfoll, 1989). Secondly, the individual's cognitive appraisals need to reflect this imbalance. That is to say there must be the perception that demands tax or exceed resources and that this will result in challenge, threat, or harm/loss. Finally, for burnout to occur the individual must have a coping style that is maladaptive in the long term. For example, the person may have strategies to cope with a temporary crisis situation but insufficient problem-focused coping strategies to deal effectively with the issue in the long term (Lazarus, 1995).

3.10 Coping and burnout

The relationship between stress and coping has been investigated (e.g. Dewe, Cox, & Ferguson, 1993) however, the relationship between burnout and coping has received very little research attention (Bernier, 1998; Rudow, 1999). The limited amount of research that has been conducted suggests that active and palliative coping strategies help lessen stress and burnout while inactive, regressive styles, such as escape and denial, appear to exacerbate stress and burnout (Lee & Ashforth, 1996; Rudow, 1999). A review of twelve studies on coping styles and burnout concluded that individuals experiencing burnout tend to cope with stressful events in a passive, defensive way where as those with fewer burnout symptoms appear to cope in a more active manner (Schaufeli & Enzmann, 1998).

It is possible that the frequently observed correlations between avoidant coping and burnout are spurious. This is because one of the core symptoms of burnout is

depersonalization, which is characterized by emotional or behavioural withdrawal. Conceptually this is very similar to avoidant coping (Cherniss, 1980; Maslach, 1982, 1993). Therefore, it is likely that there is a substantial degree of overlap between avoidant coping and burnout items (Schaufeli & Enzmann, 1998).

In terms of the current research, the focus is on coping resources as opposed to coping styles. To date it appears that the relationship between burnout and coping resources has been overlooked in the literature. Therefore, the current research is in a unique position to explore this relationship. Based on previous findings in the stress area,

It is hypothesized that coping resources will be inversely related to emotional exhaustion and depersonalization and directly related to personal accomplishment.

3.11 Demographic characteristics and burnout

Many researchers have sought a constellation of biographical characteristics that would enable them to magically predict who was most at risk of burnout. Unfortunately, nothing so simple has emerged. However, the literature does highlight some general trends.

The biographical characteristic most consistently related to burnout is age (Cordes & Dougherty, 1993; Schaufeli & Enzmann, 1998). It appears that younger employees are more likely to experience burnout. This concurs with the findings that burnout is negatively related to work experience (Maslach, 1982). Burnout symptoms tend to decline with growing age or work experience over all three dimensions, but most clearly for depersonalisation and emotional exhaustion (Maslach et al., 1996). However, it is important to note that this relationship may be due to a survival bias. That is, those who burn out early in their careers are more likely to quit their jobs so that in effect the survivors who remain show lower levels of burnout (Schaufeli & Enzmann, 1998).

There are often gender differences in relation to the three components of burnout. However, the research on this area is confusing (Cordes & Dougherty, 1993; Maslach & Jackson, 1981b). It does appear that women tend to score slightly higher on the

emotional exhaustion dimension, whereas men score significantly higher on the depersonalisation dimension. There are several possible explanations for this finding. Burnout may be confounded with occupational role in that generally women still have less access to high reward, high status positions that men (Schaufeli & Buunk, 1996). It is also possible that sex role-dependent stereotypes play a part where women are expected to be more nurturing and to show less depersonalization (Schaufeli & Enzmann, 1998). It may also be that due to their additional domestic responsibilities many working women have higher overall workloads than men and that it is actually their workload that is positively related to burnout (Schaufeli & Enzmann, 1998).

In terms of marital status, it appears that unmarried men are more at risk of burnout than married men (Maslach & Jackson, 1985) and single people tend to experience even higher levels of burnout than those who are divorced (Maslach et al., 1996). Although these findings have not been explained in terms of burnout, they are consistent with other studies on general health and well-being (Schaufeli & Enzmann, 1998).

There also appears to be a relationship with education levels and burnout, with higher levels of burnout consistently reported by those with higher levels of education (Townley, Thornburg, & Crompton, 1991). This may be related to the expectations of more highly educated individuals or because higher education often equates to positions with more responsibility (Schaufeli & Enzmann, 1998).

3.12 Identifying causes and consequences of burnout

Despite all the research that has been conducted on burnout, relatively little is actually known about the causes and consequences of this phenomenon. In fact, it is often not possible to differentiate between causes and consequences. Schaufeli and Enzmann (1998) sum the situation up with their statement that "Making a distinction between symptoms, precursors and consequences of burnout boils down to drawing an arbitrary line somewhere on a continuous scale" (p. 30).

There are several reasons that may account for the lack of definitive knowledge on burnout. Firstly, much of the research that has been conducted has been cross-

sectional with surprisingly little longitudinal research (Schaufeli & Enzmann, 1998). This is a particularly limiting factor because there is usually a considerable time interval between the factors causing burnout and the emergence of symptoms (Maslach, 1999). An additional complication is that burnout is a stable construct (Jackson et al., 1986). For example, in Shirom's (1989) review article, he cites several studies with one year stability coefficients greater than .50. At present it is unclear whether stable burnout scores are indicative of a trait-like condition reflecting some enduring aspect of the individual or are more indicative of chronically stressful working environments (Piedmont, 1993). Coping and adaptation are also thought to play a critical role in the development of burnout. However, to date the role of coping has received little research attention (Bernier, 1998; Rudow, 1999).

Perhaps the main reason for the lack of agreement on the causes and consequences of burnout is due to the complexity of the burnout phenomenon (Schaufeli & Buunk, 1996). Conflicting and confusing findings emerge in every area of research. For example, the predictors of the three components of burnout appear to differ in response to the unique job requirements of various occupations (Maslach, 1999). A variable such as supervisor support is often hailed as an important antecedent of burnout (Brown & O'Brien, 1998; Maslach, 1999). However, closer inspection reveals that it is a significant factor for nurses (Leiter & Maslach, 1988), but not for teachers (Byrne, 1999). In addition, patterns of burnout differ across occupations. For example, a study in Holland found that compared to human service professionals, secondary teachers experienced more emotional exhaustion and more personal accomplishment but less depersonalization (Schaufeli, Daamen, & Van Mierlo, 1994). In contrast, studies of police and prison officers have revealed low levels of emotional exhaustion and high levels of both other dimensions (Schaufeli & Enzmann, 1998).

There are also areas of burnout that one might expect to be widely investigated but that have been comparatively ignored. For example, very little research has examined the relationship between burnout and work performance (Cordes & Dougherty, 1993), yet Maslach (1982) states that the negative relationship between burnout and employee performance is "probably the bottom line for most institutions" (p. 40). At present a definitive relationship between burnout and work performance remains elusive. Wright and Bonett (1997) established a negative relationship between work

performance and emotional exhaustion but did not find significant relationships for depersonalization and personal accomplishment. However, they caution that their findings are not conclusive and that it is possible for the relationship to work the other way, that is for poor performance to lead to burnout (Holgate & Clegg, 1991).

3.13 Implications of burnout for community workers

Despite difficulties identifying the causes and consequences of burnout, there are factors that consistently emerge as relevant to burnout. These will be discussed in terms of their relevance to the target population of the current research, community workers.

The term "community worker" covers a diverse array of service providers. However, all are linked by the fact that the relationship between the provider and the recipient is central to the job and in many cases the nature of the work (service, treatment, or education) can be highly emotional. It is now recognized that in any type of emotionally demanding work there are potential risks for the health and well-being of workers (Geurts, Schaufeli, & De Jonge, 1998; Maslach & Schaufeli, 1993). Although there is extensive research on burnout in health-care organisations, there is very limited research on community organisations (Ben-Dror, 1994). However, following trends in current research it would appear that as a group community workers are at high risk for burnout because of their low level of organisational resources combined with extremely high demand for their services (Brown & O' Brien, 1998; Farber, 1983; Hingley & Cooper, 1986; Satyamurti, 1981).

The consequences of burnout are wide ranging and impact on the individual community worker, their clients, and the wider community. As early as 1977, Sarason noted that the "detrimental implications of disillusionment in human service workers extend far beyond the spheres of their individual existence" (p. 232).

In terms of implications for community workers themselves, research from other service providers suggests that the potential negative consequences of burnout are high (Kalliath et al., 1998; Kantas & Vassilaki, 1997; Maslach et al., 1997; Turnipseed, 1998). For example, studies of various groups of service providers have

found that burnout is associated with decreased psychological and physical well being as well as a host of problem behaviours on the job such as absenteeism, increased turnover, and reduced productivity (Cordes & Dougherty, 1993; Huberman & Vandenberghe, 1999; Jackson & Maslach, 1982; Kantas & Vassilaki, 1997; Leiter & Maslach, 1988; Maslach, 1999; Shriom, 1989). Lee and Ashforth (1990) studied supervisors and managers from a public welfare agency and found psychological and physiological strain and helplessness were associated with high levels of emotional exhaustion and depersonalization.

In addition, burnout impacts on the quality of interactions with recipients or clients. There are potential repercussions whether the individual leaves their position or remains on the job. Burnout is positively associated with turnover (Cordes & Dougherty, 1993) so it is possible the person experiencing burnout may leave their organisation. The resulting lack of continuity can lead to an impairment in the quality of care clients receive, especially as many community organisations have very few staff. In addition, clients often build a rapport with a particular individual and changing staff may reinforce a client's insecurities and mistrust in the system (Hargrove et al., 1991).

If individuals suffering from burnout remain in their job, it is likely that over time symptoms of burnout will increase and they will become progressively more emotionally exhausted and experience more depersonalization and less personal accomplishment (Janssen, Schaufeli, & Houkes, 1999; Maslach, 1982, 1999). This combination can make it very difficult for community workers to have confidence in their ability to carry out their work, which will inevitably have a substantial impact on their clients (Potter, 1987).

When community workers experience burnout, there are follow on effects for the wider community. In recent decades Western society has become more individualised. As a result many of the informal support networks that used to operate within communities have declined so there is an increasing need for human service professionals, such as community workers to fill the gaps (Cherniss, 1980; Schaufeli et al., 1993). Unfortunately, this increased need is at odds with tighter budgets and workers who are already overloaded. Communities simply can't risk losing

community workers to burnout, particularly as individuals dissatisfied with one community organisation may be more likely to withdraw from working in the community sector altogether (Hargrove et al., 1991).

3.14 Possible causes of burnout in community workers

Despite difficulties identifying the causes and consequences of burnout, there are several aspects of human service work that consistently emerge as relevant to burnout. These factors include aspects of work such as ambiguous role demands, work overload, too many secondary duties, lack of control over outcomes, monotony, isolation, and poor relationships with colleagues, superiors, or clients (Cordes & Dougherty, 1993; De Heus & Diekstra, 1999; Maher, 1983; Maslach & Leiter, 1997; Nias, 1999).

3.14.1 Work overload

The limited research available on New Zealand community workers suggests that the factor that is most relevant to their situation is work overload (Bennett & Marsh, 1999). Work overload is emerging as an issue that is relevant for workers in many organisations and not just those involved in human services. Economic pressures are forcing organisations to be more productive which often equates to increased demands for workers to do more (Kinicki, McKee, & Wade, 1996). Maslach and Leiter (1997) suggest that work overload contributes to burnout (especially the emotional exhaustion aspect) in three ways. Firstly, in many organisations work is more intense than it was previously. In addition, work generally demands more time and finally, work is more complex with people expected to take on more roles simultaneously. Cherniss (1980) also notes that increasing workloads are a major factor contributing to burnout in the human service sector. His description of the situation in the United States two decades ago is equally relevant for community workers in New Zealand today. He states that "clients became needier and more difficult to help, and the numbers needing help increased. At the same time, support for the human services declined. Thus professionals had to do more with less" (p. 36).

Cordes and Dougherty (1993) note that client interactions that are more direct, frequent, or of longer duration tend to be associated with higher levels of burnout.

Lee & Ashforth (1996) concur that workload and time pressures are among the most substantial factors in burnout. The results of their meta-anlaysis of six studies showed that workload and time pressure shared an average of 42 percent of variance with emotional exhaustion, although relationships with the other burnout dimensions were much weaker. However, they state that high correlations with workload must be interpreted cautiously because this variable is often operationalised along the lines of experienced strain so there is potentially a sizable overlap in content, especially with emotional exhaustion (Schaufeli & Enzmann, 1998).

3.14.2 Unrealistic expectations

In addition to organisational factors, research has investigated personal factors that may play a part in burnout. The personal factor that emerges most consistently involves the role of high or unrealistic expectations (Cordes & Dougherty, 1993; Cherniss, 1980, 1995; De Heus & Diekstra, 1999; Farber, 1983; Freudenberger, 1989; Freudenberger & Richelson, 1980; Gold & Roth, 1993; Jackson et al., 1986; Lyall, 1989; Schaufeli & Buunk, 1996). The popular reasoning is that people with high expectations set out full of idealism and energy to make a difference and confront the harsh reality of human service work. Over time this causes them to experience disillusionment, frustration, and burnout. Intuitively this idea has merit, but empirically it has not been substantiated (Schuafeli & Enzmann, 1998).

In examining the literature it is not easy to ascertain the role of expectations in burnout. The first problem is that it is difficult to compare studies on expectations and burnout because a variety of concepts are used, such as idealism, unmet expectations, and disillusionment. Also, it is not always clear whether the expectations refer to the individual, the organisation, or to the client's progress (Schaufeli & Enzmann, 1998). To date the evidence on the role of expectations is inconclusive. Some studies have found a positive correlation (e.g. Schwab, 1986), others no correlation (e.g. Jackson et al., 1986), and still others a negative correlation (e.g. Kirk & Koeske, 1995). The most consistent finding that emerges is that unrealistic expectations are more strongly related to reduced personal accomplishment than to emotional exhaustion or depersonalization (Schaufeli & Enzmann, 1998).

3.14.3 Reciprocal relationships

Another personal factor linked to burnout that is likely to have relevance to community workers concerns reciprocal relationships. The basic principle of equity theory (Walster, Walster, & Berscheid, 1978) is that people are motivated to seek reciprocity in interpersonal relationships. In human service work relationships are frequently not reciprocal. Generally human service workers put more into a professional relationship than they receive in return.

The implications of lack of reciprocity in professional relationships were recently illustrated in a study focusing on General Practitioners (Bakker et al., 2000). However, the researchers make a strong argument for generalizing the findings of their study to other health professionals. Their description of the role of a GP as "someone who listens and helps and devotes his or her attention to the life and problems of fellow human beings" (p. 439) could easily apply to many community workers. In this study Bakker and colleagues described a process model of burnout very similar to that of Maslach and Leiter (1988) except that Bakker et al. highlighted the role of an individual's perceptions. They found that over time repeated confrontations with demanding patients led to perceptions of inequity or a lack of reciprocity, consistent with Blau's (1964) social exchange theory, which depleted the GP's emotional resources and sparked the burnout syndrome. As in the Maslach and Leiter model, emotional exhaustion led to depersonalization. However, in this case the depersonalization was a conscious or unconscious attempt to put less into the relationship and so restore equity. Also consistent with the Maslach and Leiter model, over time negative feelings towards patients or clients were thought to be accompanied by negative attitudes towards the person's accomplishments at work, comprising the third aspect of the burnout syndrome.

The unique discovery in the Bakker et al. (2000) study is the finding that GPs who depersonalize their patients as a way of gaining emotional distance, actually tend to evoke more threatening patient behaviours. This finding has relevance to community workers. Often health professionals and community workers are advised to adopt an attitude of "detached concern" involving a blend of professional care and appropriate emotional distance (Maslach, 1982; Schaufeli & Enzmann, 1998). This study

emphasizes the fine line between detached concern and depersonalization. It also raises a crucial and rarely mentioned aspect of burnout, that negative attitudes from health professionals and clients can reinforce each other. The Bakker et al. study highlights the complexity of the burnout phenomenon and reinforces that to understand the development of burnout, it is essential to consider many factors including the way individuals perceive, interpret, and construct the emotionally demanding behaviour of others.

3.14.4 Organisational commitment

Another study relevant to community workers that highlights the complex nature of burnout is that of Kalliath et al. (1998) who investigated the role of organizational commitment in burnout. They found that orgnizational commitment, which has long been thought of strictly as an outcome of burnout (Lee & Ashforth, 1996), might actually also function as a determinant of burnout. Kalliath and colleagues studied 197 nurses and 110 laboratory technicians and found with the nurses that greater commitment to the organization had a direct effect on reduced levels of emotional exhaustion and depersonalization and an indirect effect on depersonalization via exhaustion. The results were similar for the laboratory technicians except that the direct effect of organizational commitment on depersonalization was not significant.

Given the difficult working conditions many community workers endure, turnover rates could be expected to be high. Unfortunately, there is no data on turnover rates of community workers in New Zealand and almost none internationally. One study of community mental health workers in the USA cites turnover rates as high as 60 percent (Ben-Dror, 1994). However, one study must be interpreted very cautiously.

The findings of Kalliath et al. (1998) may provide a possible explanation of why community workers would choose to remain in organizations with less than ideal working conditions. It is possible that in stressful work environments organizational commitment may buffer the relationship between stress and burnout. Schaufeli and Buunk (1996) suggest that workers with a low level of commitment to their organization will be more likely to engage in cognitive withdrawal from their job and organization and be more likely to suffer from stress and burnout symptoms than

those who are highly committed to their organization. Workers who are highly committed may experience less burnout because of their positive orientation towards their organization and their willingness to continue striving for the benefit of the organization. So even though highly committed workers experience just as much stress, the effects are eased by their attitude towards their organization. In support of this, job satisfaction and career commitment have been found to mediate the relationship between stress in the workplace and psychological strain (O'Driscoll, Ilgen, & Hildreth, 1992; Reilly, 1994). The findings of Kalliath et al. suggest that the relationship with organizational commitment may function in the same way.

3.15 Chapter summary

This chapter begins with the 'discovery' of the burnout construct and a discussion of the four main theoretical perspectives on burnout. This is followed by an overview of the issues involved in defining burnout and an explanation of the definition used in the current research. The main models of burnout are also summarized with a particular focus on the three dimensional model of burnout. Next the process of burnout is considered with a short section on recovery from burnout. The distinctions between the similar constructs of stress and burnout are highlighted and the relationship between burnout and personality and burnout and coping is explored. Distinguishing between causes and consequences of burnout is very difficult. Possible reasons for this difficulty are suggested and the implications of burnout for community workers are discussed followed by the possible causes of burnout in community workers.

Given the limited research on community workers and burnout, very few conclusions can be drawn. However, it seems safe to assume that community workers are at least as likely as other human service workers to suffer from the chronic and detrimental effects of burnout. In addition, if one message emerges clearly from the comprehensive body of burnout literature, it is that burnout is a hugely complex phenomenon that cannot be considered in isolation. In each case it is essential to consider the social environment in which work takes place.

3.16 Chapter aim and hypothesis

3.16.1 Aim

The main aim of this chapter is to investigate community workers in terms of the three dimensions of burnout.

3.16.2 Hypothesis

H 5: Coping resources will be inversely related to emotional exhaustion and depersonalization and directly related to personal accomplishment.

Please note that the hypotheses are generated following the section reviewed, but are ordered and tested logically on the basis of the overall set of stress related variables.

CHAPTER 4: WELL-BEING

4.1 Chapter overview

The following chapter begins with a brief outline of the history of well-being and a discussion of the current status of well-being research, including reasons why the topic is in a state of disarray. The topic of well-being is then separated into the constructs of subjective well-being and psychological well-being which are discussed in turn, as are the consequences of low well-being. This is followed by a summary of the theoretical perspectives of well-being, in particular the bottom-up model and top-down model. The role of cognitions in the experience of subjective well-being is also explored. The chapter concludes with a discussion of measurement issues in well-being research.

4.2 Historical roots of well-being

Well-being has a long history that dates back at least two thousand years to writings from the Greek philosophers (Wilson, 1967). Over this time many people have recognized that well-being is a desirable state, but one that is difficult to define and measure (Diener, Sapyta, & Suh, 1998; Ryff & Singer, 1998). This difficulty is what Bradburn (1969) calls the "happiness problem". The construct of well-being, loosely clothed as happiness, has been debated and discussed as a religious, political, and economic issue for many years, but it is only during the 20th century that it has been considered a viable topic for research (Diener, 1984; Diener et al., 1998).

Early research on well-being was dominated by the social indicators movement which originally focused on objective indicators such as housing conditions, number of cars, and income levels. In the late 1960s and early 1970s, the focus of this movement changed to investigating how satisfied people were with their lives. This led to the discovery that quality of life is not linked only to objective indicators but is also heavily influenced by how people perceive their lives and living conditions. From this point, perceptions of well-being became critical in well-being research (Andrews & Withey, 1976). There is now widespread agreement that social

indicators alone do not determine well-being or quality of life (Andrews & Robinson, 1991; Danna & Griffin, 1999; Diener, Suh, Lucas, & Smith, 1999; Diener & Suh, 1997).

An additional focus of early research was on identifying factors that correlate with well-being. For example, just over three decades ago Wilson (1967) published his review of subjective well-being research. Pooling all the information available at the time, he concluded that a happy person is a "young, healthy, well-educated, well-paid, extroverted, optimistic, worry-free, religious, married person with high self-esteem, job morale, modest aspirations, of either sex and of a wide range of intelligence" (p. 294).

4.3 Current status of well-being research

In recent years interest in well-being has increased (Andrews & Robinson, 1991). Diener et al. (1999) suggest that this is reflective of larger societal trends regarding the value of the individual and an acknowledgment that well-being involves more than financial resources. In addition, many researchers (e.g. Diener, 1984; Ryff, 1989; Ryff & Singer, 1998) state that increased interest in well-being is a result of a swing from psychology's traditional focus on predominantly dysfunctional behaviours to a desire to investigate adaptive functioning. Christopher (1999) highlights the dominance of psychopathological topics in psychological journals compared with the infrequent appearance of articles on well-being. He states that although there is general agreement on the importance of well-being, there is a huge discrepancy in terms of the time and effort that has been devoted to psychopathology compared with well-being. Myers and Diener (1995) quantified this when they found that articles with a focus on negative psychological states outnumbered those with a focus on positive psychological states by 17 to 1. Maxwell, Flett, and Colhoun (1990) also note that conceptualizations of disease and mental ill health are well developed and widely researched, where as conceptualizations of physical and mental health are still vague and have not really moved beyond the absence of a diagnosable disorder.

Overall research on the topic of well-being is in a state of disarray. There appear to be three main reasons for this. Firstly, the literature relating to well-being is fragmented and scattered widely across many disciplines ranging from Psychology to Engineering (Danna & Griffin, 1999). Well-being has also come under at least three headings including mental health, quality of life, and social gerontology (Andrews & Robinson, 1991). Under these broad headings researchers have investigated well-being from different perspectives including focusing on the physical aspects of well-being (Cooper, Kirkaldy, & Brown, 1994), the emotional and psychological aspects (Cartwright & Cooper, 1993), and the mental aspects (Anderson & Grunert, 1997). To add to the confusion, researchers in each area have coined their own terms to refer to well-being or aspects of well-being. A small sampling of these terms includes satisfaction, happiness, morale, positive affect, negative affect, affect balance, subjective welfare, and perceived life quality (Andrews & Robinson, 1991).

The second reason for the fragmented state of well-being research is that there is currently no comprehensive theory guiding progress in the well-being area (Diener et al., 1998; Feist, Bodner, Jacobs, Miles, & Tan, 1995; Ryff & Keyes, 1995; Ryff & Singer, 1998; Watson & Clark, 1997). Instead, much of the theory is adapted from other constructs such as stress (Beehr, 1995). Watson & Tellegen (1999) suggest that progress will remain limited until there is a systematic analysis of the key issues and factors related to well-being. Christopher (1999) summarizes the state of much contemporary research on well-being by commenting that it almost always involves identifying the variables that enhance or diminish well-being within a specific population and using a preexisting measure of well-being. He states that as a result of this approach, the focus is on the variables that affect well-being and the nature of well-being itself is very rarely considered.

Diener and colleagues (1999) agree that well-being research has been limited by a strong focus on cross-sectional correlational designs but are more optimistic about the current state of well-being research. They state that it appears that researchers are becoming less interested in just describing characteristics that correlate with well-being and that the focus is now more frequently on understanding the processes

that underlie well-being, in particular the roles played by an individual's goals, coping efforts, and disposition. The current study investigating the roles of coping resources and personality in well-being is an example of this more modern approach.

The final reason for the confusion surrounding well-being concerns definitional issues. There is currently no clearly agreed upon definition of well-being either at an individual level or in general (Christopher, 1999). The concept of well-being is particularly complex because it is by nature internal and subjective and as such difficult to quantify (Diener & Lucas, 1999). To add to the complexity, well-being can be defined as an outcome variable, as it is in the current research, or an antecedent variable according to the situation (Haworth, 1997). In addition, the range of approaches to well-being and the huge number of subjective and objective measures of well-being bring extra confusion to the situation (Watson & Clark, 1997).

This confusion is reflected in the literature on well-being. Frequently in research a definition of well-being is assumed, rather than operationlized. In other studies, the exact meaning of the term well-being is implied by a context specific operational definition determined by the researcher's theoretical framework or preference (Dewe & Guest, 1990). For example, Sumi (1998) used a measure of depression and a measure of anxiety to assess physical and psychological well-being. The twelve item General Health Questionnaire (GHQ-12, Goldberg & Williams, 1988) is also frequently used as a stand alone measure of well-being (e.g. De Witte, 1999). In their review of twenty years of research on the job demand-control model and well-being, Van der Doef and Maes (1999) found frequently used measures of well-being ranged from those assessing psychological distress to measures of burnout, job satisfaction, occupational stress, and mood.

Sometimes even when the concept of well-being is defined, the definitions are so vague and ambiguous that there is very little advantage gained from the definition. For example, Levi (1994) defined well-being as a "dynamic state of mind characterized by reasonable harmony, for example, between the abilities, needs, and

expectations of a worker and the demands and opportunities of his or her occupational environment" (p. 80). Despite the enormous difficulties operationalizing a fuzzy definition such as this, Levi does make the valid point that the factors affecting well-being vary markedly between individuals.

4.4 Describing well-being

4.4.1 Subjective well-being

The main approach to studying well-being and the approach used in the current research is subjective well-being (Christopher, 1999). Andrews and Robinson (1991) state that subjective well-being is important as a "psychological summing up of the quality of an individual's life in society" (p. 61). They note that there are other social psychological concepts that provide an indirect assessment of quality of life including self-esteem, depression and locus of control. However, none of these has as direct an impact on an individual as subjective well-being (Diener & Lucas, 1999).

In their recent review covering the past thirty years of well-being research, Diener et al. (1999) define subjective well-being as a general area of scientific interest as opposed to a specific construct. Other researchers (e.g. Christopher, 1999) agree that there is currently no consensus on a definition of well-being at any level. However, three core components of subjective well-being consistently emerge from the literature.

The first component is the most obvious. Diener (1984) suggests that subjective well-being essentially refers to an individual's self-described happiness. As such, objective conditions are never included in definitions of subjective well-being. The critical point is that well-being is not determined by an "expert" or according to an external standard, but is always determined by a person's own criteria which may include individual values, goals, strengths, and life circumstances (Diener et al., 1998). In this paradigm, the individual's subjective assessment is considered the only valid measurement of well-being, even when their assessment appears at odds with objective conditions. For example, in a work situation one individual might

experience high levels of well-being while performing a monotonous task, while another might experience low levels of well-being in what appear to be desirable working conditions (Levi, 1994).

In support of this, Diener (1984) states that satisfaction judgments tend to correlate more highly with subjective well-being than with objective conditions. However, it must be noted that it is likely that this can partly be explained by the common method variance shared with subjective judgments and subjective well-being. This is compounded by the fact that objective conditions are often mediated by subjective processes (Diener et al., 1999).

The second critical aspect of any definition of subjective well-being is that positive measures are included. This highlights the fact that well-being is far more than the absence of negative factors. The third component of any definition is that it includes a global assessment of all aspects of an individual's life (Diener, 1984).

Another important issue in any discussion of well-being is the need to recognize that the concept of well-being is essentially a Western notion and is culture bound (Christopher, 1999). For example, as Lock (1982) states, "there is no mind/body dichotomy in East Asian medicine and no concept of mental health as distinct from physical health, either historically or at the present time" (p. 220).

4.4.1.1 The structure of subjective well-being

Just as there is currently no universal agreement on a definition of well-being, the structure of subjective well-being is also somewhat elusive. However, there is an emerging consensus that well-being is a broad category, comprised of an individual's emotional responses and global judgments of life satisfaction (Andrews & Robinson, 1991; Andrews & Withey, 1976; Christopher, 1999; Diener, 1984; Diener et al., 1998; Diener & Lucas, 1999; Feist et al., 1995; Headey & Wearing, 1989; Maxwell et al., 1990; Pavot et al., 1991; Pavot & Diener, 1993). In general terms, measures of happiness tend to reflect affect while measures of satisfaction are more reflective of cognition (Andrews & Robinson, 1991). Therefore, the

consensus is that well-being is comprised of a cognitive component involving the rational and intellectual aspects of well-being operationalised as global judgments of life satisfaction, and an affective component comprised of the emotional aspects and most frequently operationalised as positive affect and negative affect.

4.4.1.2 Cognitive aspects of well-being

In terms of the cognitive aspect of well-being, most researchers assert that life satisfaction forms a factor separate from the two affective factors (Andrews & Withey, 1976; Diener & Lucas, 1999). Measures of life satisfaction provide an overall judgment of a person's life. This is in contrast to measures of domain satisfaction which provide an indication of an individual's satisfaction with life by summing the ratings from various domains to give an overall measure. Diener et al. (1985) maintain that although domains such as health and relationships with one's family may be desirable, it is likely that different people will place different values on each domain. For example, an individual may be satisfied with most life domains, but still experience dissatisfaction overall because of the impact of a single domain. Therefore, Diener et al. advocate asking people directly for an overall life evaluation. This allows them to integrate and weight particular life domains according to their own criteria and provides a cognitive judgmental evaluation of a person's life. The evaluation may be indirectly influenced by affect, but is not in itself a measure of emotion (Diener, 1984).

There is evidence that cognitive life satisfaction remains a separate factor from the affective factors of well-being over time frames as long as two years and with multiple methods of assessment, such as self and informant reports (Lucas, Diener, & Suh, 1996). Others claim that the affective and cognitive components are not completely independent, but that they can provide complementary information when assessed separately (Pavot & Diener, 1993).

There is a slight controversy over whether to include an assessment of domain satisfaction in addition to a measure of overall life satisfaction when evaluating the cognitive component of well-being. Diener et al. (1999) and Pavot and Diener

(1993) suggest that a measure of domain satisfaction should be included. However, the majority of researchers state that three dimensions are crucial to well-being: cognitive life satisfaction, positive affect, and negative affect (Andrews & Robinson 1991; Andrews & Withey, 1976; Christopher, 1999; Diener, 1984; Diener et al., 1998; Diener & Lucas, 1999; Feist et al., 1995; Headey & Wearing, 1989; Maxwell et al., 1990). The controversy is not limited to this issue. Some researchers suggest that well-being is a one-dimensional construct (e.g. Fordyce, 1986; Stones & Kozma, 1985) and others propose a two-dimensional model (e.g. Bradburn, 1969; Watson & Tellegen, 1985).

4.4.1.3 Affective aspects of well-being

There is widespread agreement that the affective component of well-being should be further broken down into positive affect and negative affect (Andrews & Robinson 1991; Andrews & Withey, 1976; Christopher, 1999; Diener, 1984; Diener et al., 1998; Diener et al. 1999; Feist et al., 1995; Headey & Wearing, 1989; Maxwell et al., 1990; Pavot and Diener, 1993). These two aspects of mood have emerged as highly distinctive dimensions in studies of affect (Bradburn, 1969; Feist et al., 1995; Watson et al., 1988). That is not to say that all emotional experience can be reduced to these two variables, but that the essence of mood at a general level can be captured by positive affect and negative affect (Watson & Tellegen, 1985).

Research on affect balance corresponds to the popular usage of the term "happiness". Diener (1984) suggests that subjective well-being essentially stresses pleasant emotional experiences or happiness. Happiness reflects a state characterized by more positive affect and less negative affect (Bradburn, 1969; Watson & Pennebaker, 1989). Positive affect is an indication of the extent to which a person feels excited, enthusiastic, active, and alert. Low positive affect is characterised by sadness and lethargy. Negative affect is a measure of subjective psychological distress that encompasses a range of aversive mood states including anger, contempt, disgust, fear, and nervousness. Low negative affect is typified by calmness and serenity (Watson et al., 1988).

Bradburn (1969) states that positive and negative affect are independent components of well-being in the sense that high positive affect does not necessarily accompany low negative affect. In addition, Bradburn states that positive and negative affect correlate with different variables. Positive affect correlates significantly with variables such as social participation, income, and education while negative affect correlates with symptoms of ill-health, depression, and anxiety. Unsurprisingly, events that are seen as beneficial relate to positive affect and events with aversive consequences relate to negative affect (Zautra & Reich, 1980). Currently there is still some debate over the degree of independence between momentary positive and negative affect, but fewer concerns about the separateness of these two dimensions as the time frame increases (Diener, Smith, & Fujita, 1995).

Both positive and negative affect can be measured as a transient or state quality or as a stable or trait quality. The terms negative affectivity and positive affectivity refer to trait qualities. Individuals high in negative affectivity tend to be more likely to be introspective, focus on negative aspects of themselves, those around them, and their environment, and are more likely to experience levels of dissatisfaction in many situations. Individuals low in negative affectivity are more likely to be secure in themselves and satisfied with their lives. Trait negative affectivity is measured by a variety of scales and is known by several labels including neuroticism and trait anxiety (Watson & Clark, 1984). Trait positive affectivity is measured by scales of well-being and extroversion and is characterized by high levels of energy and enthusiasm. Individuals high in positive affectivity tend to lead active, busy lives and be satisfied with their situations (Danna & Griffin, 1999; Watson & Pennebaker, 1989).

This distinction between cognitive and affective aspects of subjective well-being facilitates accurate measurement of the construct. In addition, it provides possible explanations for what appear to be inconsistencies in well-being data. For example, older adults tend to show lower levels of happiness than younger adults, but more life satisfaction (Campbell, Converse, & Rodgers, 1976). When the cognitive-affective distinction is taken into account, the possibility emerges that cognitive evaluations of an individual's life-as-a-whole may increase with age while positive

affect may decline. Perhaps as people age their achievements increase or maybe their expectations become more realistic. It is unclear why happiness would decrease because older adults now are more likely to remain healthy and involved in various life domains than those of previous generations (Andrews & Robinson, 1991). It may be that emotional intensity declines with age and that positive and negative affect are experienced more intensely by the young (Diener, 1984; Diener et al., 1999).

Table 4.1 shows the major divisions and subdivisions for the construct of subjective well-being.

Table 4.1

Components of subjective well-being

Positive affect	**Negative affect**	**Life satisfaction**
Alert	Guilty	Satisfaction with current life
Active	Anxious	Desire to change life
Excited	Hostile	Satisfaction with past
Determined	Afraid	Satisfaction with life compared to ideal
Proud	Distressed	Satisfaction with conditions of life
Enthusiastic	Angry	-

Adapted from Diener et al. (1999)

4.4.1.4 The relationship between subjective well-being and health

The construct of well-being is frequently associated with health (Danna & Griffin, 1999). Even though health is only one aspect of well-being, the presence or absence of illness indicators is often used as a measure of physical well-being (Warr, 1994). Christopher (1999) states that the most commonly accepted definition of well-being is an adaptation of the World Health Organisation's (1998) definition of health which views health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (p. 1). This definition has been pivotal and influential in defining health, particularly the suggestion that optimum

health cannot be achieved by preventing and treating disorders alone (Neville, 1988). However, in terms of a working definition of well-being, this would be difficult to operationalize.

4.4.2 Psychological well-being

Although the main approach to studying well-being has centred around subjective well-being, other researchers have put forward their own conceptualizations of well-being. The two most widely recognized alternative perspectives are those suggested by Ryff (1989) and Warr (1987, 1990, 1994).

Ryff (1989) acknowledges that subjective well-being has been extensively evaluated and that there are psychometrically sound measures of well-being. However, she believes that subjective well-being research has not been able to tap the essence of psychological well-being. Her approach to well-being hinges around her measure of well-being comprising six subscales: Autonomy, Environmental Mastery, Positive Relations With Others, Purpose in Life, Personal Growth, and Self-Acceptance. Ryff considers these six elements to be the keys to well-being. Her approach has been criticized on the grounds that it is incomplete (Diener et al., 1998) and locked into traditional Western assumptions (Christopher, 1999). However, Ryff's early work (1989) and later work with Burton Singer (Ryff & Singer, 1998) has been instrumental in sparking debate and thought on what constitutes positive human health.

Warr (1987, 1990, 1994) has written widely on the construct of well-being. He states that well-being can be defined from many theoretical frameworks including those with a focus on emotional states or physical symptoms. In addition, Warr (1987) states that well-being can be examined from a variety of perspectives including the self, society, significant others, and mental health practitioners.

Warr (1987) is perhaps most known for his "vitamin" model of psychological well-being which divides well-being into five components: affective well-being, competence, aspiration, autonomy, and integrated functioning. He proposes that

these five facets act in conjunction with nine components or to use Warr's terminology, "Principal Environmental Influences" in the work situation that influence well-being. These Principal Environmental Influences are opportunity for control, environmental clarity, opportunity for skill use, externally generated goals, variety, opportunity for interpersonal contact, valued social position, availability of money, and physical security. Warr (1987, 1990) proposes that Principal Environmental Influences have a non-linear effect on well-being. He likens Principal Environmental Influences to vitamins in the sense that vitamins also have a non-linear effect on physical health and require an optimum dose, ineffective in dosages that are too small and harmful in dosages that are too large.

Warr's (1987) model is innovative and thorough. There is recognition that individual differences can moderate the relationship between the individual and the environment and an emphasis on the importance of investigating person-situation interactions (Haworth, 1997). However, this model is primarily job-related. Although it is theoretically possible to apply Warr's model to a work or leisure setting, the subjective well-being conceptualization of well-being is preferred for the current research because of its more general nature.

4.5 Consequences of low well-being

A large body of research is emerging to support the notion that low levels of well-being can impact on individuals and organisations in negative ways (Danna & Griffin, 1999). The implications for an individual are pervasive and can include physiological, psychological, and emotional costs (Cartwright & Cooper, 1993). The implications for an organisation are also extensive. For example, there is evidence that low levels of well-being can impact on profitability. Employees with poor health and well-being are more likely to make unwise decisions, be more frequently absent, and less productive (Boyd, 1997). In addition, their overall contribution to the organisation is reduced (Price & Hooijberg, 1992).

An additional consequence of low well-being is the possibility of burnout. Burnout is linked to poor health, impaired personal functioning and psychological strain (Cordes & Dougherty, 1993; Lee & Ashforth, 1990). Therefore,

It is hypothesized that well-being will be inversely related to burnout, such that life satisfaction and positive affect will be inversely related to emotional exhaustion and depersonalization and directly related to personal accomplishment, and negative affect will be directly related to emotional exhaustion and depersonalization and inversely related to personal accomplishment.

In addition,

It is hypothesized that psychological distress will be directly related to emotional exhaustion and depersonalization and inversely related to personal accomplishment.

4.6 Theoretical perspectives on subjective well-being

The most widely recognized causal models of subjective well-being are the bottom-up model and the top-down model (Diener, 1984; Feist et al., 1995).

4.6.1 Bottom-up model

The rationale underlying bottom-up theories is that each individual has a set of basic human needs and if these needs are filled, the person will be happy. The research focus with this model has been to attempt to identify the bottom-up factors that influence subjective well-being. The premise of bottom up theories is that by summing up well-being in particular domains, such as work and family, an overall sense of well-being emerges. Another way to look at it is that well-being is a result of having many specific moments of happiness in life. According to the bottom-up view, objective life circumstances should be the best predictors of an individual's overall level of happiness (Diener, 1984; Diener et al., 1999; Feist et al., 1995). Unfortunately, researchers have been consistently disappointed with the small effect sizes for external objective variables such as demographic factors (Andrews & Withey, 1976; DeNeve & Cooper, 1998; Diener, 1984; Diener et al., 1999; Michalos, 1985).

4.6.1.1 Well-being and demographic variables

In general research on subjective well-being has revealed very weak relationships between measures of well-being and commonly investigated demographic variables such as age, gender, ethnicity, education, and income (DeNeve & Cooper, 1998; Diener et al., 1999). Even combined these demographic variables rarely explain more than 10 percent of the variance in global well-being (Andrews & Withey, 1976; Diener, 1984; Michalos, 1985). In addition, well-being appears to be unrelated to psychological maturity (McCrae & Costa, 1983), gender (Andrews & Withey, 1976), and intelligence (Diener, 1984). Due to the limited amount of variance accounted for by demographic variables on well-being, a full discussion of these relationships will not be undertaken here and only the most consistent findings will be discussed.

There are slight increases in well-being for those with more wealth and/or education (Andrews & Robinson, 1991; Diener et al., 1999). In addition, a frequent finding is that subjective well-being is higher for married individuals, even when selection effects for happier people getting married or staying married are ruled out (Diener, 1984). For example, Kammann (1983) found that both in New Zealand and the USA, married people reported the highest levels of well-being of any group. However, to some extent marital status is a proxy variable, that is to say it cannot completely account for relationships in its own right. Tied into marital status are other variables such as social support that are also critical to well-being. In fact, there is some suggestion that the quality and nature of interpersonal relationships is the most important predictor of well-being. The converse also applies, individuals with relationship problems or without close relationships are much more likely to experience lowered well-being (Diener, 1984; Maxwell et al., 1990).

4.6.2 Top-down model

The essence of the top-down model is the assumption that people have a predisposition to interpret life experiences in positive or negative ways and this predisposition is instrumental in determining satisfaction in specific domains. The

model emphasizes the subjective interpretation of events rather than any objective reality as the main influence on subjective well-being (DeNeve & Cooper, 1998; Diener, 1984).

Although the findings for the bottom-up model have been disappointing, a recent study suggests that both models may have a part to play in well-being. Feist et al. (1995) used structural equation modeling and found that both the top-down and bottom-up models provided good fit to their data with neither model providing a closer fit than the other. They suggest a bidirectional model of causality, raising the possibility that in the top-down model subjective well-being is a cause, while in the bottom-up model subjective well-being is an effect.

4.6.2.1 The influence of cognitions on subjective well-being

One of the major areas of investigation in the top-down model is the influence of personality on subjective well-being. This is discussed in chapter five. Another top-down area that may explain some of the variability in subjective well-being involves cognitions. Andrews and Robinson (1991) discuss research that examines how an individual's cognitions lead to subjective well-being attitudes. The main approach in this area is the gap or ratio approach.

4.6.2.2 The gap/ratio approach to understanding subjective well-being

The essence of this approach is that attitudes about subjective well-being reflect either a gap or a ratio between what individuals aspire to and what they perceive they have. The gap or ratio refers simply to how aspirations and achievements are measured and will not be discussed here. In very general terms, this approach states that when there is a small difference between what an individual wants and thinks they have, then levels of subjective well-being will be much higher than when there is a big difference between an individual's current situation and his or her desires (Andrews & Robinson, 1991; Michalos, 1985).

In addition to intuitive appeal, this approach has support because it helps explain what appear to be contrary findings in the area of subjective well-being. For example, a frequent confusing finding from cross-sectional studies is that some individuals who objectively appear to enjoy a higher standard of living than average, actually report lower than average levels of subjective well-being. Factoring in a gap (or ratio) between what is desired and what is achieved makes this finding easier to understand (Andrews & Robinson, 1991). For example, an individual living in what appears objectively to be a beautiful home, may not be satisfied because he or she aspires to an even nicer house, where as someone in a more modest home may be perfectly satisfied and report high levels of subjective well-being.

This approach can also help explain some of the confusion surrounding the relationship between income and well-being. Most studies find a positive relationship between income and well-being, such that wealthier people tend to be happier than poorer people. However, as the overall income level within a country rises, the overall level of well-being does not show a corresponding increase. Diener (1984) suggests that it is not mean levels of income or purchasing power that are most important in influencing well-being, rather the key is the overall distribution of income as individuals cognitively appraise their situation relative to others.

The main theory associated with identifying the sources of an individual's aspirations is Multiple Discrepancies Theory (Michalos, 1985). The key to this theory is that people determine their levels of subjective well-being in terms of particular aspects of their lives, such as housing, by mentally combining information about gaps between what they perceive they have and what they want. Michalos proposes that this is determined by six factors:

1. What relevant others have
2. The best they have had in the past
3. What they expected to have by now
4. What they expect to have in the future

5. What they feel they deserve
6. What they feel they need

According to this theory, people compare themselves with these standards and form a judgment based on discrepancies between these standards and their current situation. Comparing upwards against a higher standard should result in decreased satisfaction, whereas comparing downwards should result in increased satisfaction. Michalos (1985) evaluated his own theory with very promising results, stating that Multiple Discrepancies Theory could account for about 50 percent of the variance in ratings of global happiness and satisfaction.

However, since Michalos (1985) developed his theory of social comparison it has become apparent that the situation is more complex than he proposed. It appears that there is variation in the type of information that is used for comparison as well as variation in the way the information is used (Diener et al., 1999). For example, personality factors can influence the way social comparison information is used. McFarland and Miller (1994) found that optimists were more likely to focus on the number of people who performed worse than they did, while pessimists focused on the number of people who did better than they did. Essentially as the number of people they were comparing themselves to increased, happy people became happier and unhappy people became even less happy. Once again it may be possible that the tendency to use upward or downward comparison is a result and not a cause of increased subjective well-being (Diener et al., 1999).

4.7 Measuring well-being

In their review of the psychological health of New Zealanders, Maxwell and colleagues (1990) suggest that in order to best assess well-being, several criteria must be met:

- It is essential that an individual's well-being is assessed as it is experienced by him or her, rather than as rated by others.

- The measures must be global measures that are sensitive to the most important aspects of an individual's life and broad enough to measure more than just a limited sphere.
- The measures must be reliable, valid, and able to be used by most of the population.
- The measures must be sensitive enough to detect changes in circumstances that can affect an individual's quality of life.

It is possible to measure subjective well-being with a huge variety of self-report measures. Perhaps because of this plethora of measures, there is no single scale or set of scales that is accepted as the best or most widely used measure (Andrews & Robinson, 1991).

As discussed, although not without controversy, there is an emerging consensus for a three dimensional model of well-being that includes the components of cognitive life satisfaction, positive affect, and negative affect (Andrews & Robinson 1991; Andrews & Withey, 1976; Christopher, 1999; Diener, 1984; Diener et al., 1998; Diener & Lucas, 1999; Feist et al., 1995; Headey & Wearing, 1989; Maxwell et al., 1990). This three dimensional model is adhered to in the current research.

In addition to the components of the three dimensional model, two other measures of well-being are included in the current research: a measure of domain satisfaction and a measure of psychological distress. Multiple measures of well-being are included because it is becoming widely recognized that well-being is a broad construct that takes the "whole person" into account, therefore well-being also needs to be measured broadly (Danna & Griffin, 1999; Warr, 1987, 1990). As well-being is the primary dependent variable in phase two of the current research, it is critical that the construct is broadly measured to ensure maximum confidence in any conclusions drawn regarding well being.

Several researchers (e.g. Andrews & Robinson, 1991; Diener et al., 1999; Pavot & Diener, 1993) suggest that measures of domain satisfaction provide useful information on well-being. Domain specific well-being refers to outcomes that

relate to a specific aspect of an individual's life. For example, work satisfaction represents an affective dimension of well-being that is particular to work. In terms of life domains, the domains that are closest and most immediate to an individual's personal life, such as assessments of family, friends, health, and leisure, are those with the most influence on subjective well-being (Andrews & Withey, 1976; Campbell et al., 1976). Assessments of life domains that are more remote from the individual, such as assessments of government, make independent, but much smaller contributions to explaining global well-being (Hart, 1999).

This approach has proven to be a powerful statistical predictor of global well-being. On the surface it appears unlikely that a process as simple as combining assessments of specific life domains could predict global subjective well-being. However, although far more complex models have been proposed, the simplest linear additive prediction model is currently the most accurate (Andrews & Robinson, 1991).

A measure of psychological distress is also included in the current research to provide a thorough assessment of the well-being construct. The rationale for including a measure of psychological distress as part of a battery to assess subjective well-being is that an individual's levels of psychological distress will have a substantial impact on his or her assessment of overall life satisfaction and positive and negative affect (Diener, 1984; Feist et al., 1995; Larsen, 1978).

4.8 Criticisms of well-being measures

The main criticisms regarding the measurement of well-being have focused on four issues. These issues include reliance on self-report measures, the possibility that well-being measures are actually measuring depression or current mood, the fact that well-being scores may be inaccurate because they tend to be positively skewed, and the possibility that that well-being measures are particularly vulnerable to social desirability effects (Maxwell et al., 1990). These issues will be discussed in turn.

There is no doubt that to date the field of well-being has been dominated by cross-sectional correlational designs using various global self-report measures (Diener et al., 1999). Although this is a short-coming of well-being research, the majority of

these measures appear to have relatively good psychometric properties. For example, most show good internal consistency (Larsen, Diener, & Emmons, 1985) and good stability and sensitivity in response to changes after life events (Headey & Waring, 1989). In addition, there is evidence for discriminant validity. For example, people who score high on global life satisfaction are less likely to become depressed or attempt suicide (Lewinsohn, Redner, & Seeley, 1991).

However, some issues still remain unresolved. One problem is that well-being scores have been shown to fluctuate depending on the order of items, time frame of questions, and various other situational factors (Schwarz & Strack, 1991). Possibly because of these fluctuations, global self-reports of well-being do not always match scores assessed using other techniques. For example, there is not always a convergence with average mood levels reported using daily diary studies and global self-reports of well-being (Thomas & Diener, 1990). In addition, individuals sometimes report positive well-being while simultaneously appearing distressed to an interviewer and in measurements of physiological reactivity (Shedler, Maymann, & Manis, 1993). This lack of congruence parallels findings in stress research where self-reports of stress show discrepancies with physiological measures (Van Heck, 1988; Walsh et al., 1997; Watson & Pennebaker, 1989).

Other emerging options for measuring well-being include experience sampling where an individual's moods and emotions are sampled randomly during the day. The advantage of this method is that memory bias is reduced (Diener et al., 1999). Additional possibilities involve scoring qualitative descriptions of an individual's life (Thomas & Chambers, 1989), measuring reactions to emotionally ambiguous stimuli, recording memories for good and bad events (Diener et al., 1999), and physiological measures such as salivary cortisol levels (Dinan, 1994).

In terms of the question over whether well-being measures are actually tapping depression, the evidence suggests that this is not the case. Although measures of depression do correlate highly (approximately .70) with global measures of well-being, the relationship is curvilinear in that depression measures tend to be less able to discriminate among non-depressed individuals (Kamman & Flett, 1983). It is a

common finding that measures of well-being show positive skew (Andrews & Withey, 1976; Kamman & Flett, 1983; Pavot & Diener, 1993), but the measures tend to be far more useful in differentiating positive respondents and therefore they are more effective in assessing health as opposed to illness.

The fact that measures of well-being tend to be positively skewed has raised the possibility that self-reports of well-being cannot be trusted (Maxwell et al., 1990). At least in Western nations, a consistent finding is that most people report that their well-being hovers between *slightly satisfied* and *satisfied* and between *slightly happy* and *happy* (Diener et al., 1999; Pavot & Diener, 1993). Even under particularly stressful circumstances including caring for and losing a partner with AIDS, Folkman (1997) found that most of the caregivers reported that the majority of the time they experienced more positive affect than negative affect. Lykken and Tellegen (1996) suggest that this tendency may be genetic. Kamman (1984) states that it is no wonder most people end up closer to the positive end of the scale. He proposes that it is unlikely that people calculate their happiness relative to some average level and that it is far more likely that people evaluate their happiness in terms of an internal scale ranging from their worst to best feelings. As a result, the majority of people tend to have more positive than negative evaluations.

Another of the questions regarding measuring subjective well-being concerns the extent that scores are influenced by momentary mood at the time of completing the measures. Although well-being scores do tend to correlate with scores of mood, the correlations are not substantial enough to distort multi-item scores. The sizable temporal reliabilities of the most commonly used well-being measures indicate that they are not substantially influenced by momentary mood (Diener, 1984). In addition, the fact that well-being scores are highly stable across time reduces concerns over the causal influences of mood (Diener et al., 1999; Maxwell et al., 1990).

In terms of the relationship between well-being and social desirability, most studies report correlations of between .20 and .30 (Diener, 1984; Maxwell et al., 1990), which would suggest that well-being cannot be equated with social desirability. In

addition, Maxwell and colleagues suggest that it is unjust to interpret correlations with other measures and social desirability as evidence for invalidity, because the construct of social desirability is itself problematic, given that the desire to appear in a good light is so widespread. Diener, Sandvik, Pavot, & Gallagher (1991) recommend against controlling for social desirability on the basis that it may decrease the validity of subjective well-being scales. They propose that social desirability taps personality characteristics rather than response artifacts.

4.9 Chapter summary

This chapter discusses the construct of well-being in general, and subjective well-being in particular. The chapter begins with an overview of the history of well-being leading into a discussion on the current chaotic state of well-being research. This is followed by a description of the construct of subjective well-being and a summary of the structure of subjective well-being. The construct of psychological well-being is also discussed as are the consequences of low well-being. There are two main theoretical perspectives on subjective well-being; the bottom-up model and the top-down model and these are discussed with a particular focus on cognitive influences, which are one of the most widely investigated top-down areas. The chapter concludes with an assessment of measurement issues in well-being.

4.10 Chapter aim and hypotheses

4.10.1 Aim

The primary research aim for this chapter is to explore the construct of well-being as it relates to community workers.

4.10.2 Hypotheses

H 2: Well-being will be inversely related to burnout, such that life satisfaction and positive affect will be inversely related to emotional exhaustion and depersonalization and directly related to personal accomplishment, and negative

affect will be directly related to emotional exhaustion and depersonalization and inversely to personal accomplishment.

H 3: Psychological distress will be directly related to emotional exhaustion and depersonalization and inversely related to personal accomplishment.

CHAPTER 5
PERSONALITY, STRESS, COPING, BURNOUT, WELL-BEING, AND DYSFUNCTIONAL ATTITUDES

5.1 Chapter overview

There is growing evidence that personality has a key role to play in the areas of stress and well-being (Parkes, 1990). However, the exact nature of the role of personality is still emerging. As will be discussed, there is evidence to suggest that personality impacts upon the way a person responds to stress (Mayou, 1987; Parkes, 1990), appraises stressful events (Cohen & Edwards, 1989; Costa & McCrae, 1990; Evans, Pulsane, & Carrere, 1987; Kasl & Rapp, 1991; Lazarus & Folkman, 1984), and assesses their own well-being (Aldwin, 1994).

In this chapter the key characteristics that define the construct of personality will be described followed by an overview of trait theories of personality and a brief historical tour of the development of the five factor model of personality. Next the dimensions of the five factor model will be discussed with a summary of the major criticisms of this model. Included in the five factor model is the personality trait of neuroticism, a trait that is also frequently used to operationalize the construct of negative affectivity. Both neuroticism and negative affectivity are consistently linked to stress and well-being (Cooper, 2000; Matthews & Deary, 1998; Tokar, Fischer, & Subich, 1998) and will be investigated in terms of what constitutes negative affectivity, the link between negative affectivity and neuroticism, and the role of negative affectivity in occupational stress research. In addition, six possible explanations for the relationship between stress and negative affectivity are discussed. This is followed by a summary of the limited evidence for the role of the other dimensions of the Big Five in terms of stress and well-being. The considerable impact of personality, and especially neuroticism, on the constructs of coping, burnout, and well-being is also discussed. Finally, the role of dysfunctional attitudes in personality, stress, and coping is investigated. The chapter concludes with a summary of the aims and hypotheses related to personality that are investigated in the current research.

Little is known about personality and community workers. However, there are some indications that human service workers may form a unique population in terms of personality. For example, Garden (1987, 1989) raised the possibility that human service occupations attract people with a unique "feeling" personality type. Others (e.g. Maslach, 1999) have noted that human service workers tend to adhere to norms to be selfless and put others' needs first, to work long hours to meet the needs of clients, and to be dedicated to wanting to provide the best possible service for clients. As early as 1978, Pines and Kafry stated that social workers, who are also a subset of human service workers, are a "rather homogeneous group emotionally whose sensitivity to clients' problems makes them more vulnerable to stress" (p. 500). Around the same time Kadushin (1974), described social workers as people who are responsive to a "dedicatory ethic; that is, they view their work as a calling, and reward is considered to be inherent in the act of giving" (p. 706). Despite these hints and suggestions from the research, human service workers, and community workers in particular, remain a largely unexplored group in terms of personality.

5.2 Describing personality

Personality is an intriguing construct. Over time many people have attempted to identify the key dimensions of personality that can describe and predict individuals' characteristic responses and behaviours. It is thought that the first recorded attempts to uncover the essence of personality occurred during the fourth century BC when a student of Aristotle called Theophrastus described 30 personality types that would today be called "traits" (Matthews & Deary, 1998). Many researchers from a variety of theoretical perspectives have continued to attempt this task resulting in wide ranging viewpoints about the nature of personality (Diener & Lucas, 1999). For example, the Freudian perspective (e.g. Freud, 1923), the behaviour and learning perspective (e.g. Bandura, 1986), and the biological perspective (e.g. Eysenck, 1967).

Despite this long and diverse history, there is still a lack of clarity over what constitutes personality. Personality, stress, and well-being are similar constructs in the sense that most people have an intuitive understanding of what they involve and yet all are notoriously difficult to define. Although there is currently no universally accepted definition of personality (Ewen, 1988), there are elements that are frequently

incorporated into any definition. In particular, personality is generally viewed as a collection of stable ways of interacting with the environment including inborn and acquired qualities that may be shaped directly and indirectly by stressful life events. The key is that an individual's affective and cognitive characteristics, or combinations of characteristics tend to be enduring and associated with reasonably predictable patterns of behaviour (Aiken, 1996; Bolger & Schilling, 1991; Bolger & Zuckerman, 1995; Ewen, 1988; Matthews & Deary, 1998; Ormel & Wohlfarth, 1991).

5.3 Trait theories of personality

Currently the trait approach dominates theories of personality (Matthews & Deary, 1998; Pervin, 1993; Tokar et al., 1998; Wiggins, 1997) especially in terms of investigating personality in occupational settings (Barrick & Mount, 1991; Costa & McCrae, 1997; McCrae & Costa, 1985). The study of traits is concerned with the distinguishable and enduring ways that individuals differ (Staub, 1980). Johnson (1997) defines traits as "consistent patterns of thoughts, feelings, or actions that distinguish people from one another" (p. 74). The most important factor in the trait approach is the assumption that everyone has broad stable dispositions, known as traits, that influence their cognitions, behaviours, and emotions in specific ways (Pervin, 1993).

Gordon Allport (Allport & Allport, 1921) refers to traits as the 'building blocks of personality'. Allport states that traits represent generalized personality dispositions that account for consistencies in behaviour across situations and over time. He also suggests that traits can be defined in terms of frequency, intensity, and range of situations. For example, an individual high in the trait of neuroticism is likely to frequently behave in particularly negative ways in both their personal and professional lives. Allport extends his categorization of traits by distinguishing between cardinal traits, central traits, and secondary dispositions. Cardinal traits are very strong and affect the majority of an individual's behaviours across a wide range of situations. As cardinal traits are so pervasive, most people have very few and possibly no cardinal traits. Central traits, such as assertiveness, are expressed in more limited situations than cardinal traits and secondary dispostions are the smallest, least consistent, and least generalisable of all (Pervin, 1993).

The study of traits has essentially been a two-pronged affair. One of the prongs has focused on selected traits that various theorists have seen as valuable such as Rotter's (1966) locus of control. The other prong has taken a far broader approach and focused on reducing trait descriptors to a core set of fundamental personality traits (Ewen, 1988). Obviously this is a hugely complex task riddled with decisions regarding the measurement and classification of traits, how traits relate to behaviour, and even whether a general scientific theory of traits is possible (Matthews & Deary, 1998). The model of personality used in the current research, the five factor model, emerged out of this second area of research. The five factor model is the currently the most widely used and the most accepted trait model of personality (Wiggins & Trapnell, 1997).

5.4 Historical overview of the five factor model

The following provides a brief historical tour of the five factor model illustrating the painstaking process of extracting the five factors.

The five factor model originated out of Galton's (1884, cited in Schneider & Hough, 1995) lexical hypothesis. Galton proposed that dictionaries held the key to personality. He suggested that the mysteries of personality could be unlocked by examining the words that people use to describe one another. His hypothesis was that all the traits that describe human behaviour are encoded in language and the more important a trait is, the more words will be used to describe it. Using Roget's Thesaurus, Galton identified approximately one thousand words that he considered described an individual's character. Allport and Odbert (1936) vigorously continued this work producing a list containing nearly 18 thousand words. However, after weeding out words that suggested moods, temporary states, or those that they considered evaluative or metaphorical, they arrived at a shortened list of 4504 personality descriptors (Matthews & Deary, 1998).

Cattell (1943) took this thorough but large and unwieldy list and made the first of many attempts to refine it, finally ending up with 35 trait descriptors from which 12 factors were extracted. Although Cattell's contribution was substantial, this 12 factor

solution was difficult to interpret and the factor loadings proved unsatisfactory. Fiske (1949) reduced Cattell's list of descriptors to 22 and from these he was the first to extract a five factor solution to describe personality. However, despite being the first, the glory went to two other researchers, Tupes and Christal in 1961 (Tupes & Christal, 1992). By this time, factor analytical techniques had become more powerful and they found five consistent factors after factor analyzing data from eight studies that all used data from Cattell's list of 35 trait descriptors (Schneider & Hough, 1995).

Further support for the five factor model came from Norman (1963) and Digman and Takemoto-Chock (1981). In addition, Goldberg (1990) added confidence to the robustness of the model when he extracted the five factors from a new list of trait descriptors that Norman (1967) had extracted from another dictionary. This went some way to answering critics (e.g. Waller & Ben-Porath, 1987) who stated that simply replicating studies using Cattell's variables provided very shaky support for the five factor model.

5.5 The current five factor model

As discussed, a substantial amount of research has been devoted to investigating the endless ways individuals can differ (Piedmont, 1993). The main purpose of this research has been to identify the underlying dimensions of personality and develop a taxonomy of personality variables. Obviously an area this complex generates considerable controversy. However, over the past 40 years there has been an emerging consensus that there are five broad, orthogonal dimensions of personality commonly known as the "Big Five". Currently the five factor model of personality has widespread support (Costa & McCrae, 1988, 1992; Costa & Widiger, 1993; Digman, 1990; Goldberg, 1993; Hogan & Hogan, 1992; John, 1989; McCrae & Costa, 1987, 1985, 1989a, 1989b; Passini & Norman, 1966; Tokar et al., 1998; Wiggins & Trapnell, 1997).

These five dimensions are considered by many researchers to be comprehensive, embodying the basic dispositions of personality (Piedmont, 1993; Piedmont, McCrae, & Costa, 1991; Watson & Hubbard, 1996). However, this is not to suggest that the entire sphere of personality can be reduced to only five factors. Rather, each of the

factors represents an extremely broad, largely independent dimension and within each dimension are many distinct and more specific personality characteristics. This structure provides a useful and parsimonious framework for analyzing and assessing individual differences (Barrick & Mount, 1991; Digman, 1990; Goldberg, 1990).

Costa & McCrae (1992b) provide four reasons why they consider the five factor model valid. Firstly, they state that longitudinal and cross-sectional studies have shown the five factors to be enduring behavioural dispositions that remain reasonably stable across the life-span. Secondly, traits associated with the five factors have emerged from different personality systems and from studies of natural language. Thirdly, it appears that the five factors have convergent and discriminant validity and can be found across different age, sex, gender, race, and language groups (Digman, 1990; John, 1990). Finally, heritability studies demonstrate some biological basis for each of the five factors. Watson and Hubbard (1996) state that the main advantage of the five factor model is that each of the general traits defines a broad domain of human functioning that is distinct from all of the others. As a result the information provided is generally non-redundant which allows for extremely efficient investigation of personality characteristics.

5.6 Dimensions of the five factor model

5.6.1 Extroversion

Despite the emerging consensus on the number of dimensions, some ongoing debate remains over the meaning of the specific dimensions and the labels given to the dimensions (Barrick & Mount, 1991). The first of the five factors is generally considered to be extroversion. This dimension is measured in all inventories that measure the five factors of personality (Watson & Clark, 1997). In general extroverts are cheerful and social, preferring large groups and gatherings. Individuals high in this dimension tend to be warm, assertive, active, and talkative. They like excitement and stimulation and are usually upbeat, energetic, and optimistic (Costa & McCrae, 1992a).

Introversion is the absence of extroversion rather than the opposite. Therefore, introverts are more likely to be reserved rather than cold and unfriendly. They may not be shy, but may prefer their own company. Although individuals low on the dimension of extroversion are unlikely to have the buoyant spirits that characterize extroverts, this does not mean that they are invariably unhappy or pessimistic (Costa & McCrae, 1992a).

5.6.2 Neuroticism

The second factor goes by a variety of labels. It is known as emotional stability (Eysenck, 1967), stability, emotionality (John, 1989), emotional control (Fiske, 1949), negative affectivity (Watson & Clark, 1984), or neuroticism (Costa & McCrae, 1992a). In terms of stress and well-being, this is clearly the most influential domain of the personality scales (Matthews & Deary, 1998). It has also been shown to be particularly stable over the lifespan (Costa & McCrae, 1989). Essentially this dimension contrasts adjustment or emotional stability with maladjustement or neuroticism. Individuals high in neuroticism tend to have a negative view of themselves and a greater tendency to experience negative affects such as fear, sadness, embarrassment, anger, guilt, and disgust. They are also more prone to irrational ideas, less able to control their impulses, and tend to cope more poorly with stress (Costa & McCrae, 1992a).

The effects of neuroticism are pervasive. High neuroticism is associated with poorer personal adjustment and with increased somatic complaints (Costa & McCrae, 1987; Costa, McCrae, & Norris, 1981). In addition, the association between stress-proneness and neuroticism is apparent in measures of everyday functioning. For example, car drivers high in neuroticism were found to be more prone to stress in the form of anger, irritation, anxiety, and lack of confidence (Matthews, Dorn, & Glendon, 1991).

Although high neuroticism has been widely investigated, far less research attention has been paid to individuals who are low on this dimension (Watson & Clark, 1984). In general, they are emotionally stable and even tempered with an ability to stay reasonably calm even in stressful situations (Costa & McCrae, 1987).

5.6.3 Agreeableness

The third factor is most commonly known as agreeableness (Costa & McCrae, 1992a) or likability (John, 1989; Norman, 1963). This factor refers to the quality of an individual's interpersonal relationships. The primary focus is on specific behaviours undertaken during interpersonal interactions, such as cooperating with and trusting others. This is distinct from the extroversion factor that focuses primarily on the quantity and intensity of relationships (DeNeve & Cooper, 1998). Individuals high on this dimension tend to be richer in the more benevolent and humane aspects of personality. The key characteristics include being kind-hearted, altruistic, tolerant, helpful, and sympathetic to others (Barrick & Mount, 1991; Costa & McCrae, 1992a; Digman, 1990).

Individuals who are low in agreeableness are more likely to be disagreeable or antagonistic, egocentric, skeptical of others' intentions, and competitive rather than cooperative. However, there may be some beneficial aspects to being low in agreeableness. For example, skeptical and critical thinking can be useful in many life situations and a willingness to fight for one's own interests can also be advantageous (Costa & McCrae, 1992a).

5.6.4 Conscientiousness

The fourth factor is known most frequently as conscientiousness (McCrae & Costa, 1992a) or conscience (John, 1989) and less frequently as conformity (Fiske, 1949), will (Digman & Takemoto-Chock, 1981), or dependability (Digman, 1990). As indicated by the variety of labels for this dimension, there is some controversy about the key elements of conscientiousness (Digman, 1990). There is general agreement that individuals high in conscientiousness tend to be dependable, reliable, careful, punctual, thorough, and organized (John, 1989). In addition, it appears that this dimension is incomplete without including volitional variables such as being purposeful, strong-willed, and determined (McCrae & Costa, 1985, 1987). Perhaps as a result of these tendencies, conscientiousness is associated with high achievement in many spheres (Barrick & Mount, 1991; Digman & Takemoto-Chock, 1981; McCrae & Costa, 1992a). At the extreme, high conscientiousness may also lead to less desirable behaviours such as workaholism. Individuals low in conscientiousness are

not lacking in moral principles, but may be looser about how they apply them. They also tend to be more casual about working towards their goals (McCrae & Costa, 1992a).

5.6.5 Openness to Experience

The fifth factor is the most controversial of all the factors (DeNeve & Cooper, 1998). This dimension goes by a variety of labels including culture (Fiske, 1949; Norman, 1963; Tupes & Christal, 1992), intellect or intelligence (Digman & Takemoto-Chock, 1981; John, 1989), and openness to experience (McCrae & Costa, 1992a). Digman (1990) suggests that it is likely that all of these dimensions are encompassed within this factor. This domain is characterized by both an intellectual and unconventional orientation. Some of the difficulty defining this factor may stem from fundamental differences between questionnaire studies and studies of natural language. Trait descriptors typically associated with this dimension include intellectual curiosity, active imagination, and perception. However, the English language makes it difficult to access some of the other aspects of this domain because there is no equivalent word for "sensitive to art and beauty" (McCrae & John, 1992). Elements such as aesthetic sensitivity, attentiveness to inner feelings, preference for variety, and independence of judgment are also part of this factor. Individuals high in openness to experience tend to be curious, willing to entertain new ideas and unconventional values, and open to a variety of experiences. This dimension is not a measure of intelligence, but it may be related to elements of intelligence, such as divergent thinking (McCrae, 1987; McCrae & Costa, 1992a).

Individuals low on the dimension of openness to experience tend to be conventional and conservative. They prefer the familiar to the new and their emotional responses are somewhat muted. In addition, they tend to have a narrower scope and intensity of interests (McCrae & Costa, 1992a).

5.7 Criticisms of the five factor model

Historically trait approaches have been criticized as being poor predictors of behaviour and some researchers (e.g. Bentall, 1993) believe they are tainted by values and are skeptical of their ability to predict behaviour. In addition, there are concerns

regarding the adequacy of the five factor model as an organizational framework for personality. The most common criticisms centre around four main issues. These involve concerns that five factors may not be enough or may be too many, and that the five factors found by different investigators may not be equivalent (Matthews & Deary, 1998). In addition, there are concerns about the development of the Big Five model.

Regarding the first concern, some researchers (e.g. Waller & Ben-Porath, 1987) have suggested that the five factor model is not comprehensive enough because it cannot incorporate other respected personality taxonomies. McCrae, Costa, and Piedmont (1993) disagree on the basis that the California Psychological Inventory (CPI; Gough, 1987) can be incorporated into the five factor model. However, closer inspection of the data suggests that McCrae et al. (1993) may have been overly optimistic in their interpretation. They regressed each CPI scale on the five NEO-PI factors to see whether the five factor model could encompass Gough's folk constructs. The data revealed that seven of the CPI scales had adjusted multiple *R*s below .50, which suggests that Gough's Inventory contains constructs that are not measured by the NEO-PI. Schneider and Hough (1995) also question the comprehensiveness of the five factor model. In particular, they have raised the issue of how the five factor model can account for personality traits, such as locus of control, that do not fit into the five factor model but that do appear to predict job performance constructs.

Other researchers have also suggested that a five factor solution is inadequate. For example, Hogan (1986) states that a six factor solution would be more effective with extroversion replaced by two new factors that he calls sociability and ambition. Tellegen (1993) has forcefully argued for a seven factor model. He states that the five factor model is based on an incomplete set of trait descriptors and that when this is rectified, a seven factor solution is more appropriate. Others (e.g. Almagor, Tellegen, & Waller, 1995; Benet & Waller, 1995) have also expressed support for a "Big Seven" model of personality that is very similar to the existing Big Five but that incorporates factors of positive and negative valence. McCrae and Costa (1995) have commented on the two valence dimensions and agree that they are related to the Big Five personality factors, in particular, self-appraisal and social evaluation. However, they state that the valence dimensions do not constitute core personality traits.

In contrast to the cluster of researchers who suggest that five factors is too few, others have expressed concern that five factors may be too many. The theorist who has most strongly argued this case is Eysenck (1991, 1992) who has been vocal in criticizing the five factor model. He argues in favour of his own three factor model and suggests that agreeableness and conscientiousness are in fact primary level traits that are factors of his higher-order factor of psychoticism. He also states that openness is a part of extroversion and (low) conscientiousness is an aspect of neuroticism.

The third broad area of concern with the five factor model is that other researchers have identified five broad personality factors that differ conceptually and psychometrically from the factors currently known as the "Big Five". For example, Zuckerman et al. (1993) suggest an 'alternate five' where two of the factors are similar, extroversion (that they call sociability) and neuroticism-anxiety. However, they also suggest traits of aggression-hostility (similar to low agreeableness) and impulsive sensation seeking (similar to low conscientiousness). In the alternate five openness is excluded in favour of an activity factor.

Block (1995) has expressed concerns about the development of the five factor model. In particular, he states that in the early stages of developing the five factor model, important information, such as words that were too complex for college undergraduates, was eliminated from the pool of trait descriptors that was later used to validate the big five factor structure. He suggests that inclusion of a wider range of personality descriptors would have generated factors beyond the five currently identified. Block also questions the adequacy of lexically derived taxonomies overall and is critical of the notion that single word trait descriptors are an appropriate method of developing a personality taxonomy. Goldberg and Saucier (1995) have commented on Block's criticisms. They state that although the evidence for the Big Five model is not perfect, in their opinion, it is currently best model of personality available.

Matthews and Deary (1998) summarize the current consensus regarding the structure of trait models of personality when they state that there is almost universal agreement that neuroticism and extroversion should be included as personality dimensions. In

addition, they note that there is also widespread support for conscientiousness and agreeableness, although it is possible that these factors could be superseded by a higher-order factor such as psychoticism, which means that the "Big Five" and "Gigantic Three" might not be completely at odds.

Of all the factors in the Big Five model, openness continues to be the most controversial (DeNeve & Cooper, 1998; De Raad & Van Heck, 1994; Matthews & Deary, 1998). Goldberg (1992) correlated lexically defined factors with the NEO-PI (Costa & McCrae, 1989) scales. Theoretically this should provide equivalent measures, however, the correlation between the lexical and NEO-PI measures of the Openness scale was only .46, which is considered too low for parallel versions of a scale. In lexical systems, the openness dimension has been called a variety of names, such as imagination, culture, and intellect, which are not representative of the same construct. In addition, openness is the only dimension totally dropped by Zuckerman et al. (1993). Despite the criticisms of the openness dimension, McCrae (1996) is adamant that this factor has continued social relevance.

5.8 Negative affectivity and neuroticism

Neuroticism is one of the five fundamental dimensions of personality included in the Big Five model (McCrae, 1990) and it is the dimension that is most strongly and consistently linked to stress and well-being (Cooper, 2000; Matthews & Deary, 1998; Tokar et al., 1998). The construct of neuroticism encompasses emotional vulnerability, pessimism, and a general tendency to react negatively to life and work stressors (Parkes, 1994). Neuroticism is very closely aligned with negative affectivity, another construct that is influential in research on stress and well-being (Watson & Clark, 1984; Watson & Pennebaker, 1989). In fact, these constructs are so similar that many researchers suggest that the terms neuroticism and negative affectivity can be used interchangeably (Schaubroeck, Ganster, & Fox, 1992; Watson & Clark, 1984). However, it is perhaps more precise to view neuroticism as a manifest indicator of negative affectivity. For example, Heinisch and Jex (1998) and Parkes (1990) used measures of neuroticism to operationalize negative affectivity. In the current research, the term negative affectivity is used because it is broad enough to represent a general negative condition (Spector et al., 2000; Watson & Clark, 1984)

and has fewer psychiatric connotations (McCrae, 1990). However, where a study specifically investigates neuroticism, the term neuroticism will be used.

5.9 Describing negative affectivity

Negative affectivity is the predisposition to feel chronically dissatisfied and unhappy (Costa & McCrae, 1980). A tendency to emphasize the negative is the hallmark of negative affectivity. For example, Watson and Clark (1984) describe negative affectivity as "a mood dispositional dimension which reflects a tendency to view things negatively" (p. 465) and state that negative affectivity is a "pervasive disposition that manifests itself even in the absence of any overt stress" (p. 466). Watson and Pennebaker (1989) describe negative affectivity as a construct that "subsumes a broad range of aversive mood states, including anger, disgust, scorn, guilt, fearfulness, and depression (p. 234).

Overall, individuals high in negative affectivity are more likely to focus on the negative aspects of others and the world in general, have a heightened sensitivity to minor failures, frustrations, and irritations in daily life, and an intensified focus on negative experiences (Jelinek & More, 1995; Watson & Clark, 1984; Watson & Pennebaker, 1989). This may be because negative information tends to stay fresher in their minds. Larsen (1992) demonstrated that individuals high in negative affectivity tend to be capable of greater accessibility of negative information during recall. In general higher scores on measures of negative affectivity have been linked to poorer mental health (Clark et al., 1994; Watson & Pennebaker, 1989). People who are high in negative affectivity tend to display more emotional instability and experience more stress, anxiety, depression, hostility, and self-consciousness (McCrae & Costa, 1986).

It appears that negative affectivity is at least in part genetically determined and that it is extremely stable in adulthood (Matthews & Deary, 1998). Even intervening life changes appear to have little effect on the stability of negative affectivity. For example, Ormel (1983) found that negative affectivity scores were powerful predictors of psychological well-being even after seven years, but that objectively assessed life stress and changes in life circumstances over the time interval were not.

5.10 The role of negative affectivity in occupational stress research

In the transactional model of stress and coping (Lazarus, 1966; Lazarus & Folkman, 1984), stress is not found in objective circumstances or in the person, but in an ongoing interaction between the two. As such appraisal and coping play key roles in the stress process. It is simple enough for an individual to put a rating on the perceived stressfulness of any event they have experienced and to compare the relative stressfulness of two or more events, but it becomes difficult to compare perceived stress across individuals because perceptions of stress differ widely. One of the reasons for these differing responses is thought to be related to negative affectivity (McCrae, 1990). Individuals with high scores on measures of negative affectivity tend to consistently report more stress than individuals with low negative affectivity scores (Brief et al., 1988; Parkes, 1990; Walsh et al., 1997). Research suggests that negative affectivity is related to both the appraisal of the stressor and the experience of distress. This means that individuals high in negative affectivity are likely to assess a given objective stressor as more negative and to be more reactive to a given level of stress (Bolger, 1990; Bolger & Schilling, 1991; Bolger & Zuckerman, 1995; Bookwala & Schulz, 1998; Gunthert, Cohen, & Armeli, 1999; Ormel & Wohlfarth, 1991; Suls, Green, & Hillis, 1998) or in response to major life events (Innes & Kitto, 1989; Ormel & Wohlfarth, 1991; Parkes, 1990).

This phenomenon is at the heart of one of the most hotly debated issues in occupational stress. The controversy concerns the degree to which negative affectivity influences self-report measures of occupational stress and strain (Cooper, 2000). As discussed, there is ample evidence to suggest that negative affectivity correlates highly with reported symptoms of stress and with stress outcomes such as affective distress. What concerns some researchers is the possibility that negative affectivity may inflate correlations between self-reports of perceived occupational stress and symptoms of distress (Brief et al., 1998; Burke et al., 1993). The proposed relationship is that individuals who have a tendency towards aversive mood states will interpret their environment more negatively, therefore systematically biasing their self-reports of stress and stress outcomes and inflating correlations among self-report stress measures (Brief et al., 1998; Schaubroeck et al., 1992; Watson & Pennebaker, 1989). An additional concern is whether self-report measures of stress and stress

outcomes measure different constructs or just tap into a common dispostional variance such as negative affectivity (Watson & Pennebaker, 1989).

In summary, negative affectivity may have a biasing effect on self-reports of stress and stress outcomes either because negative affectivity leads to spurious over-reporting of stress and stress outcomes or because negative affectivity and stress reports may measure the same common factor.

This has sparked a debate over the need to control for the confounding effects of negative affectivity before examining relationships between stressors and outcome variables (e.g. McCrae, 1990). Some researchers (e.g. Brief et al., 1988; McCrae, 1990; Payne, 1988) have suggested that the effects of negative affectivity should be statistically controlled with some form of partialling to reduce this potential bias. Indeed, several researchers have found that statistically controlling for negative affectivity results in varying degrees of reduction in stressor-strain correlations (Brief et al., 1988; Chen & Spector, 1991; Jex & Spector, 1996).

However, it must be noted that only Brief et al. (1988) found that negative affectivity explained significant amounts of variance in terms of stressor-strain effects. Chen & Spector (1991) found very little reduction after partialling negative affectivity, as did Jex and Spector (1996). Schaubroeck et al. (1992) and Jex & Spector (1996) suggest that the reason Brief and colleagues found such strong findings and the reason these findings have not been replicated is linked to their choice of measure. Brief et al. used a measure based on the Life Experiences Survey (Johnson & Sarason, 1979) which requires participants to make evaluative judgments about the personal impact of various life events and to indicate the current impact of each event on a scale ranging from *very negative* to *very positive*. It is possible that the structure of this measure makes it particularly susceptible to inflated stressor-strain correlations.

Other researchers have argued strongly against partialling. For example, Spector et al. (2000) state that partialling out the effects of negative affectivity is dangerous because it can effectively remove substantive effects rather than bias. They also suggest that it is illogical to remove the effects of a variable before clarity is achieved about what the variable actually does. In their opinion, negative affectivity is not a bias that needs to

be controlled, but an important variable that can play a variety of roles in the occupational stress process. To be considered a bias, negative affectivity would need to distort the assessment of the intended construct and could not be causally inter-linked with the true underlying construct as either a cause or an effect. An example of a genuine bias is a response set, such as agreement, whereby an individual responds to all items in a similar way regardless of the variable that is intended to be measured. Currently there is no evidence to demonstrate that negative affectivity functions only as a bias. Spector and colleagues suggest that it is certainly possible that negative affectivity does function as a bias, particularly when the measures have an affective tone and when both the stressors and strains have a theoretical overlap with negative affectivity. However, in addition to potentially functioning as a bias, negative affectivity plays a variety of complex and as yet not completely understood, roles in the stress process.

Spector et al. (2000) state that it is critical that the intended construct is considered in relation to possible bias. For example, if an occupational stress measure is supposed to measure the objective work environment, it is inevitable that many factors that are independent of the work environment will influence the measure. This argument taken to extreme says that all measures of occupational stress are biased because they are always dependent on the perceptions of individuals. However, if an individual's perceptions of the work environment are considered valid, then the measure is still valid. As Lazarus and Folkman (1984) state, in stress research an individual's perceptions are paramount and far more crucial than objective reality. Therefore, partialling out negative affectivity would not make the self-report measure any more objective.

Spector et al. (2000) suggest that any measure of negative affectivity is in part reflective of the stable trait of affective disposition and in part reflective of factors such as transitory mood or reactions to stressful events at work. In terms of trait negative affectivity, the latter represents systematic error variance. However, in stress research this is actually the target variance. As it is currently impossible to separate these two hypothesised components of negative affectivity, the end result of partialling out the effects of negative affectivity is that true variance is partialled out

along with any systematic error variance. In the simplest terms possible, valuable information is lost.

Payne (2000) also argues against partialling out the effects of negative affectivity as a matter of course. Although he does state that in many cases the partialling effect is small so it may be of less concern than some (e.g. Spector et al., 2000) suggest. Judge et al. (2000) are also not in favour of routinely partialling out the effects of negative affectivity. They suggest that negative affectivity can be both a substantive and biasing factor at the same time. In support of this they extend one of the mechanisms proposed by Spector and colleagues – the perception mechanism. They describe a study using structural equation modeling that investigates the role of self-deception and negative affectivity in the occupational stress process.

Judge et al. (2000) argue that individuals low in negative affectivity may actually under-emphasize their health problems and that in contrast, individuals high in negative affectivity engage in fewer forms of self-deception so that their reports concerning their health are more accurate. Others have also found that individuals high in negative affectivity tend to be more accurate in assessing their environment (e.g. Sacco, 1985).

The essence of the argument put forward by Judge and colleagues (2000) is that controlling for negative affectivity as a single bias measure may give the impression that negative affectivity inflates the relationship between occupational stress and strain. However, they argue that due to the effects of self-deception, negative affectivity controls for the deflation and not inflation of this relationship. In their study they found that individuals low in negative affectivity tended to deceive themselves and as a result were less stressed and complained less about health problems, while individuals high in negative affectivity were less likely to deceive themselves and complained more about health problems. Therefore, self-deception in the form of positive biases played a significant role in the relationship between stress and outcome variables. In particular, approximately half of the influence of negative affectivity on stress and almost all of the influence of negative affectivity on health complaints was mediated through self-deception. Judge et al. (2000) claim that their

findings suggest that the construct of self-deception may be as important as negative affectivity in stress research.

One aspect of the study by Judge et al. (2000) that must be noted is that the relationship between negative affectivity and stress remained significant even after controlling for self-deception. This implies that negative affectivity does positively influence stress and supports Watson and Clark's (1984) conclusion that individuals high in negative affectivity react more strongly to stressful situations than individuals low in negative affectivity.

In summary, it appears that the only conclusive statements that can be made about the role of negative affectivity in the stress process are that the effects are complex and worthy of fuller investigation (Heinisch & Jex, 1998). The one area of consensus is that measuring negative affectivity is useful in any stress research in order to provide a context in which to interpret the information on stress (McCrae, 1990; Parkes, 1990; Schaubroeck et al., 1992). In terms of the issue of partialling out the effects of negative affectivity, Cooper (2000) summarizes current thinking with his statement that "the growing use of statistical controls for negative affectivity has not been endorsed as an effective strategy for enhancing the interpretability of job stress research" (p. 77).

5.11 Possible explanations for the relationship between negative affectivity and stress

Spector et al. (2000) discuss six ways that negative affectivity might affect occupational stressors and impact upon well-being. The mechanisms they discuss are not intended to be mutually exclusive and may all play a role. Each was chosen based on current evidence and Spector and colleagues suggest that there is more evidence for the effects of these mechanisms than bias effects. They contend that the majority of evidence for bias consists simply of observed correlations between measures of negative affectivity and measures of other variables. Therefore, they state that it is far more likely that negative affectivity plays a variety of roles in the occupational stress process.

5.11.1 The perception mechanism

This mechanism suggests that individuals who are high in negative affectivity tend to see the world in a negative light. In terms of the transactional model of stress and coping (Lazarus, 1966; Lazarus & Folkman, 1984), the stress response is triggered by a gap between perceived demands and perceived resources. This means that individuals who exaggerate the scale of demands will experience more stress. In addition, individuals who underestimate their resources will also be more vulnerable to stress (Matheny et al., 1986). Essentially this mechanism focuses on individual differences in appraisal. That is to say that individuals high in negative affectivity are more likely to have a pessimistic style of appraisal and appraise stressful events as threatening rather than challenging or neutral (Costa & McCrae, 1992a; Mayes et al., 2000).

The findings of several studies are supportive of this mechanism. For example, according to Moyle (1995), individuals high in negative affectivity perceive their jobs as more stressful than individuals low in negative affectivity. Jelinek and More (1995) found that individuals high in neuroticism reported more hassles and hassles of greater intensity than individuals low in neuroticism. Matthews and Deary (1998) state that individuals high in neuroticism tend to perceive themselves as more lonely even when their social networks are as well developed as other individuals. Tokar et al. (1998) also state that people with high negative affectivity perceive more stress and therefore experience more distress. This mechanism states that individuals who reports large amounts of stress in their jobs are accurately portraying their perception of their situation, but the key point is that these perceptions are influenced by negative affectivity as well as the actual work situation.

The symptom perception hypothesis discussed by Watson & Pennebaker (1989) corresponds to this mechanism. This hypothesis states that individuals high in negative affectivity are more likely to complain about their health (and other aspects of their lives) and may exaggerate their health problems. It is becoming increasingly clear that negative affectivity does not correlate with physiological stress, but does correlate with self-reports of health (Schaubroeck et al., 1992; Watson & Pennebaker, 1989). This means that in a situation where two individuals have identical health

problems, the individual with the highest level of negative affectivity will be more likely to over-report symptoms of illness. In support of this, research does suggest that high negative affectivity is associated with poorer personal adjustment and with increased somatic complaints (Costa & McCrae, 1987; Costa, McCrae, & Norris, 1981).

A longitudinal study by Staw, Bell, and Clausen (1986) also provides a possible demonstration of this mechanism. They assessed personality during adolescence and found that affective dispositions could predict job satisfaction over a decade. The longitudinal nature of this study means that individual working experience could not have affected personality (the causality mechanism). Staw et al. concluded that individuals differ in their tendency to experience positive and negative emotions and that this tendency affects their perceptions of job conditions and their affective reactions.

Spector and O'Connell (1994) reported similar findings when they investigated a US student population. They assessed the students' level of negative affectivity in their final semester of college and then one year later assessed their reports of stressors and strains from their new full-time jobs. The results indicated that pre-job negative affectivity significantly predicted later perceptions of (four of six) job stressors and (two of three) job strains.

5.11.2 The hyper-responsivity mechanism

This mechanism suggests that individuals who are high in negative affectivity are hyper-responsive to their environment so that stressors cause them to experience more distress and strain. That is to say that given an identical environment, individuals who are high in negative affectivity will experience stress more quickly and experience more distress. According to this mechanism, a person's perceptions of stress will be the same, but his or her response will differ. This implies an interaction between negative affectivity and stress whereby relations of job stress will be higher for individuals high in negative affectivity and lower for individuals lower in negative affectivity. Moyle (1995) and Parkes (1990) have found support for this interaction.

The findings of several studies are supportive of this mechanism. For example, in a study of major life events, Ormel and Wohlfarth (1991) found that the occurrence of life stressors was related to more subsequent distress in individuals with high neuroticism scores even after adjusting for initial levels of distress. Bolger (1990) studied students taking a high pressure medical exam and found that the students scoring high in neuroticism reported more distress than those scoring low in neuroticism, even after controlling for prior mood. Larsen and Ketelaar (1991) also investigated the relationship between negative affectivity and mood. They found that although it is normal to experience more distress as perceptions of the severity of a stressful event increase, individuals high in negative affectivity tended to experience even greater increases in negative mood.

In another study with students, Bolger and Zuckerman (1995) asked participants to keep diaries about interpersonal conflicts. They found that the participants who were higher in neuroticism were more upset by conflicts. Bolger and Schilling (1991) used a similar methodology in their study of 166 married adults who provided daily reports of minor stressful events and mood for six weeks. They also found that interpersonal conflicts played a key role in the neuroticism-distress relationship. It appeared that individuals high in neuroticism were more sensitive to adverse emotional reactions to the hassles of every day life. Individuals high in neuroticism showed the most distress following stressful events. All participants found arguments with their partner or another adult the most stressful events in their lives but high neuroticism participants found these particularly distressing. In this study stressor reactivity was twice as important as stressor exposure in explaining the neuroticism-distress relationship.

In the context of the transactional model of stress and coping (Lazarus & Folkman, 1984), this mechanism suggests that individuals high in negative affectivity are more reactive to negative primary and secondary appraisals. For example, Gunthert et al. (1999) found that individuals high in negative affectivity were more sensitive to negative stimuli leading them to experience more distress as a result of negative primary and secondary appraisals. They state that this is one of the reasons why individuals high in negative affectivity experience frequent negative moods.

5.11.3 The selection mechanism

This mechanism proposes that individuals who are high in negative affectivity somehow end up in more stressful jobs than those lower in negative affectivity. In support of this hypothesis Spector, Jex, and Chen (1995) reported that independent observers using objective job analysis techniques found that individuals high in negative affectivity were more likely to be in jobs lower in autonomy and scope, both of which are possible job stressors. Cook, Vance, and Spector (1995; cited in Spector et al., 2000) found that students high in negative affectivity performed less well in a simulated job interview than students low in negative affectivity. In a field study by the same authors, college students high in negative affectivity were less likely to successfully complete a job interview after graduation than students low in negative affectivity. A similar mechanism has also been proposed by Kasl and Rapp (1991) when they suggested that individuals high in Type A behaviour are more likely to select themselves into demanding occupational settings.

5.11.4 The stressor creation mechanism

This mechanism raises the possibility that individuals high in negative affectivity behave in ways that end up increasing the stress in their lives (Brief et al., 1988; Depue & Monroe, 1986; Dohrenwend, Dohrenwend, Dodson, & Shrout, 1984). This is consistent with the finding that there is an association between negative affectivity and greater exposure to negative life events (Bolger & Schilling, 1991). A possible explanation for this mechanism is that a person who is high in negative affectivity is more likely to behave in ways that result in poor interpersonal relationships. For example, there is some research that suggests that negative affectivity predisposes people to marital problems (O'Leary & Smith, 1991) and to shyness (Crozier, 1982).

This mechanism is likely to be particularly relevant to social stressors because of the strong possibility that many of the behaviours associated with negative affectivity elicit negative reactions from others. For example, in their longitudinal study Magnus, Diener, Fujita, and Pavot (1993) assessed participants on two occasions, four years apart. They distinguished between objective events, such as divorce, and subjective events, and found that neuroticism was more strongly related to objective

life events. Their findings led them to conclude that neuroticism influenced future life events but that life events did not have any effect on neuroticism. They proposed two possible hypotheses for these relationships. Firstly, that individuals high in neuroticism react to a wider variety of events in a negative way (essentially the hyper-responsivity mechanism). Secondly, they suggested that individuals high in neuroticism behave in ways that make social interaction difficult and as such may actually initiate negative events such as divorce and job loss.

It is possible to interpret a study by Gunthert et al. (1999) as further support for this mechanism. Gunthert and colleagues asked students to complete questionnaires at the end of every day for fourteen consecutive days and found that individuals high in negative affectivity were more likely to report interpersonal events as their most stressful event of the day than individuals low in negative affectivity. Participants high and low on negative affectivity did not differ in their reports of any other stressors. Gunthert et al. proposed a variety of possible reasons for this finding. They suggested that individuals high in negative affectivity may report interpersonal stress more frequently because others respond poorly to their negative affect, which leads to a negative interpersonal event. Another option they put forward is that high negative affectivity might lead to a negative bias in interactions with others so that neutral encounters could be misinterpreted as negative encounters. The results of this bias could lead simply to inaccurate labeling of the encounter or might actually create a negative encounter. The final possibility suggested by Gunthert et al. is that individuals high in negative affectivity have a negative recall bias for interpersonal stressors and are more able to remember negative interpersonal events than individuals low in negative affectivity. Marco and Suls (1993) have suggested that this is the case, but Bolger and Schilling (1991) did not find support for a negative recall bias in their study of married couples.

The large body of evidence regarding negative responses to depressed individuals (e.g. Sacco, Dumont, & Dow, 1993) is likely to be particularly applicable here. The key to the stressor creation mechanism is that negative affectivity produces real and objective job stressors that can be observed by others and aren't biased by perceptions, but that these stressors are specific to the individual.

In summary, it is likely that the relationship between negative affectivity and negative life events is complex and dependent on multiple factors, but there does appear to be some evidence for a causal link between negative affectivity and subsequent stress reactions.

5.11.5 The mood mechanism

This mechanism hinges around the possibility that mood influences an individual's response to measures of stress, strain, and negative affectivity. For example, Marcelissen and colleagues (1988) found using a structural equations approach that cross-sectional stressor-strain correlations were biased by factors that could be interpreted as mood factors.

Studies of induced negative mood states on stress reporting have found that participants in an induced negative mood did report significantly more negative life events and lower social support than participants who were induced to have a positive mood (Cohen, Towbes, & Flocco, 1988). In addition, participants induced into a negative mood reported more aches and pains and were less confident that they could alleviate these symptoms than participants induced into a positive mood (Salovey & Birnbaum, 1989). These studies suggest that negative mood does inflate self-reports of stressors and strains.

Another possibility with this mechanism is that job conditions influence mood which influences reports of negative affectivity (Spector, 1992). It is possible that an individual experiencing a high degree of stress feels more anxious and upset which inflates reports of negative affectivity, regardless of whether the underlying trait level of negative affectivity has changed. Therefore, any correlation between negative affectivity and occupational stress may be more reflective of the indirect effect of occupational stress on the report of negative affectivity, instead of negative affectivity on reports of occupational stressors (Spector et al., 2000).

5.11.6 The causality mechanism

The final mechanism argues that an individual who is in a highly stressful job, actually becomes higher in negative affectivity over time. In this proposed mechanism, the job affects the trait itself (Schonfeld, 1992). Watson and Slack (1993) identified a relationship between negative affectivity and job satisfaction that suggested that people who were dissatisfied with their jobs were likely to become higher in negative affectivity. Although negative affectivity is normally considered to be stable over time (Watson & Clark, 1984; Watson & Pennebaker, 1989), it may be possible that indicators of negative affectivity, in particular anxiety and depression, can be influenced by high levels of occupational stress (Schonfeld, 1992).

This is very similar to one of the mechanisms proposed by Matthews and Deary (1998) to describe the relationship between illness and health. They raised the possibility that illness might cause personality changes. For example, a person suffering a chronic illness might over time become lower in extroversion and higher in neuroticism.

In summary, the six mechanisms proposed by Spector et al. (2000) include the perception mechanism, which suggests that negative affectivity leads people to see more stress in their environment than may actually exist. The hyper-responsivity mechanism which assumes that people who are high in negative affectivity are so sensitive to their environment that they experience more stress leading to more strain. The selection mechanism, which states that individuals high in negative affectivity self-select into more stressful jobs. The stressor creation mechanism which argues that individuals high in negative affectivity behave in ways that cause others to respond negatively to them which causes more stress. The mood mechanism which suggests that an individual's mood influences their reports of stressors, strains, and negative affectivity and the causality mechanism which proposes that individuals in stressful jobs end up higher in negative affectivity. These six mechanisms provide possible explanations of the relationship of negative affectivity to other variables. The plausibility of these mechanisms effectively strengthens the argument by Spector and colleagues that it is illogical to assume that the relationship of negative affectivity to occupational stressors and strains is inflated by a negative affectivity bias.

5.12 Other dimensions of the Big Five model

Neuroticism is overwhelmingly the personality dimension that is most strongly related to stress and well-being. The majority of stress research that has incorporated the five factor model has focused on the role of neuroticism and to a much lesser extent extroversion. Both extroversion and neuroticism have been linked to positive and negative affect respectively, and therefore also to subjective well-being (Costa & McCrae, 1980).

The other three dimensions of the five factor model have been almost ignored. Miller, Griffin, and Hart (1999) suggest that one of the reasons that conscientiousness has been overlooked is that it is more strongly related to work performance, a variable that is only infrequently included in models of occupational stress. There is some evidence that conscientiousness is at the root of successful job performance in a variety of occupations. For example, Barrick and Mount (1991) found that conscientiousness was the most valid predictor of the Big Five for the three job performance criteria that they measured: job proficiency, training proficiency, and personnel data. However, Tett, Jackson, and Rothstein (1991) suggest that the Big Five variable most highly related to job performance is agreeableness. When Miller et al. investigated conscientiousness, they found that it was related to a measure of organisational citizenship and that it moderated the impact of role clarity and ambiguity on individual well-being. As a result, they suggested that conscientiousness does have a role to play in the broad realm of organisational health and that it should be more widely investigated in the future.

Trull and Sher (1994) used the five factor model in their study that assessed a non-clinical population for various disorders using the DSM-III-R. They found that anxiety disorders were associated with high neuroticism and low extroversion, low agreeableness, low conscientiousness, and high openness. Difficulties in social functioning were also associated with low agreeableness and low conscientiousness and it appeared that individuals high in openness to experience had a tendency to be over-sensitive. In contrast, extroversion was related to good mental health.

5.13 Personality and coping

There is an emerging awareness that interpersonal factors, such as personality, influence every aspect of the stress and coping process including the occurrence of stressful events, the appraisal of events, the choice and effectiveness of coping strategies, and the impact of stress on well-being (Carver et al., 1989; Eckenrode, 1991; O'Brien & Delongis, 1996). For example, Mayes, Johnson, and Sadri (2000) investigated the relationships among job stressors, job level, personality, and coping resources. They concluded that overall personality factors appear to play more of a role in coping behaviour than factors such as job level or specific job stressors.

As discussed, there is evidence that individuals high in negative affectivity are more likely to have a pessimistic style of appraisal and to appraise stressful events as more distressing, which is essentially the perception mechanism (Costa & McCrae, 1992a; Mayes et al., 2000). In addition, research suggests that individuals high in negative affectivity are more reactive to negative primary and secondary appraisals (the hyper-responsivity mechanism, Gunthert et al., 1999; Larsen & Ketelaar, 1991). One of the reasons people with high negative affectivity scores experience more distress may be because they use less effective coping strategies. It is possible that negative affectivity leads to ineffective coping, which leads to increased distress (Bolger, 1990). McCrae and Costa (1986) state that this has an impact on secondary appraisals of coping efficacy. In particular, secondary appraisals will be negatively biased because they are based on previous unsuccessful coping experiences. Gunthert et al. (1999) found support for this hypothesis when they confirmed that participants high in negative affectivity felt less confident in their coping resources for dealing with daily stress. Clark et al. (1994) propose another possible reason. They state that individuals high in negative affectivity have a negative self-evaluation bias and as a result they are likely to feel less confident in their ability to deal effectively with stress.

In their differential choice-effectiveness model, Bolger and Zuckerman (1995) suggest that the emotional reactivity commonly associated with negative affectivity can be explained by differences in coping choice and coping effectiveness. Coping choice refers to the specific strategy or strategies that an individual chooses to manage

their stress. Coping effectiveness refers to how successful those strategies are in reducing distress. Bolger and Zuckerman (1995) provided the first evidence that negative affectivity affects both coping choice and effectiveness for daily stresses when they found that self-controlling coping led to decreased depression for individuals low in negative affectivity but to increased depression for individuals high in negative affectivity.

Much research energy has been devoted to linking personality traits with the use of particular coping strategies (Carver et al., 1989). Coping resources, not coping strategies are the focus of the current research. However, in order to provide a thorough justification for the forthcoming hypotheses, the research linking coping strategies and the Big Five personality dimensions will be summarized because in some cases there is an overlap between coping strategies and coping resources. For example, depending on the context social support can function as either a strategy or a resource (Hammar & Marting, 1988; Taylor, 1991; Watson & Hubbard, 1996). In addition, over time some coping strategies contribute to coping resources. For example, exercise is a coping strategy and contributes to the development of physical coping resources (Long & Flood, 1993).

The clearest evidence of theoretical links between personality traits and coping strategies is for neuroticism and extroversion (Vollrath & Torgersen, 2000). In general terms, neuroticism is linked to a reliance on emotion focused strategies. Although not inherently good or bad (Beehr, 1995), these strategies are not aimed at resolving the problem and frequently end up perpetuating negative feelings (Bolger & Schilling, 1991; Costa & McCrae, 1980; McCrae & Costa, 1986; Rim, 1986). In contrast, extroverts are more likely to use active problem oriented coping strategies, possibly because they are more likely to appraise stressful events as challenges and because their gregarious nature makes them more likely to seek social support in difficult situations (David & Suls, 1999).

For the most part the literature concurs with these generalizations. The link between neuroticism and emotion-focused coping strategies has been demonstrated in many studies. For example, neuroticism has been associated with the strategies of seeking of emotional support (Rim, 1986; Watson & Hubbard, 1996), disengagement (Carver

et al., 1989; Watson & Hubbard, 1996), wishful thinking (Gunthert et al., 1999; McCrae & Costa, 1986; Rim, 1986), self-blame (Bolger, 1990; Gunthert et al., 1999), hostile reaction, escape, sedation (Amirkhan, Risinger, & Swickert, 1995; Dorn & Matthews, 1992; Gunthert et al., 1999; Jelinek & More, 1995; Mayes et al., 2000; McCrae & Costa, 1986), and emotion focused coping in general (Bolger, 1990; Carver et al., 1989; David & Suls, 1999; Deary et al., 1996; Endler & Parker, 1990; Hart, 1999; McCrae & Costa, 1986; O'Brien & DeLongis, 1996; Saklofske & Kelly, 1995; Vollrath & Torgersen, 2000). In addition, neuroticism has been inversely linked to problem-focused strategies (Endler & Parker, 1990; Rim, 1986).

The relatively stable use of emotion-focused coping behaviours appears to further increase distress under pressing conditions (Ormel, Sanderman, & Stewart, 1988). The key question is why are individuals high in neuroticism more likely to focus their coping efforts on relieving the symptoms of stress rather than tackling the problem directly? Mayes et al. (2000) suggest that the emotionally reactive style typically associated with people high in neuroticism, might make them more likely to be overwhelmed by stress and want to seek relief as quickly and expediently as they can. In effect, they are simply less able to muster the resources required for problem solving coping.

Several studies have demonstrated a relationship between extroversion and coping. In particular, that extroversion is associated with greater use of problem-focused coping behaviours (Mayes et al., 2000; McCrae & Costa, 1986; Rim, 1986; Watson & Hubbard, 1996) which are generally viewed as effective options to deal with stress (Matthews & Deary, 1998). For example, McCrae and Costa (1986) found that extroverts tend to use rational action, perseverance, positive thinking, restraint, and self-adaptatiton as ways of coping with stress. Dorn and Matthews (1992) found similar results in their study investigating drivers' responses to stress and Amirkhan et al. (1995) reported the results of two studies that showed that extroversion was associated with person-seeking tendencies in response to stress.

However, extroversion is sometimes positively related to emotion-focused strategies (David & Suls, 1999; McCrae & Costa, 1986). For example, Mayes et al. (2000) found that extroversion was not associated with problem focused coping as other

studies have suggested. They found that it was related to other strategies including physical activity and active emotional control, which led them to suggest that it is possible that extroverts choose outgoing, active coping responses even when their responses are emotion focused rather than problem focused. Watson and Hubbard (1996) note that given their personality characteristics, it is logical for extroverts to turn to others during times of stress.

In comparison with neuroticism and extroversion, the other three dimensions of the five factor model have received far less empirical attention (David & Suls, 1999; O'Brien & Delongis, 1996; Vollrath & Torgersen, 2000). However, some general conclusions can be drawn about the role of conscientiousness, agreeableness, and openness to experience in coping.

The role of conscientiousness as a variable in coping research is only just emerging (Watson & Hubbard, 1996; Vollrath & Torgersen, 2000). Overall it appears that high conscientiousness is linked to the use of active strategies including planning and problem solving (Vollrath & Torgersen, 2000; Watson & Hubbard, 1996) and less frequent use of emotion-focused coping including alcohol and drug use, disengagement, and denial (O'Brien & Delongis, 1996; Watson & Hubbard, 1996). Vollrath & Torgersen (2000) investigated combinations of personality factors and found that individuals who were low in neuroticism and high in conscientiousness experienced less than average stress and used an effective and varied coping style. However, David and Suls (1999) found no associations between conscientiousness and the use of particular coping strategies. This may have been because their investigation focused on daily coping, whereas many of the other studies have used long-term or dispositional measures.

The factor of agreeableness has also been linked to support seeking, positive reappraisal (Jelinek & More, 1995), and active coping and planning (O'Brien & Delongis, 1996; Watson & Hubbard, 1996). Jelinek and More (1995) found that individuals scoring high on conscientiousness and agreeableness have fewer and less intense hassles, measured by the Hassles Scale, (Kanner, Coyne, Schaefer, & Lazarus, 1981) than those high in neuroticism.

Openness to experience is the most controversial factor in the five factor model (DeNeve & Cooper, 1998). To date the general consensus has been that this factor is only weakly and inconsistently related to coping (McCrae & Costa, 1986; O'Brien & Delongis, 1996; Watson & Hubbard, 1996). However, David and Suls (1999) recently investigated openness to experience in terms of daily coping efforts and concluded that the relationship between openness and coping may be more complex than correlational studies have been able to demonstrate.

As discussed, much research has linked personality factors to specific coping styles. In particular, neuroticism and extroversion are linked to emotion focused and problem focused strategies respectively. However, links between personality factors and coping resources have been largely ignored. Certainly investigating associations between coping resources and personality factors in a population of community workers is uncharted territory. Therefore, this aspect of the current research is exploratory. However, taking cues from the research focusing on coping strategies allows some specific predictions to be made about coping resources and personality.

In particular, due to the pervasive negative effects of neuroticism on all aspects of the stress and coping process,

It is hypothesized that neuroticism will be inversely related to coping resources.

Individuals high in extroversion have a tendency to seek the company of others when under stress (Watson & Hubbard, 1996). In addition, individuals high in agreeableness tend to be pleasant, co-operative, and trustworthy (Costa & McCrae, 1992a). As a result they are likely to have well-developed social networks (Watson & Hubbard, 1996). Therefore,

It is hypothesized that extroversion and agreeableness will be directly related to social coping resources.

Extroversion is characterised by a positive, optimistic, and upbeat nature (Costa & McCrae, 1992a). Cognitive coping resources provide an indication of a person's

sense of self-worth, their orientation towards others, and how optimistic they are about life in general (Hammer & Marting, 1988). Therefore,

It is hypothesized that extroversion will be directly related to cognitive coping resources.

5.14 Personality and burnout

To date personality has not had a high profile in burnout research (Piedmont, 1993; Shriom, 1989). Overwhelmingly research attention has been directed at job factors, such as caseload (Maslach & Jackson, 1984), on the assumption that they are more strongly related to burnout than personality factors (Maslach, 1999; Schaufeli & Buunk, 1996). Recently, evidence has been accumulating to suggest that personality variables may be more powerful predictors of psychological distress than environmental factors (Ormel & Wohlfarth, 1991) and that dispositonal factors are worthy of investigation (Lee & Ashforth, 1996).

Various personality factors have been investigated in relation to burnout including locus of control (Glass & McKnight, 1996), hardiness (Pierce & Molloy, 1990), Type A behaviour (Nowak, 1986), self-esteem (Manlove, 1993), and a "feeling type" personality (Garden, 1987, 1989). However, these factors are not measured in the current research because although links to the various dimensions of burnout have been reported, there is more evidence for a link between burnout and the construct of neuroticism.

Neuroticism is the trait most strongly and consistently related to stress symptoms. As discussed, individuals high on this dimension tend to be very responsive emotionally (Bolger & Schilling, 1991; Costa, McCrae, & Zonderman, 1987; Eysenck & Eysenck, 1968; McCrae & Costa, 1988), to have difficulty managing stress and strain (Buss & Plomin, 1984), and to use less effective coping techniques (Bolger, 1990; McCrae & Costa, 1986). Evidence suggests that individuals high in neuroticism are likely to experience distress in other areas of their lives also. For example, people high in neuroticism are more likely to experience emotional exhaustion and depersonalisation and to score highly on measures of personal dysfunction including increased drug and

alcohol use (Bellecastro & Gold, 1982), marital and family problems (Jackson & Maslach, 1982), and health problems (Maslach & Jackson, 1981).

These findings have implications for the health and well-being of community workers who are frequently involved in socially and emotionally demanding situations. However, there is currently no research linking personality and burnout in community workers. Research with other groups of human service workers suggests that neuroticism may be a factor for community workers suffering from burnout. For example, studies with human service workers have linked higher neuroticism scores with negative affect, poor well-being, somatic complaints, and poor personal adjustment (Clark, Watson, & Mineka, 1994; Costa & McCrae, 1980; Cox et al., 1983). Manlove (1993) studied child care workers and found that those with higher neuroticism scores also had higher burnout scores especially emotional exhaustion and depersonalization. Hills and Norvell (1991) also found that higher levels of neuroticism were associated with increased reports of emotional exhaustion with police officers. Rudow (1999) found that neuroticism was a significant predictor of stress and burnout in teachers. Bellani et al. (1996) studied 194 Italian health workers in HIV/AIDS units. They found that neuroticism was positively associated with emotional exhaustion and negatively associated with feelings of personal accomplishment.

Piedmont (1993) studied a small sample of occupational therapists and found that neuroticism scores at Time 1 predicted two of the three dimensions of burnout (emotional exhaustion and depersonalisation) seven months later. Piedmont found that approximately 42 percent of the variance in emotional exhaustion and depersonalisation related to neuroticism. Multiple regression analyses indicated that the relationship between neuroticism (in combination with agreeableness) and burnout remained significant even after partialling out the (nonsignificant) effects of perceptions of work environment on burnout. This suggests that individuals who are anxious, depressed, and unable to deal with stressors are those who are more prone to experiencing emotional exhaustion and depersonalisation.

Another two studies are well suited to demonstrate the relationship between burnout and personality factors because they used random samples and had high

(approximately 80 percent) response rates. The first study (Hills & Norvell, 1991) found that neuroticism was positively related to emotional exhaustion (17 percent shared variance) and that it moderated the effects of daily hassles. For example, when exposed to minor stressors traffic officers who scored high on neuroticism also reported higher levels of emotional exhaustion than their co-workers with lower neuroticism scores. The second study using doctors as participants, found that neuroticism and emotional exhaustion shared 31 percent of the variance and that neuroticism was related to depersonalisation and reduced personal accomplishment with 16 percent and 12 percent of the shared variance, respectively (Deary, Blenkin, & Agius, 1996).

How can the relationship between neuroticism and burnout be explained? As yet there is no definitive explanation. However, it appears that neuroticism may make individuals more vulnerable to burnout in the sense that neuroticism moderates the effect of stressful situations actually enhancing the likelihood of a negative outcome (Schauflei & Enzmann, 1998). In addition, neuroticism may bias the self-report responses of participants on the basis that people high in neuroticism are more likely to respond negatively to questions than people low in neuroticism (Geurts et al., 1998). It is likely that the six previously discussed mechanisms proposed by Spector et al. (2000) to account for the relationship between negative affectivity and stress are also relevant here. Of course, it must also be noted that the consistent positive relationship between neuroticism and emotional exhaustion may simply be the result of overlapping items (Schauflei & Enzmann, 1998).

In terms of the Big Five model of personality used in the current research, less information exists concerning the other dimensions of the Big Five and burnout. It has been suggested that extroverts, due to their tendency to be sociable and outgoing, (Buss & Plomin, 1984) are less prone to burnout perhaps because they have more social support or because they find it easier to cope with the social contact and interaction which is such a huge part of human service work. However, these findings have not yet been substantiated (Manlove, 1993).

Schuafeli and Enzmann (1998) analysed data supplied by Deary et al. (1996) to ascertain the contribution of all the Big Five personality factors in terms of the

variance shared with burnout. They found that emotional exhaustion was positively related to neuroticism and openness to experience with 33 percent of the shared variance. They also found that depersonalisation was positively related to neuroticism and negatively related to agreeableness with 20 percent of the shared variance. This finding can be partly explained by the fact that agreeableness is part of the interpersonal circumplex characterised by altruism, caring, and social support as opposed to hostility, indifference to others, self-centredness, and non-compliance. In addition, Schuafeli and Enzmann found that personal accomplishment was significantly related to four of the Big Five personality factors: neuroticism, extroversion, openness to experience, and conscientiousness with 25 percent of the shared variance. This suggests that personal accomplishment may be more reflective of an individual's personality than his or her reaction to a stressful situation (Schaufeli & Van Dierendonck, 1993; Shirom, 1989).

Piedmont (1993) also investigated the other dimensions of the Big Five and found that occupational therapists with higher agreeableness scores at Time 1 reported lower levels of emotional exhaustion and depersonalization seven months later. Occupational therapists who were higher in conscientiousness at Time 1 reported less burnout in terms of feelings of personal accomplishment seven months later.

In summary, it is likely that the role of personality has much to offer in understanding burnout, but currently most of what is known comes from correlational evidence and therefore has to remain speculative (Schaufeli & Enzmann, 1998).

Based on the substantial amount of research that suggests a link between neuroticism and burnout,

It is hypothesized that neuroticism will be directly related to emotional exhaustion and depersonalization and inversely to personal accomplishment.

Personal accomplishment is indicative of feelings of competence and successful achievement at work. In addition, the conscientiousness dimension can assess desire to compete against personally meaningful standards of excellence. Therefore,

It is hypothesized that personal accomplishment will be directly related to conscientiousness.

As low agreeableness may indicate an antagonistic orientation to others,

It is hypothesized that depersonalization will be inversely related to agreeableness.

5.15 Personality and well-being

One of the key areas of investigation in the top-down model of well-being is personality (DeNeve & Cooper, 1998). Several reviews have suggested that personality has a major part to play in well-being (Costa & McCrae, 1980; Diener, 1984; Diener & Larsen, 1993; Diener & Lucas, 1999; McCrae & Costa, 1991; Myers & Diener, 1995).

Francois La Rouchefoucauld stated that "happiness and misery depend as much on temperament as on fortune". However, he may have underestimated the influence of personality on subjective well-being. As will be discussed, the experience of positive affect, negative affect, and life satisfaction frequently depends more on a person's temperament than on life circumstances or objective indicators of well-being (Diener & Lucas, 1999).

Neuroticism and extroversion are the personality traits most strongly and consistently associated with subjective well-being (Diener & Lucas, 1999). There is general acceptance that neuroticism influences negative affect and extroversion influences positive affect (Costa & McCrae, 1980; Diener & Lucas, 1999; Watson & Clark, 1984, 1997). Researchers are still investigating the mechanism by which neuroticism and extroversion influence affect. One of the most interesting suggestions in terms of extroversion is the idea that the characteristics of extroverts are actually an outcome of higher levels of positive affect (Diener et al., 1999). This might explain why extroverts tend to be happier in all types of situations, not just social situations. For example, Pavot, Diener, and Fujita (1990) used a time sampling study and found that contrary to popular expectation, extroverts did not spend more time with others than introverts, although they were happier than introverts even when they were alone.

The logic of the top-down model is also supported by studies that have found that some people, especially those with the characteristic personality traits of low neuroticism and high extroversion, do appear to be more predisposed to happiness than others (e.g. Costa & McCrae, 1980; Headey & Wearing, 1989). This predisposition or these personality characteristics influence the experience and interpretation of other aspects of life such as health. These findings parallel additional research on negative affectivity which states that negative affectivity can filter perceptions of daily experience (Watson & Clark, 1984; Watson & Pennebaker, 1989).

One avenue of support for the role of personality in subjective well-being and in particular the suggestion that individuals have characteristic tendencies towards happiness or unhappiness, comes from studies that demonstrate the stability of well-being scores across time and across situations. For example, Costa and McCrae (1980) demonstrated the stability of personality traits over time when they found that neuroticism and extroversion were significantly related to reported levels of happiness ten years later. Diener and Larsen (1984) demonstrated the stability of personality traits across situations when they found that average levels of positive affect at work correlated .7 with average levels of positive affect at leisure and average levels of negative affect at work correlated .74 with average levels of negative affect at leisure. Similar findings for positive and negative affect were also evident for social versus alone situations and familiar versus novel situations. Even more consistent findings were found for mean levels of life satisfaction with stability coefficients in the .95 range (Diener & Larsen, 1984). These findings strongly suggest that people have characteristic emotional responses to their environment that remain consistent even when the environment changes (Diener & Lucas, 1999).

A possible alternative explanation is that well being scores are stable due to stability in an individual's life situation. However, the evidence is less supportive of this possibility. For example, Costa et al. (1987) studied people in stable situations and people undergoing life changes, such as being divorced or widowed. They found very little difference in the stability estimates for both groups. Studies of income levels

also find relatively stable levels of subjective well-being despite increases or decreases in income (Diener et al., 1999).

Headey and Wearing (1989) proposed their dynamic equilibrium model to account for the stability of well-being scores. The dynamic equilibrium model suggests that people have a set-point or equilibrium level of subjective well-being. This equilibrium level is predicted by personality characteristics, in particular extroversion and neuroticism. The key to this model is that life events can move people away from their set-points, but they will eventually return to their usual level of affect. In an Australian panel study, Headey and Wearing found support for their dynamic equilibrium model with the findings that after good and bad events people returned to their previous levels of positive and negative affect. This means that it is expected that situational factors will be the cause of some variation in well-being scores, but that over longer periods of time, stable personality factors should have greater influence (Diener et al., 1999).

Suh et al. (1996) replicated Headey and Wearing's (1989) findings and demonstrated that people adapt to events surprisingly quickly. In addition, major catastrophes such as becoming a paraplegic or major excitements such as winning lotto do not appear to have long term impacts on well-being, although there is an initial impact. Over time frames as short as two to three months it appears that even after a dramatic life event, an individual's level of well-being returns to approximately where it was before. This concept of adaptation to life events is emerging as an important factor for understanding subjective well-being (Maxwell et al., 1990). However, Diener et al. (1999) note that this process may be less simple than it appears. Adapting to some events, such as imprisonment or winning money, may be a relatively quick process, but adapting to other events, such as losing a loved one may be a much slower process.

Ormel and colleagues (Ormel & Schaufeli, 1991; Ormel & Wohlfarth, 1991) extended the dynamic equilibrium model by showing that personality is a more powerful predictor of psychological distress than external events. However, although Headey and Wearing's (1989) model has been replicated and extended, a question still remains over whether adaptation to life events occurs because of personality or as a

result of changes in goals and the adoption of new coping strategies (Diener & Lucas, 1999).

Personality theorists also state that personality is a key factor in subjective well-being. McCrae and Costa (1991) differentiate between a temperamental and instrumental view of factors that influence well-being. The temperamental view proposes that certain personality traits, such as extroversion and neuroticism, are enduring dispositions and as such lead directly to subjective well-being. This view in a nutshell says that neuroticism leads to negative affect and extroversion to positive affect mainly because of temperament. As such extroverts are cheerful and individuals high in neuroticism are more prone to experience negative mood states.

In support of the temperamental view, DeNeve and Cooper (1998) found that neuroticism does seem to predispose a person to experience less subjective well-being. In their study they found that of all the Big Five personality traits, neuroticism was the highest predictor for life satisfaction (r = -.24), happiness (r =-.25), and negative affect (r =.23). Diener (1996) has also reported correlations for extroversion and positive affect that are as high as .71. However, DeNeve and Cooper (1998) did not find such a straightforward relationship. They did find that the best predictor of happiness was extroversion but they also found that positive affect was predicted equally by extroversion and by agreeableness. DeNeve and Cooper's findings suggest that the relationship between extroversion and positive affect is not as simple as it first appears. They suggest that the critical factor for positive affect is a connection to others but that two dimensions of this factor are equally important: quantity of relationships (extroversion) and quality of relationships (agreeableness).

The instrumental view proposes that traits such as agreeableness and conscientiousness are instrumental in the sense that they encourage life situations that then impact on an individual's well-being. The assumption is that because agreeableness is linked to more satisfying interpersonal relationships and conscientiousness is associated with achievement, that these traits will facilitate more positive experiences in social or achievement situations which will ultimately, but indirectly, influence subjective well-being (Larsen & Ketelaar, 1991; McCrae & Costa, 1991). The findings of DeNeve and Cooper (1998) can also be interpreted in a

manner consistent with the instrumental view. That is to say that extroversion and agreeableness promote both more and more satisfying relationships and that these in turn foster increased positive affect.

An additional finding of DeNeve and Cooper (1998) is that the trait with the strongest positive relationship to life satisfaction is conscientiousness. The explanation provided by DeNeve and Cooper for this relationship is that although relationships contribute to happiness, behaviours associated with conscientiousness such as working towards goals and exerting control over oneself and the environment enhance the overall quality of a person's life. There is evidence to suggest that people high in conscientiousness set higher goals for themselves and tend to achieve more in work settings (Barrick & Mount, 1991). DeNeve and Cooper state that as a result they also tend to experience more life satisfaction.

The personality trait of openness to experience obtained the lowest correlations with each measure of subjective well-being in DeNeve and Cooper's (1998) study. However, the Openness sub-scale has been found to be slightly positively correlated with positive and negative affect (Diener & Lucas, 1999). McCrae and Costa (1991) suggest that this factor may predispose individuals to experience both positive and negative emotions more intensely.

Based on these findings,

It is hypothesized that well-being will be inversely related to neuroticism and directly related to extroversion, openness, agreeableness, and conscientiousness, such that life satisfaction and positive affect will be inversely related to neuroticism and directly related to extroversion, openness, agreeableness, and conscientiousness; and negative affect will be directly related to neuroticism and openness and inversely related to extroversion, agreeableness, and conscientiousness.

Other personality traits also relate to well-being. For example, in Western cultures self-esteem appears to be a powerful predictor (Lucas et al., 1996) as is optimism, the tendency to expect favourable outcomes in life (Scheier & Carver, 1985). Although as with every aspect of well-being, these relationships may not be as straightforward

as they seem. Currently, it is not known whether self-esteem and optimism are the cause or the result of high well-being (Diener, et al., 1999; Diener & Lucas, 1999).

In addition, other variables that correlate with well-being, such as social support and coping, may also be influenced by personality. For example, extroverts are likely to have greater social support as a result of their more positive interpersonal relationships. Individuals high in neuroticism may experience higher negative affect as a result of their less effective coping skills (Diener, 1996).

Behaviour-genetic studies of heritability estimate the amount of variance in well-being scores that can be explained by genes. Results of these studies provide evidence for a temperamental predisposition to experience particular levels of well-being. For example, Tellegen et al. (1988) investigated monozygotic and dizygotic twins who had been reared together and reared apart. They found that the monozygotic twins who had been raised apart were more similar than the dizygotic twins who had been raised together or apart. Based on their findings Tellegen and colleagues estimated that genes account for approximately 40 percent of the variance in positive emotionality and 55 percent of the variance in negative emotionality. In contrast they estimated that a shared family environment could account for 22 percent of the variance in positive emotionality and only 2 percent of the variance in negative emotionality.

Years later, Lykken and Tellegen (1996) reanalyzed the original Tellegen et al. (1988) data and stated that although 40-55 percent of the variation in subjective well-being can be accounted for by genes, actually 80 percent of long-term subjective well-being is heritable. However, it must be noted that this estimate of 80 percent is for the portion of affect that is stable over a ten year period and that the portion of variance in well-being responses is much more modest at either of the measurement periods. This suggests that if the focus is on well-being at a specific time in an individual's life, then heritability appears to have a moderate influence, but if the focus is on average well-being over a time-span such as a decade, heritability appears to have a substantial effect.

Although the heritablity estimates proposed by Lykken and Tellegen (1996) look substantial, there is frequently a wide variation in heritability estimates across studies. For example, McGue and Christensen (1997) investigated elderly Danish twins and found a much smaller heritability estimate of .27 for affect. One of the reasons for the wide range of estimates is that studies such as these can be compromised by methodological issues including being influenced by the amount of environmental variability in the population being studied (Diener et al., 1999). An additional complicating factor is that genes may not have a direct effect on well-being. Plomin, Lichtenstein, Pedersen, McClearn, and Nesselroade (1990) suggest instead that it is possible that genes influence life events in the sense that genes influence behaviour and certain behaviours make particular life events more likely, so it is actually the life events that have a more direct effect on subjective well-being.

In summary, personality is an important correlate of subjective well-being, but it does not provide all the answers. Currently empirical evidence suggests that when predicting subjective well-being on a short-term basis, personality emerges as a weaker predictor than situational factors. However, when focusing on long-term levels of subjective well-being, personality is a much better predictor (DeNeve & Cooper, 1998; Diener, 1996). Diener et al. (1999) state that the most widely used working model of personality and well-being simply and very broadly states that personality predisposes people to particular affective reactions, but that an individual's level of subjective well-being is also subject to many other influences including life events. The accumulated evidence suggests that well-being is a complex construct that refuses to be reduced to a tidy pile of predictors.

5.16 Personality, dysfunctional attitudes, stress, and coping

5.16.1 Dysfunctional attitudes and stress

Dysfunctional attitudes are a cognitive concept commonly used in clinical studies of depression. Beck (1976) states that dysfunctional attitudes are a set of stable cognitive schemata that are typically formed out of early life experiences and that are characterized by rigid and inappropriate beliefs about the self and the world. These beliefs or assumptions form the basis by which an individual organizes his or her life.

They can be likened to filters through which an individual interprets his or her environment. Dysfunctional attitudes are typically rigid and unrealistic. For example, "If I fail partly it is as bad as being a complete failure".

There is now increasing support for the hypothesis that dysfunctional attitudes make an individual more vulnerable to depression (Dobson & Breiter, 1983; Dobson & Shaw, 1986; Hamilton & Abramson, 1983; Newman & Haaga, 1995; Parks & Hollon, 1988). It is reasonable to assume that dysfunctional attitudes are also involved in the stress process given that stress and depression are both forms of emotional distress (Goh & Oei, 1999). In addition, the premise of Beck's cognitive therapy is that dysfunctional or maladaptive thinking has relevance beyond depression to all psychological disturbance and to common problems. Beck (1991, 1995) states that the serious biases which occur with very disturbed clients are actually just exaggerated versions of those occurring in individuals with less extreme problems. On this basis targeting maladaptive thoughts makes sense for treating stress-related problems (Auerbach & Gramling, 1998). In recent years the Dysfunctional Attitude Scale (DAS, Weissman & Beck, 1978) has been used in stress research on several occasions (e.g. Bond & Bunce, 2000; Brown, Hammen, Craske, & Wickens, 1995; Spangler, Simons, Thase, & Monroe, 1997)

As a group community workers have been overlooked in many areas of psychological research. It is not surprising that they have not been investigated in terms of dysfunctional attitudes particularly because maladaptive thoughts such as these are more typically located in the clinical domain. Therefore, the current research provides a good opportunity to investigate dysfunctional attitudes in a population of community workers.

Although there is no stress measure included in the current research, the Emotional Exhaustion sub-scale of the Maslach Burnout Inventory (Maslach et al., 1997) is sometimes also used as a measure of stress (Maslach, 1982, 1999; Schaufeli & Enzmann, 1998). On the basis of assumed links between stress and dysfunctional attitudes,

It is hypothesized that dysfunctional attitudes will be directly related to psychological distress, negative affect, emotional exhaustion, and depersonalization and inversely related to life satisfaction, positive affect, and personal accomplishment.

5.16.2 Dysfunctional attitudes and coping

Dysfunctional attitudes are cognitive schemata which means that in terms of the transactional model of stress and coping (Lazarus, 1966; Lazarus & Folkman, 1984), they are most likely to affect the processes of primary and secondary appraisal. Guppy and Weatherstone (1997) suggest that dysfunctional beliefs can affect coping specifically by impacting on the appraisal process. They base this on the rationale that an individual with higher levels of dysfunctional beliefs, such as stronger internal demands to be liked or to be successful, will have more 'at stake' in each stressful event. Having more at risk will influence perceptions of the importance of events, perceptions of the consequences of failure, and will increase the frequency that events are perceived as stressful. All of these possibilities will affect the primary appraisal process, which due to the dynamic nature of the transactional model, will also affect the process of secondary appraisal and ultimately coping. For example, Guppy and Weatherstone found that dysfunctional beliefs were related to avoidance coping.

Dewe (1991) suggests that focusing on the appraisal process and the link between appraisal and coping strategies will promote a greater understanding of the stress process. Given that beliefs are fundamental to the appraisal process, this means that they also need to be further investigated. The findings of Guppy and Weatherstone (1997) that there are associations between well-being and dysfunctional beliefs, both alone and in combination with coping strategy use, have implications for stress management interventions. These findings suggest that focusing only on coping strategies may not be as effective as allowing participants to identify dysfunctional beliefs that may affect the way they cope.

The intervention described in the current research contains a variety of techniques adapted from cognitive therapy designed to modify underlying dysfunctional attitudes (Beck, 1976). In particular, aspects of the intervention are intended to raise awareness of automatic thoughts, which are the surface level cognitions that affect the deep level

cognitions present in dysfunctional attitudes. Goh and Oei (1999) suggest that a relationship between deep level and surface level cognitions is also likely to exist in the stress process. They state that the appraisal and coping processes are equivalent to surface level cognitions and that the dysfunctional attitude is the deep level cognition.

Although there is no research linking coping resources and dysfunctional attitudes, given the powerful role dysfunctional attitudes are thought to play in the cognitive processes involved in stress appraisal,

It is hypothesized that dysfunctional attitudes will be inversely related to levels of coping resources.

5.16.3 Dysfunctional attitudes and personality

Currently dysfunctional attitudes have not been investigated in relation to the five factor model of personality. Given that neuroticism is linked to negative mood states such as depression (Clark et al., 1994; McCrae & Costa, 1986; Watson & Pennebaker, 1989) and dysfunctional attitudes are also linked to depression (Dobson & Breiter, 1983; Dobson & Shaw, 1986; Hamilton & Abramson, 1983; Newman & Haaga, 1995; Parks & Hollon, 1988), it seems reasonable to assume that there will be a relationship between dysfunctional attitudes and neuroticism. Further support for this hypothesis comes from Dyck (1992) who investigated defining six sub-scales of the DAS. He found that the sub-scale scores were as closely related to anxiety symptoms as to depression and suggested that the attitudes measured may be better conceptualized as vulnerability to negative affect. Therefore,

It is hypothesized that neuroticism will be directly related to dysfunctional attitudes.

5.17 Additional personality variables

The primary focus of the current research is on the dimensions of the five factor model of personality. However, there are other personality variables that may be influential in terms of stress and well-being. These include locus of control, hardiness, and Type A behaviour (Auerbach & Gramling, 1998; Parkes, 1994; Spector

& O'Connell, 1994). These constructs are not investigated in the current research because none has shown the same impact as neuroticism. For example, Walsh et al. (1997) compared neuroticism, Type A behaviour, and locus of control with self-reported levels of stress and found that levels of stress were most strongly correlated with neuroticism. Others (e.g. Payne, 2000) have also suggested that neuroticism is the key variable underlying relationships between other measures of individual differences such as locus of control and Type A behaviour.

In addition, each of the constructs of locus of control, hardiness, and Type A behaviour has limitations. For example, research on occupational stress and locus of control has provided inconsistent results (Walsh et al., 1997). There is some evidence that individuals with an internal locus of control are better able to cope with occupational stress (Cooper et al., 1994; Spector & O'Connell, 1994; Tokar et al., 1998). This makes sense from a theoretical perspective because individuals with an external locus of control who do not believe that they can control their environment, are likely to find their work environment more threatening and stressful. However, this hypothesis has not been substantiated.

The construct of hardiness originally looked very promising. It was conceptualized as a personal 'resistance resource' that allowed an individual to stay healthy despite a stressful lifestyle. Hardiness incorporates three components: control beliefs, commitment, and challenge (Kobasa, 1979). However, this construct is currently receiving very little research attention (Parkes, 1994). The main reasons for the decline in popularity of this construct include questions concerning the validity of combining three diverse constructs into a single scale (Carver, 1989, Funk & Houston, 1987), concerns over the relevance of the hardiness scale to women and blue collar workers, and the possibility of an overlap between hardiness and social support as potential stress moderators (Carver, 1989; Weibe, 1991). Finally, hardiness also appears to be confounded with low neuroticism (Schaubroeck & Ganster, 1991).

Type A behaviour is characterized by impatience, hostility, irritability, job involvement, competitiveness, and achievement striving (Parkes, 1994). The role of Type A behaviour in cardiovascular disease has been widely investigated (Matthews & Haynes, 1986). Although findings are sometimes erratic (Walsh et al., 1997), Type

A behaviour also appears to be involved in other stress-related adverse health outcomes (Suls & Sanders, 1988). Spector and O'Connell (1994) found that individuals who had higher scores on a Type A measure experienced more occupational stress and strain. Cooper, Kirkcaldy, and Brown (1994) studied 500 male senior British police officers and found that Type A personality positively predicted both stressors and strains.

However, there have been criticisms of the Type A construct. For example, there are issues of possible methodological weaknesses including reliance on retrospective self-report data and concerns over the diverse number of assessment methods (Parkes, 1994). In addition, questions have been raised over the validity of the Type A-B classification especially regarding definitional issues and the nature of the components of Type A (Strube, 1989). It has also been suggested that Type A behaviour is conceptually related to elements of high conscientiousness (achievement striving) and high neuroticism (hostility) (Tokar et al., 1998).

5.18 Chapter summary

This chapter begins with a description of the main characteristics of the construct of personality with a particular focus on trait theories of personality. This is followed by a summary of the history of the five factor model of personality and an overview of the current status and composition of this model including the criticisms most frequently directed at the model. It is argued that although there is still much to learn about the construct of personality, the five factor model of personality used in the current research provides a useful context for examining individual differences. The focus of the chapter then shifts to highlighting the pervasive role that personality and in particular negative affectivity and neuroticism play in research on stress, coping, burnout, and well-being. In addition, the role dysfunctional attitudes play in personality, stress, and coping is investigated. A short summary of additional personality variables is also provided and the chapter concludes with research aims and hypotheses.

5.19 Research aims and hypotheses

5.19.1 Aims

Given the absence of literature related to community workers, the current research provides a unique opportunity to expand the knowledge pool. Therefore, one of the aims of the current research is to generate a profile of community workers in terms of the personality dimensions of the Big Five model. In addition, the current research aims to investigate the interaction of personality with the constructs of well-being, burnout, coping resources, and dysfunctional attitudes.

5.19.2 Hypotheses

As this chapter discusses all of the variables in the current research, all the hypotheses pertaining to phase one of the current research will be summarized here. Please note that although the hypotheses have been generated following the sections reviewed, they are ordered and tested logically on the basis of the overall set of stress related variables.

H 1. Well-being will be directly related to coping resources, such that life satisfaction and positive affect will be directly related to coping resources, and negative affect will be inversely related to coping resources.

H 2: Well-being will be inversely related to burnout, such that life satisfaction and positive affect will be inversely related to emotional exhaustion and depersonalization and directly related to personal accomplishment, and negative affect will be directly related to emotional exhaustion and depersonalization and inversely to personal accomplishment.

H 3: Psychological distress will be directly related to emotional exhaustion and depersonalization and inversely related to personal accomplishment.

H 4: Well-being will be inversely related to neuroticism and directly related to extroversion, openness, agreeableness, and conscientiousness, such that life satisfaction and positive affect will be inversely related to neuroticism and directly related to extroversion, openness, agreeableness, and conscientiousness; and

negative affect will be directly related to neuroticism and openness and inversely related to extroversion, agreeableness, and conscientiousness.

H 5: Coping resources will be inversely related to emotional exhaustion and depersonalization and directly related to personal accomplishment.

H 6: Coping resources will be inversely related to neuroticism.

H 7: Social coping resources will be directly related to extroversion and agreeableness.

H 8: Extroversion will be directly related to cognitive coping resources.

H 9: Neuroticism will be directly related to emotional exhaustion and depersonalization and inversely related to personal accomplishment.

H 10: Personal accomplishment will be directly related to conscientiousness.

H 11: Depersonalization will be inversely related to agreeableness.

H 12: Dysfunctional attitudes will be directly related to psychological distress, neuroticism, negative affect, emotional exhaustion, and depersonalization and inversely related to life satisfaction, positive affect, personal accomplishment, and levels of coping resources.

H 13: In a linear multiple regression equation satisfaction with life will be predicted positively by extroversion, life spheres, and coping resources, and negatively by emotional exhaustion, neuroticism, psychological distress, and dysfunctional attitudes.

H 14: In a linear multiple regression equation positive affect will be predicted positively by personal accomplishment, extroversion, conscientiousness, life spheres, and coping resources, and negatively by emotional exhaustion, neuroticism, psychological distress, and dysfunctional attitudes.

H 15: In a linear multiple regression equation negative affect will be predicted positively by emotional exhaustion, neuroticism, the GHQ-28 sub-scales: somatic symptoms, anxiety and insomnia, social dysfunction, and depression and dysfunctional attitudes and negatively by extroversion, life spheres, and coping resources.

CHAPTER 6: PHASE ONE METHODOLOGY

6.1 Chapter overview

The aim for phase one of the current research was to compile information about community workers and the constructs of burnout, personality, well being, psychological distress, coping resources, and dysfunctional attitudes. This chapter begins with a definition of the term "community worker" as it is used in the current research. Next general demographic characteristics of the participants are described. This is followed by a description of the materials used and the procedures implemented to attract participants to the research and those employed once the participants were involved in the research. The next section is a thorough summary of all the measures used in the research. The chapter concludes with an overview of the data analyses conducted for phase one of the research.

6.2 Definition of community worker

Prior to discussing the characteristics of the participants, it is important to clearly define the target population for the current research. For a person to be eligible to participate they had to be a "community worker". However, the term "community worker" is a nebulous concept. The limited literature in this area provides no guidelines as to a definition and community workers themselves are a diverse group and have varying interpretations of the term. Community workers are a subset of human service workers. Unfortunately this widely used term also suffers from definitional problems. "Human service work" is commonly defined only as "people work" (Farmer, Monahan, & Hekeler, 1984).

For the purposes of the current research, "community worker" is defined by the researcher as "any person in a paid or unpaid capacity working for a not-for-profit, charitable, and/or educational agency that serves the community in the greater Auckland area". This definition is deliberately broad in order to include community workers from as wide a range of sectors as possible. A key point in the definition is that volunteers were as welcome to participate in the research as paid workers. This is in recognition of the fact that much valuable work is done in the community by

volunteers and many community organisations could not exist without the considerable hours of unpaid time provided by volunteers.

For the purposes of the research not all community organisations were approached to participate. Within the not-for-profit sector, there are many social service organisations. These can be separated into two categories known informally in the community sector as "grass roots" organisations and "community corporates".

These types of organisations differ mainly in terms of size and resources. "Grass roots" organisations tend to be smaller, often consisting of only one or two staff members who may or may not be paid. For example, the Stillbirth and New Born Death Support Group (SANDS) is staffed by one volunteer. Perhaps the more notable factor separating community corporates and grass roots organisations is their level of resources. Community corporates include organisations such as the Cancer Society and the Heart Foundation, both of which provide a valuable and necessary contribution to society. However, in comparison with grass roots organisations they are also relatively well funded, often national organisations with government contracts and support. In addition, they are usually run in a more "corporate" manner to the largely non-profit, charitable, and educational agencies comprising grass roots organisations. For example, community corporates generally have fundraising departments and reasonable operating budgets. In comparison, grass roots community organisations operate mainly with limited and tenuous levels of funding. Most seek their funding from a variety of sources and many operate knowing that they may not have the funding to continue to operate in a years time.

Community workers from community corporates were not approached to participate in the current research. Their contribution to the community is acknowledged as being as valuable as that of grass roots organisations. However, community workers from grass roots organisations are the target population in the current research primarily because very little is known about the individuals involved with these organisations. In addition, preliminary evidence suggested high levels of need (Bennett & Marsh, 1999) that could not be met with the limited resources available in these types of organisations. In contrast, community corporate organisations have

higher levels of resources and are in a better position to offer their employees workshops and assistance programmes to cater for their well being.

The terms "community corporate" and "grass roots" organisation are a useful means of distinguishing between types of community organisations. However, these terms may be more specific to New Zealand. Internationally, an emerging term for organisations that are not-for-profit and non-government is the "Third Sector". Third Sector organisations are a major component of many industries including community services, health, education, sport and recreation, culture, and financial management. Third Sector organisations vary widely among themselves and this inclusive term incorporates community corporates and grass roots organisations. However, all organisations and groups in the Third Sector differ as a class from for-profit organisations and government departments and authorities. Internationally a variety of terms may be used to refer to Third Sector organisations. These include nonprofit, not-for-profit, nongovernment, NGO, community, voluntary, club, society, association, co-operative, church, foundation, charity, people's organisations, and civil society organisations.

6.3 Participants

The sample is comprised of 223 community workers from a variety of grass roots community organisations in Auckland, or within a 200km radius of Auckland, New Zealand.

Demographic information for the sample of community workers is presented in Table 6.1. As can be seen, the majority of participants are female (85%) and of Pakeha/European origin (80%). In terms of ethnicity, 180 participants are Pakeha/European and 22 participants (10%) are Maori. The remaining 10% of the participants are comprised mostly of Pacific Island peoples (4%), with a few Asian participants (1%) and a small selection of participants (5%) from other countries.

Table 6.1
Demographic characteristics of the total sample

	N = 223	Number	Percentage
Gender	Female	189	85
	Male	34	15
Age	20-29 years	23	10
	30-39 years	55	25
	40-49 years	73	33
	50-59	60	27
	60 plus	10	4
	Missing	2	1
Ethnic group	Pakeha/European	180	80
	Maori	22	10
	Pacific Island	8	4
	Asian	2	1
	Other	10	5
	Missing	1	0
Marital status	Single	54	25
	Married/with a partner	129	58
	Divorced	37	17
Education	School Certificate	38	17
	University Entrance	28	13
	Technical College	34	15
	University Degree	47	21
	Postgraduate Qualification	35	16
	Other	23	10
	Missing	18	8
Presence of dependents*	Yes dependents	112	50
	No dependents	109	49
	Missing	2	1
Number of dependents	Under 5	18	13
	5-18 years	81	58
	18 years plus	35	25
	Elderly dependents	5	4
Employment status	Permanent staff	190	85
	Volunteers/casual staff	32	14
	Missing	1	1
Full or part-time status	Full-time	125	56
	Part-time	96	43
	Missing	2	1
Life events	No life events	82	37
	Affected a great deal	94	42
	Moderately affected	43	19
	Missing	4	2

*Note. Participants can have dependents in more than one category

As Table 6.1 shows, the age distribution of the participants is relatively even with approximately 85% of participants aged between 30 and 59 years. Approximately 10% of participants are aged under 30 years and approximately 4% are over 60 years. The majority of the participants (58%) are also married or living with a partner, with 25% single and 17% divorced. The distribution of participants in terms of education is also relatively even. Approximately 30% of the participants are educated to the level of School Certificate or University Entrance, while a further 36% of the participants have either a University degree or a qualification from a technical college. Postgraduate qualifications were obtained by 16% of the participants and the remaining 18% chose either not to answer the question or received alternative qualifications such as becoming a Registered Nurse.

There is almost an even split between the participants with dependents (50%) and those without dependents (49%). Of those who do have dependents, the majority (58%) have children between 5 and 18 years of age. Twenty-five percent of participants have dependents living with them who are over 18 years of age, while just 13% have children under five and only 4% have elderly dependents living with them.

In terms of employment status, most participants (85%) are permanent employees with the remaining 14% comprised of volunteers or casual workers. Full-time staff account for 56% of the participants, while the remaining 43% work part-time. The participants were also asked whether they had experienced any significant life events in the past six months. Thirty-seven percent responded that they had not experienced any significant life events, while approximately 61% said they had experienced such an event. Of these, 42% said that they had been affected a great deal by the life event and 19% reported that they had only been moderately affected.

Table 6.2
Work related demographic variables for participants

	N	Mean	Median	*SD*	Min	Max
Present job tenure	219	3.5 years	2.5	3.2	1 month	16 years
Tenure in community work	215	7.7 years	6.0	7.6	1 month	41 years
Hours paid to work	213	28.4 hours	32.0	13.3	3 hours	50 hours
Average hours worked per week	213	35.4 hours	40.0	13.3	3 hours	70 hours

Some of the demographic questions asked the participants to provide time estimates related to work related variables. These are presented in Table 6.2. As indicated, the length of time participants had been employed in their current jobs ranged from 1 month to 16 years, with an average of 3.5 years (*SD* = 3.2). The length of time participants had been employed in community work ranged from 1 month to 41 years, with an average of 7.7 years (*SD* = 7.6).

The hours the participants are paid to work each week ranged from 3 to 50 with an average of 28.4 hours (*SD* = 13.3), reflective of the high number of part-time participants. In contrast, the actual hours the participants worked each week ranged from 3 to 70 hours with an average of 35.4 hours (*SD* = 13.3).

6.4 Materials

Information sheets and consent forms.

The questionnaire pack contained the following information:

- An Information Sheet (Appendix A)
- A questionnaire (Appendix B)
- A postage paid, self-addressed envelope

An Information Sheet was provided for each participant involved in the research (Appendix A). The Information Sheet explained the purpose of the research, the commitment required by each participant, contact details for the researcher and

supervisor, and the participant's rights according to the Massey University Human Ethics Guidelines. For example, participants were made aware that their participation in the research was voluntary and that they had the right to decline to participate, withdraw at any time, or refuse to answer any questions. In addition, participants were assured that their individual results would be anonymous so their privacy would be protected.

The survey method of research was used to assess the outcomes of the research intervention. This method was considered appropriate for accessing the sensitive and personal information that was required from each participant. As Schweigert (1994) suggests, it is much easier for participants to believe their responses are anonymous when an interviewer is not recording their information. The survey method also has the advantage of being completed at the participant's convenience and avoids the issue of experimenter bias.

6.5 Procedure

Ethical approval from the Massey University Human Ethics Committee was granted for the research.

Community organisations are difficult to access. This process was made easier when the researcher and Massey University formed an alliance with the community organisation, Raeburn House. Raeburn House (North Shore Community Health Network Inc.) is a community support, resource, and information centre. It provides an integrated range of services to those with need in the community with an emphasis on affordability and accessibility. Raeburn House provided practical support for the research. For example, paying for the services of a person skilled in desk top publishing to prepare the questionnaire, and supplying post paid envelopes. In addition, they provided contacts for community agencies throughout the greater Auckland area that were used to recruit participants to assist with the research.

Using these contacts, the researcher called all potential participants, explained the purpose of the research and asked for their participation. Many times participants agreed to also provide names of coworkers and colleagues to approach regarding

participating in the research. Some (159) of the participants involved in the first phase of the research also went on to participate in the intervention comprising the second phase. These participants were recruited according to the procedures described in the second method section (chapter 10).

Participants who agreed to be involved in the research received the questionnaire in the mail with an Information Sheet and a handwritten personal note from the researcher thanking them for their help. The data was collected from May 25th 2000 to December 22nd 2000. Whenever possible the questionnaires were mailed out at the beginning of the week as suggested by De Vaus (1995) to maximize response rates in postal surveys.

Two to three weeks after each questionnaire was sent out, the researcher began follow-up procedures in an effort to maximize the number of questionnaires returned. This consisted of a total of two reminder calls at two week intervals or a letter if the person was unavailable by phone. As the questionnaires were anonymous, each person had to be contacted. The personal contact used to recruit the participants and follow-up on the questionnaires resulted in a return rate of 57% (222 of the 390 questionnaires were returned).

6.6 Measures

The measurement instruments consisted primarily of widely used standardised measures and the selection of measures was influenced by previous research.

The questionnaires were all pre-tested with various community workers who volunteered to help and who did not participate in the research. It was found that each questionnaire took approximately half an hour to complete. Several minor changes were made to the wording of items in the questionnaire to make them more appropriate to the New Zealand situation. For example, item 21 from the Coping Resources Inventory (Hammer & Marting, 1988) was changed from "My weight is within 5lbs of what it should be" to "My weight is within a few kilos of what I think it should be" in recognition of healthier attitudes towards body image.

Data were collected on (1) demographic information, (2) burnout, (3) personality, (4) psychological well being (life satisfaction, positive and negative affect, domain satisfaction, and psychological distress), (5) coping resources, and (6) dysfunctional attitudes.

6.6.1 Demographic data

Information was collected on employment status (e.g. permanent staff or volunteer), whether the person worked full time or part time, job tenure, how many hours the participants were paid to work, how many hours they actually worked, and how long they had been involved in community work. Information was also collected on marital status, gender, age, ethnicity, education, and number and ages of dependents currently living with them. The final questions asked whether the participants had experienced a significant life event and the degree to which this life event had affected them.

6.6.2 Burnout

The Maslach Burnout Inventory (MBI) (Maslach et al., 1997) was used to assess burnout. There are currently three versions of this questionnaire. One for the human services (MBI-HSS), one for educators (MBI-ES), and a general survey (MBI-GS). For the current research, the Orignial Human Services Survey was chosen as the most appropriate version for community workers as it is the version most frequently used with service providers.

The MBI is the most widely used measure of burnout (Cordes et al., 1997; Evans & Fischer, 1993; Kantas & Vassilaki, 1997; Leiter, 1990; Manlove, 1993; Schaufeli & Enzman, 1998; Turnipseed, 1998). It is based on the three dimensional model of burnout which describes a syndrome consisting of three components: emotional exhaustion, depersonalization, and feelings of reduced personal accomplishment (Leiter & Maslach, 1988; Maslach & Jackson 1986; Piedmont, 1993). This model of burnout has a great deal of support (Bakker et al., 2000; Byrne, 1993; Evans & Fischer, 1993; Firth & Britton, 1989; Frieson & Sarros, 1989; Golembiewski & Boss,

1992; Huberman & Vandenberghe, 1999; Kantas & Vassilaki, 1997; Manlove, 1993; Schaufeli & Beata, 1994; Schaufeli & van Dierendonck, 1993; Turnipseed, 1994).

The MBI focuses on an individual's experience of work and consists of 22 statements about feelings or attitudes. The items are answered in terms of the frequency with which the person experiences these feelings. Each item is anchored on a 7 point Likert type scale ranging from 0 = *never* to 6 = *daily*. A separate sub-scale measures each of the three aspects of the burnout syndrome. The MBI provides a total score for each of the three sub-scales and is not designed to give a single burnout score (Maslach & Jackson, 1986). Burnout is a continuous variable ranging from low to high degrees of experienced feeling. Scores on emotional exhaustion and depersonalization increase as burnout increases, while scores on personal accomplishment are negatively related to burnout.

Normative scores are provided, but the MBI was not designed as an individual diagnostic instrument. The normative scores are meant as guidelines only and are not intended to function as clinical cut off points (Schaufeli et al., 1993). The MBI manual suggests cut-off points but stresses that these are based on arbitrary statistical norms where the normative sample is divided into three equally sized groups of 33.3% corresponding to high, medium, and low levels of burnout respectively (Maslach & Jackson, 1986). The MBI is well suited to the current research because it was designed to assess levels and patterns of burnout among groups of workers (Maslach & Jackson). The MBI is also a commonly used indicator of stress outcomes (Schaufeli et al., 1993).

The MBI is very widely used and has been found to be reliable, valid, and easy to administer (Maslach et al., 1997). Estimates of internal consistency (Cronbach Alpha) are .90 for Emotional Exhaustion, .79 for Depersonalization, and .71 for Personal Accomplishment (Maslach & Jackson, 1986). Lee and Ashforth (1996) analysed 47 studies that included approximately 10, 000 participants and found overall reliability coefficients for each sub-scale that were well within the range quoted in the test manual: Emotional Exhaustion (.86), Depersonalisation (.76), and Personal Accomplishment (.77).

MBI scores also seem to be stable over time. Test-retest reliability ranges from .60 - .82 across short periods (2 - 4 week intervals) and only drops slightly with longer periods of up to a year (Maslach & Jackson, 1986). Emotional exhaustion appears to be the most stable of the burnout dimensions and depersonalisation the least stable dimension (Schaufeli & Enzmann, 1998).

There is considerable support for the construct validity (Gold, 1984; Meier, 1984; Powers & Gose, 1986; Rafferty, Lemkau, Purdy, & Rudisill, 1986) and the convergent and discriminant validity of the MBI (Gold, 1984; Iwanicki & Schwab, 1981; Schaufeli & van Dierendonck, 1993). The scales are internally consistent and the three factor structure has been confirmed in various studies (Schaufeli et al., 1993). In addition, it appears that the three-factor model is valid across a variety of occupations. For example, with teachers (Schaufeli et al., 1994; Kantas & Vassilaki, 1997), school-based administrators (Friesan & Sarros, 1989), nurses (Schaufeli & van Dierendonck, 1993), and supervisors and managers from a public welfare agency (Lee & Ashforth, 1990). Finally, there is evidence of cross-cultural validity for the MBI (Golembiewski, Scherb, & Boudreau, 1993; Kantas & Vassilaki, 1997; Schaufeli & van Dierendonck, 1993).

Schaufeli and Enzmann (1998) in their analysis of the psychometric validity of the MBI stated that the factorial validity, convergent validity, and reliability of the MBI are good. The primary symptom of burnout is emotional exhaustion (Maslach, 1999) and the Emotional Exhaustion scale is the most robust of the MBI and shows good convergent validity in that it is strongly related to other measures of burnout (Schaufeli & Buunk, 1996). However, the Emotional Exhaustion sub-scale is also the least specific sub-scale and overlaps with related concepts such as depression and job satisfaction. In summary, the most robust and reliable sub-scale and the one that displays the strongest convergent validity, is at the same time the least specific dimension of burnout (Schaufeli & Enzmann, 1998).

6.6.3 Personality

Despite disagreement on the number and type of personality factors (Goldberg, 1993), there is widespread support for the five-factor model of personality as an adequate description of human personality differences (Matthews & Deary, 1993). This model proposes five overall dimensions of personality that are thought to reflect an individual's "characteristic emotional, interpersonal, experiential, attitudinal, and motivational styles" (Costa & McCrae, 1989, p. 2). The personality dimensions are Neuroticism, Extroversion, Openness to Experience, Agreeableness, and Conscientiousness. Neuroticism (N) refers broadly to negative affectivity. Extroversion (E) is defined as the propensity for interpersonal interaction, stimulation, and positive affectivity. Openness to Experience (O) encompasses the appreciation of experience, intellectual curiosity, and aesthetic sensitivity. Agreeableness (A) refers to the individual's interpersonal orientation in terms of thoughts, feelings, and actions (including trust, altruism, and sympathy). The Conscientiousness (C) scale assesses preferences for structure, organization, self-discipline, and motivation in goal directed behaviour (Costa & McCrae).

Currently the only instrument designed specifically to measure the factors in this model is the NEO Personality Inventory (Costa & McCrae, 1989) and the revised version, the NEO Personality Inventory Revised (NEO PI-R, Costa & McCrae, 1992a). There are two forms of the NEO Personality Inventory. The 240 item NEO PI-R and the 60 item NEO Five-Factor Inventory (NEO-FFI, Costa & McCrae, 1989). Both are intended to be representative of the structure of traits that have emerged out of the literature over the past forty years (Digman, 1990).

The measure used in the current research is the NEO-FFI, the 60 item version of the 240 item NEO-PI-R. This measure provides a brief, comprehensive measure of the five domains of personality measured by the NEO-PI-R and is used because although it assesses the five overall domains of personality proposed by the five-factor model, it is designed for testing when time is limited and when global information on personality is considered sufficient. The main advantage of the NEO-FFI is that it provides global information on personality in approximately ten minutes versus approximately forty minutes for the NEO-PI-R. In addition, the NEO-FFI has been

used previously in stress and coping research (e.g. O'Brien & Delongis, 1996; Watson & Hubbard, 1996).

The main disadvantage is that unlike the NEO-PI-R, the NEO-FFI does not provide information on the specific facets within each domain (Costa & McCrae, 1992a). Each measure of the NEO-PI-R consists of an additional six scales that measure the more specific traits or facets of each dimension. For example, the factor of Neuroticism is broken down into the six traits of: anxiety, angry hostility, depression, self-consciousness, impulsiveness, and vulnerability. These five domain scales and thirty facet scales make the NEO-PI-R a particularly comprehensive assessment of personality. However, for the current research, global information was considered sufficient.

There are 60 items in the NEO-FFI, 12 questions for each of the five factors. The participants rate the extent to which each statement is representative of themselves on a five point Likert type scale ranging from 0 = *strongly disagree* to 4 = *strongly agree.* A sample item from the Neuroticism sub-scale is "I am not a worrier". Reverse scoring is used with some items.

A substantial amount of psychometric research has been conducted on this scale indicating that it has excellent psychometric properties (see Costa & McCrae, 1992, for a review). For example the NEO-FFI demonstrates good reliability. Costa and McCrae (1992) reported coefficient alphas ranging from .78 to .90. Watson and Hubbard (1996) reported coefficient alphas for their sample that ranged from .78 (Agreeableness) to .87 (Conscientiousness) with a median value of .80.

In terms of the validity of the NEO-FFI, several studies have been conducted. McCrae and Costa (1987) found evidence of consensual validation for all five dimensions. They also considered convergent and discriminant validity and found that for all five dimensions the median validity coefficient was .44. In addition, there is evidence of the construct validity of the NEO-FFI (Costa & McCrae, 1980).

One small semantic change was made to item 28 to make it more appropriate for the New Zealand situation. This item was changed from "I often try new and foreign foods" to "I often try new and ethnic foods".

6.6.4 Well-being

Multiple measures to assess well being were used. This was to ensure that the construct was both broadly and accurately measured and to provide greater confidence in any conclusions drawn regarding well being.

6.6.4.1 Satisfaction with life

Global life satisfaction was measured by the Satisfaction With Life Scale (SWLS; Diener et al., 1985). This measure assumes that in order to measure the construct of life satisfaction, each individual must be asked for an overall judgment of his or her life. This rationale differs from that used to assess domain satisfaction where an individual is asked to indicate his or her satisfaction with various life aspects and the results are summed to give an overall measure. Diener et al. maintain that although domains, such as health, may be desirable, it is likely that different people will place different values on each domain. Therefore, Diener et al. advocate asking people directly for an overall evaluation of their lives so that they can integrate and weight particular domains as they choose and according to their own criteria. This provides a cognitive judgmental evaluation of a person's life. It may be indirectly influenced by affect, but is not in itself a measure of emotion (Diener, 1984). In addition, the SWLS does not include related concepts such as vigor or health (Pavot et al., 1991).

The SWLS consists of five global statements to which participants are asked to indicate their degree of agreement using a seven point Likert type scale ranging from 1 = *strongly disagree* to 7 = *strongly agree*. The range of possible scores is from 5 to 35 with higher scores indicating higher levels of life satisfaction. A score of 20 represents the neutral point on the scale indicating that the person is experiencing about equal levels of satisfaction and dissatisfaction. Scores between 21 and 25 represent *slightly satisfied*, scores between 26 and 30 represent *satisfied*, and scores between 31 and 35 represent *extremely satisfied*. At the other end of the scale, scores

between 5 and 9 represent *extremely dissatisfied* with life and scores between 15 and 19 represent *slightly dissatisfied*. A common and widely replicated finding is that in non-clinical Western samples, most participants score above the neutral point on subjective well-being (Andrews & Withey, 1976; Diener et al., 1999; Kamman & Flett, 1983; Pavot & Diener, 1993). Normative data suggest that this is also the case for the SWLS with most participants scoring in the range of slightly satisfied to satisfied (Pavot & Diener, 1993).

Support for the psychometric properties of the SWLS comes from a review by Pavot and Diener (1993) who also provide normative data from several diverse populations. They report reliability data from six studies. In each case the SWLS shows strong internal reliability with coefficient alphas ranging from .79 to .89. The short-term temporal reliabilities are also high with test-retest coefficients of .83 and .84 with time intervals of two weeks and one month respectively. Larsen et al. (1983) also found high alpha and test-retest reliability in the short-term. With longer time intervals, the test-retest stability decreased markedly to as low as .54 with a four year time interval, suggesting that considerable change in life satisfaction can occur (Pavot & Diener, 1993).

The SWLS is a well validated measure that has been used extensively in quality of life research (e.g. Hart, 1999) to assess the cognitive dimension of subjective well-being. Pavot et al. (1991) conducted two validation studies on the SWLS using peer reports, a memory measure, and clinical ratings as external criteria for validation. They concluded that the SWLS is a reliable and valid measure of life satisfaction that has the advantages of being brief and appropriate for a wide range of age groups. The high convergence of self and peer reported measures of subjective well-being add to the evidence that life satisfaction is a relatively stable and global construct and not a measure of temporary mood. In addition, Pavot et al. found that the factor analyses from both studies demonstrated a single factor structure indicating that although the items are very broadly stated, they show high intercorrelation. Larsen et al. (1983) also found that all of the SWLS items showed high factor loadings on a single common factor.

In terms of construct validity, Pavot et al. (1991) and Pavot and Diener (1993) report that the SWLS has been shown to be negatively correlated with clinical measures of distress and positively correlated with other measures of life satisfaction.

One change was made in the wording of the fourth item in the SWLS. The original item states "So far I have gotten the important things I want in life." The word "gotten" was considered inappropriate for a New Zealand population, so the word "achieved" was substituted. No other changes were made.

6.6.4.2 Positive and negative affect

The Positive and Negative Affect Schedule (PANAS, Watson et al., 1988) was used to measure the two mood factors of positive affect and negative affect. The terminology suggests that these two aspects of mood are opposites. However, Watson et al. state that they have emerged as highly distinctive dimensions in studies of affect.

Positive affect is an indication of the extent to which a person feels enthusiastic, active, and alert. Individuals high in positive affect tend to be active and satisfied with their life situations (Danna & Griffin, 1999; Watson & Pennebaker, 1989). Low positive affect is characterized by sadness and lethargy. Negative affect is a measure of subjective psychological distress and includes dimensions of anger, contempt, disgust, fear, and anxiety. Individuals high in negative affect tend to be more likely to be introspective and to focus on the negative aspects of themselves, those around them, and their environment. Low negative affect is typified by calmness and serenity (Bradburn, 1969; Watson & Pennebaker, 1989; Watson et al., 1988).

The PANAS scale consists of twenty individual word mood descriptors. Ten are used to measure positive affect (e.g. excited, enthusiastic) and ten are used to measure negative affect (e.g. hostile, irritable). Participants were asked to indicate on a five point Likert type scale (from *not at all* to *extremely*) the extent that they had experienced these moods over the past few weeks. The PANAS can be used with a variety of time instructions ranging from the immediate present "you feel this way right now" to a general state "you generally feel this way". In the current research, the time frame "over the past few weeks" was used to try and tap any variation in

affect. Possible scores range from 10-50 for each sub-scale, with high scores indicating high positive affect (greater well being) and high negative affect (reduced well being).

Watson et al. (1988) report sound reliability and validity data and recommend the PANAS as an efficient and effective measure for assessing positive and negative affect. Internal consistency reliabilities (Cronbach's alpha) were .87 for the both the Positive Affect and Negative Affect sub-scales using the time frame "over the past few weeks". Additional reliability data (Watson et al., 1988) states that the reliability of the scales is unaffected by the time instructions used. The scale also appears to be appropriately stable over a two month time period. Watson et al. state that test-retest reliability tends to increase over longer time periods. They suggest that ratings over longer time periods, such as a few weeks, are implicit aggregations. That is to say that as the time frame increases, the participants average their responses over more occasions. Diener and Larsen (1984) found similar findings.

In terms of validity, the scales correlated at predicted levels with measures of related constructs and showed the same pattern of relations with external variables that has been seen in other studies. For example, the Negative Affect scale of the PANAS correlated substantially with the Beck Depression Inventory (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) although not highly enough to indicate interchangeability. In terms of discriminant validity, the correlation between the Negative Affect and Positive Affect scales is consistently low, ranging from -.12 to -.23, indicating that the scales share only approximately 1% to 5% of their variance (Watson et al., 1988).

6.6.4.3 Domain satisfaction

The Life Satisfaction Scale is a measure of life satisfaction that was developed by Kopina in 1996 to measure psychosocial stressors and their effects on life satisfaction. It was originally designed to measure the long-term effects of psychosocial stress on the life satisfaction of survivors of the Chernobyl Nuclear disaster seven years after the event, and has since been used by others (e.g. Rudolph, Stamm, & Stamm, 1997).

The Life Satisfaction Scale contains three sub-scales. In the current research only the 12 item Life Spheres sub-scale was used as a measure of domain satisfaction because it was the most relevant, focusing on specific personal and professional areas of satisfaction. This sub-scale is comprehensive in terms of personal satisfaction, with 9 of the 12 items investigating how satisfied the participants were with their family, friends, health, hobbies, nutrition, and so on. The remaining three items investigated how satisfied the participants were with their jobs (i.e. work content, work roles etc.), material well being, and life prospects.

The main limitation of the Life Satisfaction Scale is the lack of psychometric information available. Rudolf et al. (1997) reported a reliability estimate of .89 for the Life Spheres sub-scale but currently no data exists on validity or the stability of scores over time. However, the comprehensiveness of the sub-scale and the fact that it was included as part of a quartet of measures assessing well-being meant that it was worthwhile including on a provisional basis. Assessing satisfaction with life domains provides valuable additional information to life satisfaction (Pavot & Diener, 1993).

6.6.4.4 Psychological distress

The General Health Questionnaire (GHQ, Goldberg & Williams, 1988) is a self-administered screening test specifically designed for detecting psychiatric disorders among non-clinical populations. However, the GHQ has also been widely used as a measure of psychological distress/well-being when evaluating the mental health outcomes of training programmes (e.g. Creed, Machin, & Hicks, 1999; Muller, 1992) including stress management interventions (Newton, 1989).

There are four forms of the GHQ: a 12 item measure, 28 item measure, 30 item measure, and a 60 item measure. For the current research, the 28 item GHQ (GHQ-28) was chosen as it is the only version which provides scaled scores on four, seven item sub-scales. These sub-scales provide information on specific aspects of psychological distress including somatic symptoms, anxiety and insomnia, social dysfunction, and severe depression. In addition, a total score can be used. The total score is a valid measure because all of the sub-scales are highly intercorrelated and all

28 items have high loadings on the first unrotated principle component (Goldberg & Williams, 1988).

Each of the 28 items on the GHQ-28 consists of a question asking whether the respondent has experienced a particular symptom or item of behaviour. The answers are rated on a four-point scale ranging from 0 to 3 (maximum score 84). This four-point response scale is an attempt to avoid the problems frequently associated with a bimodal response scale, including the tendency towards overall agreement. Having an even number of response categories also means that the 'error of central tendency' is limited (Goldberg & Williams, 1988).

Cronbach alphas for the GHQ-28 range from .82 to .93. No split-half reliabilities are provided in the manual specifically for the GHQ-28, but the split-half reliability of the GHQ-30 is reported as .77 (Goldberg & Williams, 1988). Goldberg and Williams report criterion validities for 12 studies that have investigated the validity of the GHQ-28. From these twelve studies, the median sensitivity (the probability that a "true case" will be correctly identified) was .86 and the specificity (the probability that a "true normal" will be correctly identified) was .82.

Two minor semantic changes were made to the GHQ-28 to make the language more appropriate for a New Zealand population. The changes concerned items B2 and B7 (from the original GHQ-28). In item B2, "Had difficulty staying asleep once you were off", the word "off" was changed to "asleep". In item B7, "Been feeling nervous and strung-up all the time", the word "strung-up" was changed to "strung-out".

6.6.5 Coping resources

The Coping Resources Inventory (CRI, Hammer & Marting, 1988) was developed to provide a standardized measure of identifying the coping resources available to an individual for managing stress. The CRI places an emphasis on resources rather than deficits. Resources are defined 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" (Hammer

& Marting, p. 2). The CRI was designed for use with individuals or groups and is appropriate for a wide range of ages. In addition, the CRI has been recently used in stress research (Durm, 1999, 2000).

The CRI is a 60 item instrument that measures resources in five domains:

Cognitive: This domain provides an indication of a person's sense of self-worth, his or her orientation towards others, and how optimistic he or she is about life in general. A positive self-concept is advantageous in managing stress (Auerbach & Gramling, 1998). A representative item is "I feel as worthwhile as anyone else".

Social: This domain measures whether an individual feels connected to social networks that can provide support in times of stress. The role of social support in reducing the negative effects of stress is well documented (Eckenrode, 1991; Ganster et al., 1986). A representative item is "I am part of a group, other than my family, that cares about me".

Emotional: This domain measures the extent to which an individual can accept and express his or her emotional responses. This is based on the rationale that expressing emotions can reduce long-term negative consequences of stress (Auerbach & Gramling, 1998). A representative item is "I can cry when sad".

Spiritual: This domain provides a sense of how much an individual's actions are guided by stable values derived from religious, familial, or cultural traditions or from a personal philosophy. This domain is not limited to traditional Western religious definitions of spirituality. In terms of stress management, an individual who espouses a set of particular values is more likely to be in a position to define the meaning of potentially stressful events and to prescribe strategies for responding effectively (McKay et al., 1981). A representative item is "I know what is important in life".

Physical: This domain measures the degree to which an individual engages in health-promoting behaviours. Taking care over one's physical well-being can decrease the level of negative response to stress (Sapolsky, 1994). A representative item is "I exercise vigorously 3 - 4 times a week".

Each of the 60 items is scored on a four-point Likert type scale where 1 = *never or rarely* and 4 = *always or almost always*. Six of the items are reverse scored. Scores from each sub-scale are summed to provide an individual scale score for each resource. In each case the higher the scale score, the higher the resource. The sub-scale scores can be also be summed to give a total resource score. Normative data is available but there are no New Zealand norms and much of the normative data is based on rather small sample sizes. Therefore, normative interpretations should be made with caution.

Internal consistency reliabilities of the CRI scales were estimated using Cronbach's alpha. The estimates for a sample of 749 adults range from .71 for the Physical scale to .84 for the Emotional scale with .91 for the Total Resource score (Hammer & Marting, 1988). This suggests that the CRI scales are fairly homogenous and are reliably tapping the intended constructs. Only one sample provides information on test-retest reliability and this sample is comprised of high school students tested with a six week time interval. The reliability estimates range from .60 for the Spiritual scale to .78 for the Social scale with .73 for the Total Resource score (Hammer & Marting, 1988). Hammer and Marting report evidence of adequate predictive validity, convergent and divergent validity, discriminant validity, and concurrent validity. However, little independent validity data is available.

One item (item 21) was changed from "My weight is within 5lbs of what it should be" to "My weight is within a few kilos of what I think it should be" in recognition of healthier attitudes towards body image.

6.6.6 Dysfunctional attitudes

The Dysfunctional Attitude Scale (DAS, Weissman & Beck, 1978) is a 40-item scale designed to measure the beliefs or assumptions by which individuals organize their lives. In particular, it assesses the strength of belief in a variety of dysfunctional attitudes that theoretically make an individual more vulnerable to depression. Dysfunctional attitudes or beliefs are typically rigid and unrealistic. For example, "If I fail partly it is as bad as being a complete failure". The scale is not intended to

cover every possible dysfunctional attitude, but much of the thinking that causes emotional distress is reducible to one of the 40 attitudes included in the scale (Scott, 1989). Although traditionally used in research on depression, in recent years the DAS has also been used in stress research (e.g. Bond & Bunce, 2000; Brown, Hammen, Craske, & Wickens, 1995; Spangler, Simons, Thase, & Monroe, 1997) and coping research (e.g. Guppy & Weatherstone, 1997).

Each item is scored on a Likert-type scale of 1 = *totally disagree* to 7 = *totally agree.* A total score is achieved by summing the ratings for individual items. Possible scores range from 40 to 280 with higher scores indicating the endorsement of more dysfunctional attitudes. Thirty items are reverse scored so that disagreement reflects dysfunctional thinking (e.g. "If others dislike you, you cannot be happy"). The remaining ten items are scored in the dysfunctional direction where the participant agrees with the statement (e.g. "One can get pleasure from an activity regardless of the end result").

Weissman (1979) reported that the DAS is internally consistent with coefficient alphas ranging from .89 to .92. In addition, the test-retest correlation was .84 over an eight week period. Dykman and Johll (1998) reported a Cronbach alpha for their study of .92. Bond and Bunce (2000) reported Cronbach alphas of .77, .79, .77, and .76 from the four time periods in their intervention. In addition, the DAS shows satisfactory validity (Dobson & Breiter, 1983; Dobson & Shaw, 1986; Hamilton & Abramson, 1983). Generally scores decline when depressive symptoms decline (Parks & Hollon, 1988).

The DAS is a global measure that was not designed to measure specific vulnerabilities, although several researchers have attempted to create sub-scales (e.g. Guppy & Weatherstone, 1997). Therefore, a possible weakness of the DAS is that it is currently not possible to identify specific areas where an individual might have functional or dysfunctional beliefs (Dyck, 1992).

Two forms of the DAS are available: the DAS-A and DAS-B. In theory these are parallel forms (Weissman, 1979). However, in practice it appears that they are not

equivalent and that the DAS-A is the preferred form (Power et al., 1994). Therefore, the DAS-A was used in the current research.

6.7 Analysis of data

The results from the questionnaires were entered into a data file. All analyses of the data were conducted using the Statistical Package for Social Sciences (SPSS) software package (version 9). Before conducting any analyses the data were assessed for accuracy of input. Ten percent of the questionnaires were selected at random and checked for accuracy. No errors were found. As an additional check of the data, the maximum and minimum variable scores were reviewed for the entire data set to identify any idiosyncratic data. One error was found and remedied.

6.7.1 Missing values

Missing values were dealt with prior to any analyses. Overall less than 1% of values were missing. Any measure with more than 10% of values missing was eliminated from the analyses. For any measure with less than 10% of values missing, the other values in the scale were averaged and this value was assigned in place of the missing value (Tabachnick & Fidell, 1989). However, in the case of the NEO-FFI less than .5% of values were missing and these values were replaced with the neutral response (2) in accordance with the scoring information provided in the manual (Costa & McCrae, 1992a).

6.7.2 Scale completion

Several respondents ticked between boxes to indicate an average choice. For any scale item, over the three questionnaires, this occurrence was less than 0.1%. In such cases, a score representing the average value of response alternatives was used.

6.7.3 Statistical analyses

The first analyses conducted were calculations of the means, standard deviations, ranges, and reliability coefficients for each of the scales used in the current research. In

addition, *t* tests were conducted to compare the means of the variables in the current sample with the respective normative means. Next a multivariate analysis of variance (MANOVA) was performed to identify significant differences between male and female participants. A significance level of .05 was set for these analyses. In addition, for all tests, Levene's test for homogeneity of variance was performed and if the variance for each of the comparisons between samples was different, then the appropriate statistic was used.

In order to examine the adequacy of the three dimensional model of well-being, a factor analysis was performed. However, first the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was used to determine whether factor analysis was appropriate. The factor analysis proceeded using the maximum likelihood extraction method and items were rotated using the oblimin rotation with the Kaiser normalization.

Correlation coefficients were computed for the three dimensions of well-being that correspond to the three factor model of well-being; Satisfaction with Life, Positive Affect, and Negative Affect, the two additional indicators of well-being; Psychological Distress and Domain Satisfactions, the three dimensions of burnout, the five personality sub-scales of the NEO-FFI, the five sub-scales and the Total Coping Resources score, and Dysfunctional Attitudes. Pearson product-moment correlation coefficients were used. In addition, using the Bonferroni approach to control for Type I error due to many correlations, a *p*-value of less than .0001 (05/276 = .0001) was required for significance. Cohen's (1992) set of effect size conventions for significant product moment correlations was used. Cohen states that an effect size of .10 is considered small, .30 medium, and .50 large.

Three linear multiple regression analyses were performed to investigate the factors that predict the three dimensions of well-being. A different combination of predictor variables was used in each analysis. Predictor variables were determined from the literature and each predictor variable had to correlate to at least $p < .0001$ significance with the variable in question to be included in the analysis. In addition, care was taken to keep the number of predictors well below Steven's (1986) general rule of no more than one predictor variable for every fifteen participants.

6.8 Chapter summary

At the beginning of this chapter the term "community worker" was defined as it pertains to the current research. Next an overview of the general demographic characteristics of the 223 participants was presented. This was followed by a description of the materials used and a summary of the procedures put in place to attract participants to the research and those employed once the participants were involved. The next section included a review of each of the measures used and the chapter concluded with an overview of the data analyses conducted for phase one of the research.

CHAPTER 7: RESULTS

7.1 Chapter overview

This chapter begins with a summary of the descriptive statistics computed for each of the variables investigated in the current research and a comparison of the mean scores obtained from the current sample with the respective normative mean scores. This is followed by a multivariate analysis of variance to check for significant gender differences in the sample. A factor analysis is also included to investigate the factors that are thought to comprise the three dimensional model of well-being. Next relationships among the variables are investigated using correlational analyses. The chapter concludes with three regression analyses performed to provide an indication of the factors that predict the three dimensions of well-being.

7.2 Descriptive statistics

Table 7.1 presents the means, standard deviations, and reliability coefficients for the scales used in the current research. As can be seen, all but one of the coefficients of internal consistency (Cronbach's alpha), indicated a moderately high to high level of reliability (.74 to .94) for the current sample. This is above Nunnally's (1978) level of .7 for acceptability. The exception was the Depersonalization scale of the Maslach Burnout Inventory (MBI, Maslach et al., 1997) which had a reliability coefficient of .68 and therefore, just reaches Nunnally's level of acceptability.

T-tests comparing the means of the variables in the current sample and the means of the respective normative samples are presented in Table 7.2. Overall, the results indicate that of the 15 *t*-tests, 14 of the differences in means were statistically significant. Each of the variables used in the current research will be discussed in turn.

Table 7.1

Descriptive statistics for scales

Scale	*N*	Mean	*SD*	α	Possible Range
Burnout					
Emotional Exhaustion	223	21.00	11.00	.90	0 - 54
Depersonalization	223	4.62	4.57	.68	0 - 30
Personal Accomplishment	223	36.95	6.98	.80	0 - 48
Personality					
Neuroticism	223	21.73	7.86	.85	0 – 48
Extroversion	223	29.38	5.87	.77	0 - 48
Openness to Experience	223	30.85	6.29	.77	0 - 48
Agreeableness	223	33.72	5.51	.74	0 - 48
Conscientiousness	223	33.58	6.41	.83	0 - 48
Well-being					
Satisfaction with Life	220	22.27	6.68	.87	5 - 35
Positive Affect	223	34.22	7.23	.90	10 - 50
Negative Affect	223	20.07	7.50	.90	10 - 50
Life Spheres	220	34.04	6.27	.83	12 - 48
Psychological distress					
GHQ-28 (total)	223	24.12	13.09	.94	0 - 84
Somatic Symptoms	223	7.49	4.76	.87	0 - 21
Anxiety and Insomnia	223	6.92	4.79	.89	0 - 21
Social Dysfunction	223	7.73	2.83	.77	0 - 21
Severe Depression	223	1.96	3.82	.93	0 - 21
Coping resources (total)	223	187.50	22.74	.94	60 - 240
Cognitive resources	222	29.90	4.99	.87	9 - 36
Social resources	223	46.46	5.36	.82	13 - 52
Emotional resources	223	44.99	8.00	.89	16 - 64
Spiritual resources	223	30.61	5.67	.80	11 - 44
Physical resources	223	35.70	5.34	.79	11 - 44
Dysfunctional Attitudes	222	104.23	30.40	.93	40 - 280

Note. *N*'s vary due to missing values.

Table 7.2

T-test comparison of means between the current sample and normative data

	Current sample ($N = 223$)		Normative samples				
Variables	**Mean**	***SD***	**Mean**	***SD***	***N***	***t***	***df***
Personality					500		
Neuroticism	21.73	7.86	19.07	7.68		4.27***	721
Extroversion	29.38	5.87	27.69	5.85		3.58***	721
Openness	30.85	6.29	27.03	5.84		7.93***	721
Agreeableness	33.72	5.51	32.84	4.97		2.13*	721
Conscientiousness	33.58	6.41	34.57	5.88		-2.03*	721
Well-being							
SWLS	22.27	6.68	23.60	6.10	255	-2.27*	476
PA	34.22	7.23	32.00	7.00	586	3.99***	807
NA	20.07	7.50	19.50	7.00	586	1.01	807
Coping resources (tot)	187.50	22.70	174.17	21.90	843	8.02***	1064
Cognitive	29.90	4.99	27.49	4.54		6.90***	1064
Social	46.46	5.36	39.35	6.08		15.90***	1064
Emotional	44.99	8.00	46.12	7.49		-1.97*	1064
Spiritual	30.61	5.67	32.02	6.10		-3.11*	1064
Physical	35.70	5.34	28.95	5.37		16.71***	1064
DAS	104.23	30.40	119.4	27.2	355	-6.23***	576

*$p < .05$, **$p < .01$, ***$p < .001$

7.3 Burnout

The burnout scores from the current sample were compared with the normative data provided in the MBI manual (Maslach & Jackson, 1986). Various normative samples are provided. However, the normative data most relevant to the current research is from a pool of 1538 social service workers, including social workers and child protective service workers. There is no total burnout score provided by the MBI. Instead, scores are provided for three separate and distinct aspects of burnout (emotional exhaustion, depersonalization, and personal accomplishment). Normative data are provided in the form of ranges of expressed burnout where the normative sample is divided into three equally sized groups of 33.3% corresponding to high, medium, and low levels of burnout respectively.

Comparing the current sample with the normative sample, it is evident that the mean scores obtained by the community workers for Emotional Exhaustion (M = 21, SD = 11) equate to average levels of Emotional Exhaustion (17 - 27). The mean scores for Depersonalization (M = 4.62, SD = 4.57) put the current group into the category of low Depersonalization (≤ 5) and the mean scores on Personal Accomplishment (M = 36.95, SD = 6.98) equate to low (≥ 37) Personal Accomplishment. While low scores on Emotional Exhaustion and Depersonalization are indicative of low burnout, low scores on Personal Accomplishment indicate reduced feelings of efficacy and achievement in one's work and are indicative of high burnout. Therefore, the current sample experienced average burnout in terms of emotional exhaustion, low burnout in terms of depersonalization, and high burnout in terms of reduced personal accomplishment.

Estimates of internal consistency (Cronbach alpha) for the normative sample are .90 for Emotional Exhaustion, .79 for Depersonalization, and .71 for Personal Accomplishment (Maslach & Jackson, 1986) compared with .90, .68, and .80 respectively for the current sample.

7.4 Personality

Comparisons of the normative mean scores for men and women on Form S of the NEO-FFI and the mean scores for the NEO-FFI sub-scales obtained by the current sample are displayed in Table 7.2. T-tests were performed to highlight any significant differences in means between the normative data and the current sample. As shown in Table 7.2, the current sample was significantly different to the normative sample on each of the five personality dimensions. The current sample was higher in Neuroticism, Extroversion, Openness to Experience, and Agreeableness, but lower in Conscientiousness.

Internal consistency for the personality scales of the NEO-FFI was calculated on a sample of 1539 adults. Coefficients were .86, .77, .73, .68, and .81 for N, E, O, A, and C respectively (Costa & McCrae, 1992). These are very similar to those found in the current sample of .85, .77, .77, .74, and .83 respectively. Similar coefficient alphas were also found by Watson and Hubbard (1996) ranging from .78 (Agreeableness) to .87 (Conscientiousness) with a median value of .80.

7.5 Well-being

7.5.1 Satisfaction with life

The possible range of scores for the Satisfaction With Life Scale (SWLS, Diener et al., 1985) is from 5 to 35. The mean for the participants in the current sample was 22.27, with a standard deviation of 6.68. This means that the participants in the current sample were in the *slightly satisfied* group, comprised of those scoring between 21 and 25. As Table 7.2 demonstrates, there was a significant difference between the normative group (Pavot & Diener, 1993) and the current sample, t (476) = -2.27, $p <$ .05, with the current sample reporting lower satisfaction with life than the normative sample. The alpha coefficient for the SWLS in the current sample was .87. Pavot and Diener (1993) provide alpha coefficients from six studies that range from .79 to .89.

7.5.2 Positive and negative affect

The PANAS (Watson et al., 1988) can be used with several different time frames. In the current research, the time frame "over the past few weeks" was used and all normative comparisons were made with studies that also used this time frame. This is important because Watson et al. note that mean scores on both scales tend to increase as the time frame increases. As Table 7.1 shows, the means and standard deviations for Positive Affect and Negative Affect in the current sample were 34.22 (SD = 7.23) and 20.07 (SD = 7.5) respectively. The range of scores for both scales was from 10 to 50 indicating that participants in the current research experienced above average positive affect and below average negative affect. Table 7.2 demonstrates that the current sample were significantly higher in Positive Affect than the normative sample, t (807) = 3.99, $p < .001$. However, no significant differences were found for Negative Affect, t (807) = 1.01, $p > .05$. Coefficient alphas of .90 were obtained for the Positive and Negative Affect scales in the current sample. These coefficients are slightly higher than the normative data provided by Watson et al. who report coefficient alphas of .87 for both scales.

7.5.3 Domain satisfactions

Domain satisfaction was measured by the Life Spheres sub-scale of the Life Satisfaction scale (Kopina, 1996). As discussed in chapter 6, no normative data is currently available for this scale. However, Tomkins (1999) recently used this measure in a study investigating 161 psychologists in New Zealand. The mean score in the current sample was 34.04 (SD = 6.27). This is significantly lower than the mean score obtained by Tomkins (35.46, pro-rated), t (379) = -2.15, $p < .01$. The range of possible scores is from 12 to 48. In the current sample, the average rating for the Life Spheres scale was 2.91, indicating that the majority of participants were *somewhat satisfied* with the various areas of their lives. An alpha coefficient of .83 was obtained in the current research. This is slightly lower than the alpha coefficient of .89 reported by Rudolf et al. (1997).

7.5.4 Psychological distress

Goldberg and Williams (1988) do not provide normative data for the GHQ-28 in their manual, which means that comparisons cannot be made with the current sample. However, as indicated in Table 7.1, the current sample had a total mean score of 24.12 (SD = 13.09) indicating relatively low levels of Total Psychological Distress compared with a possible total mean score of 84. In addition, the current sample had a distinctly low mean score for the Severe Depression sub-scale of 1.96 (SD = 3.82) compared with a possible range of scores from 0 to 21. The other three sub-scales of Somatic Symptoms, Anxiety and Insomnia, and Social Dysfunction were all approximately in the lower third of possible scores indicating relatively low levels of psychological distress for these specific sub-scales. Low levels of psychological distress can be used as indicators of high well-being.

7.6 Coping resources

The Coping Resources Inventory (CRI, Hammer & Marting, 1988) provides an indication of levels of coping resources in five areas and an aggregated score for Total Coping Resources. As can be seen in Table 7.1, Total Coping Resources (M = 187.50,

SD = 22.74) in the current study were relatively high compared with the possible range of 60 to 240. (Higher scores indicate higher levels of coping resources.) In addition, as Table 7.2 demonstrates, the mean score for Total Coping Resources in the current sample was significantly different to the normative mean score, t (1064) = 8.02, p < .001, as were the scores for each of the five sub-scales. The current sample reported higher Total Coping Resources than the normative sample and higher Cognitive, Social, and Physical Resources, but lower Emotional and Spiritual Resources.

Hammer and Marting (1988) report internal consistency reliabilities (Cronbach alpha) of the CRI scales for a sample of 749 adults ranging from .71 for the Physical scale to .84 for the Emotional scale with .91 for the Total Resource score. In the current sample, the Cronbach alphas were higher in each case, but the distribution was the same. For example, the coefficient of .79 for the Physical scale was the lowest of all the scales and the Cronbach alpha of .89 for the Emotional scale was the highest. The alpha coefficient for the Total Resource score was .94.

7.7 Dysfunctional attitudes

The mean Dysfunctional Attitude score for the current sample was 104.23 (*SD* = 30.40). This is significantly lower than, t (576) = -6.23, p < .001, the mean score reported by Weissman (1979) of 119.4 (*SD* = 27.2) for the sample of 355 undergraduate students that formed the original normative data. The range of possible scores for the DAS is 40 to 280. Higher scores indicate the endorsement of more dysfunctional attitudes. Therefore, it would appear that the participants in the current research are on the low side of normal for dysfunctional attitudes. In terms of internal consistency, the coefficient alpha for the current sample was .93, which is similar to the coefficient alpha reported by Weissman (1979) of .90.

7.8 Gender differences

A multivariate analysis of variance (MANOVA) was performed to check for significant pre-intervention differences between the male and female participants in the current

sample. The results are displayed in Table 7.3. The MANOVA resulted in a Wilks' Lambda of .727 which was significant, F (26, 170) = 2.46, $p < .001$. Women obtained significantly higher scores than men for the personality variables of Openness to Experience, F (1, 195) = 7.23, $p < .01$, Agreeableness, F (1, 195) = 12.77, $p < .001$, and Conscientiousness, F (1, 195) = 5.81, $p < .05$, and for Emotional Coping Resources, F (1, 195) = 6.31, $p < .05$. In addition, women had significantly lower scores than men for Dysfunctional Attitudes, F (1, 195) = 4.24, $p < .05$.

7.9 Additional demographic differences

MANOVAs and chi square analyses revealed no further meaningful demographic differences.

Table 7.3

MANOVA comparing mean variable scores for female and male participants

	Female (n = 166)		**Male** (n = 31)		
Variables	**Mean**	***SD***	**Mean**	***SD***	***F*** (df = 1, 195)
Burnout					
Emotional Exhaustion	21.49	10.89	20.52	12.87	0.20
Depersonalization	4.34	4.42	5.70	5.48	2.33
Personal Accomplishment	37.33	6.63	36.87	6.68	0.13
Personality					
Neuroticism	21.39	7.91	21.13	7.11	0.03
Extroversion	29.81	5.94	28.06	5.66	2.30
Openness	31.52	6.02	28.23	7.50	7.23**
Agreeableness	34.51	5.32	30.77	5.42	12.77***
Conscientiousness	34.34	6.30	31.29	7.36	5.81*
Well-being					
Life Satisfaction	22.54	6.67	21.51	7.36	0.60
Positive Affect	34.01	7.23	34.97	7.68	0.45
Negative Affect	20.11	7.55	19.65	7.15	0.10
Life Spheres	35.18	5.92	34.03	7.04	0.93
Psychological distress					
GHQ-28 (total)	24.66	13.55	23.08	12.39	0.36
Somatic Symptoms	7.61	4.86	6.56	8.43	0.05
Anxiety and Insomnia	7.13	4.80	5.84	4.18	1.97
Social Dysfunction	7.94	2.88	7.61	2.62	0.34
Severe Depression	1.98	3.97	2.23	4.02	0.10
Coping resources (total)	189.63	22.54	183.55	25.69	1.82
Cognitive	30.23	4.84	29.00	6.14	1.54
Social	47.12	5.11	45.35	6.55	2.82
Emotional	46.09	8.01	42.13	8.31	6.31*
Spiritual	30.61	5.65	31.48	6.46	0.59
Physical	35.58	5.13	35.58	6.55	0.00
Dysfunctional Attitudes	100.65	28.30	112.26	31.51	4.24*

*p< .05, **p< .01, ***p< .001

7.10 Factor analysis

Factor analytic procedures were applied to the three scales representing the three dimensional model of well-being. These scales include the Satisfaction With Life scale (SWLS; Diener et al., 1985) and the Positive and Negative Affect Schedule (PANAS, Watson et al., 1988) that is comprised of the two mood factors of Positive Affect and Negative Affect. However, first the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was used to determine whether factor analysis was appropriate. The KMO for the three measures was .89, which is more than satisfactory for factor analytic procedures to be applied (Norusis, 1992).

A factor analysis using the maximum likelihood extraction method resulted in five factors with eigenvalues greater than one. However, only three of these five factors were retained for several reasons. Firstly, the three factors accounted for the majority of the total variance. Specifically, the three factors accounted for 52% of the variance whereas the additional two factors contributed only another 7.5% of the variance. In addition, an examination of the eigenvalues revealed that the three retained factors had eigenvalues substantially larger than one, while the remaining two factors had eigenvalues just over one. There is evidence that the Guttman-Kaiser "eignenvalue greater than one rule" can lead to overestimating factors (Zwick & Velicer, 1986). Therefore, only the three factors with eigenvalues substantially over one were retained. Finally, a scree plot test highlighted the three factors as being adequate and sufficient. That is, a line could be drawn which encompassed the first three points and another line was required for the rest of the points (Tabachnick & Fidell, 1996).

The items were then rotated using the oblimin rotation with Kaiser normalization and a parsimonious three factor solution was revealed where each of the factor items clearly loaded onto the original scale. The results are presented in Table 7.4. As can be seen, only one item in the three factor solution had a correlation below .5. This is the fifth item in the Negative Affect factor labeled "hostile" with a correlation of .477. However, this item was retained in the interests of parsimony because it was just below the suggested cut-off of .5 and because comparisons with the other two factors revealed that it was substantially larger than the other options (Merenda, 1997).

In conclusion, the three factor solution provides confirmatory evidence for the orthogonality of the three scales and support for the three dimensional model of well-being.

Table 7.4

Structure matrix for the three well-being factors

Item	Factor 1	Factor 2	Factor 3	Communality
Negative Affect				
Distressed	**.677**	.240	-.384	.471
Upset	**.641**	.247	-.379	.429
Guilty	**.588**	.010	-.286	.346
Scared	**.849**	.150	-.385	.721
Hostile	**.477**	.003	-.353	.262
Irritable	**.565**	.239	-.355	.339
Ashamed	**.558**	.128	-.379	.328
Nervous	**.777**	.000	-.304	.629
Jittery	**.775**	.166	-.323	.605
Afraid	**.862**	.230	-.423	.748
Positive Affect				
Interested	.214	**.696**	-.288	.492
Excited	.108	**.788**	-.355	.630
Strong	.252	**.671**	-.313	.465
Enthusiastic	.197	**.821**	-.366	.676
Proud	.134	**.607**	-.315	.376
Alert	.002	**.590**	-.181	.365
Inspired	.009	**.728**	-.405	.563
Determined	.009	**.696**	-.240	.487
Attentive	.243	**.700**	-.249	.509
Active	.238	**.679**	-.290	.473
Satisfaction With Life				
Life close to ideal	.434	.336	**-.862**	.744
Conditions of life excellent	.434	.346	**-.934**	.872
Satisfied with life	.459	.496	**-.853**	.761
Achieved important things in life	.369	.397	**-.611**	.410
No life changes desired	.303	.195	**-.544**	.298
EXPLAINED VARIANCE	30.36	14.86	6.78	
CUMULATIVE VARIANCE	30.36	45.22	52.00	

(Oblimin rotation with Kaiser normalization, KMO = .89, $N = 223$)

7.11 Relationships among the variables

Correlation coefficients were computed for the three dimensions of well-being that correspond to the three factor model of well-being; Satisfaction With Life, Positive Affect, and Negative Affect, the two additional indicators of well-being; Psychological Distress and Domain Satisfactions, the three dimensions of burnout, the five personality sub-scales of the NEO-FFI, the five sub-scales and the Total Coping Resources score, and Dysfunctional Attitudes. Pearson product-moment correlation coefficients were used. Using the Bonferroni approach to control for Type I error across all of the correlations, a p-value of less than .0001 (.05/276 = .0001) was required for significance. The results of the correlational analyses are shown in Tables 7.5 to 7.8.

Table 7.5 displays the relationships between well-being, coping resources, and burnout. The well-being measures included the Satisfaction With Life Scale (SWLS) and the Positive Affect and Negative Affect components of the PANAS. Coping resources were measured by the total score from the Coping Resources Inventory (CRI) and the five sub-scales of the CRI; Physical, Emotional, Cognitive, Social, and Spiritual Coping Resources. Burnout was assessed by the three dimensions of the Maslach Burnout Inventory (MBI); Emotional Exhaustion, Depersonalization, and Personal Accomplishment.

7.11.1 Well-being and coping resources

Table 7.5 shows that 17 of the 18 correlations between well-being and coping resources were statistically significant ($p < .0001$, using the Bonferroni adjustment) and were greater than or equal to .24. In general, the effect sizes were medium to large. CRI Total scores and sub-scale scores were significantly and positively correlated with SWLS scores and PA scores and negatively with NA scores. The one non-significant relationship was between Spiritual Coping Resources and Negative Affect.

In summary, the results supported Hypothesis 1. Life Satisfaction and Positive Affect were significantly and positively correlated with Total Coping Resources and Negative Affect was significantly and negatively correlated with Total Coping Resources.

7.11.2 Well-being and burnout

Table 7.5 also presents the relationships between well-being and burnout. Of the nine correlations, four were statistically significant ($p < .0001$, using the Bonferroni adjustment) and were greater than or equal to .34. Emotional Exhaustion scores were significantly but negatively related to SWLS and PA and significantly and positively related to NA. Personal Accomplishment scores were significantly and positively correlated with PA. Depersonalization scores were not significantly related to any aspect of well-being.

The results indicated that Hypothesis 2 was only partially supported. Well-being was inversely related to burnout in that Life Satisfaction and Positive Affect were significantly and negatively related to Emotional Exhaustion. Positive Affect was also significantly and positively related to Personal Accomplishment. In addition, Negative Affect was significantly and positively related to Emotional Exhaustion. However, there was no significant relationship between Life Satisfaction and Depersonalization and Life Satisfaction and Personal Accomplishment. There was also no significant relationship between Positive Affect and Depersonalization, between Negative Affect and Personal Accomplishment, and between Negative Affect and Depersonalization.

7.11.3 Coping resources and burnout

The final correlations displayed in Table 7.5 are between coping resources and burnout. Of the 18 correlations, eight were statistically significant ($p < .0001$, using the Bonferroni adjustment) and were greater than or equal to .25. All of the effect sizes were between small and medium according to Cohen's (1992) criteria. Overall, Coping Resources were significantly and positively correlated with Personal Accomplishment with the exception of scores on the Physical Coping Resource sub-scale. Total Coping Resource scores and scores on the Physical and Cognitive Coping Resource sub-scales were also significantly and negatively correlated with Emotional Exhaustion. There were no significant relationships between Coping Resources and Depersonalization.

The results indicated only partial support for Hypothesis 5. In terms of Total Coping Resources, two of the three aspects of the hypothesis were supported. Coping

Resources were inversely related to Emotional Exhaustion and directly related to Personal Accomplishment, but were not inversely related to Depersonalization.

Table 7.5

Pearson product-moment correlations between well-being, coping resources, and burnout

	SWLS	PA	NA	CRI	P	E	C	S	SP	EE	D	P Acc
Well-being												
SWLS												
PA	.45****											
NA	-.47****	-.23***										
Coping resources												
CRI (total)	.62****	.52****	-.39****									
Physical	.45****	.24****	-.28****	.55****								
Emotional	.46****	.41****	-.30****	.86****	.27****							
Cognitive	.62****	.55****	-.43****	.89****	.50****	.71****						
Social	.53****	.46****	-.33****	.85****	.32****.	.76****	.75****					
Spiritual (SP)	.34****	.35****	-.16	.66****	.21**	.43****	.50****	.44****				
Burnout												
Emotional Exhaustion	-.40****	-.40****	.42****	-.27****	-.27****	-.16	-.29****	-.23***	-.15			
Depersonalization	-.13	-.15	.23***	-.19**	-.09	-.15	-.22***	-.13	-.14	.41****		
Personal Accomplishment	.18**	.34****	-.08	.28****	.04	.25****	.28****	.27****	.25****	-.04	-.13	

**$p < .01$, ***$p < .001$, ****$p < .0001$ (all tests 2 tailed)

174

Table 7.6

Pearson product-moment correlations between burnout, psychological distress, and dysfunctional attitudes

	EE	Dep	P Acc	GHQ	SS	AI	SD	D	DA
Burnout									
Emotional Exhaustion									
Depersonalization	.41****								
Personal Accomplishment	-.04	-.13							
Well-being									
GHQ (total score)	.54****	18**	-.07						
Somatic Symptoms	.49****	.14	-.02	.85****					
Anxiety & Insomnia	.48****	.13	-.00	.87****	.66****				
Social Dysfunction	.34****	.09	-.11	.71****	.48****	.50****			
Depression	.40****	.23***	-.13	.76****	.48****	.53****	.49****		
Dysfunctional Attitudes	.21***	.18**	-.20**	.37****	.23***	.31****	.21***	.43****	

**$p < .01$, ***$p < .001$, ****$p < .0001$ (all tests 2 tailed)

7.11.4 Burnout and psychological distress

Table 7.6 presents the relationships between burnout and psychological distress. Of the 15 correlations, five were statistically significant ($p < .0001$, using the Bonferroni adjustment) and were greater than or equal to .34. All of the effect sizes were between medium and large according to Cohen's (1992) criteria. The five statistically significant correlations were all between the GHQ Total score and sub-scale scores and Emotional Exhaustion. This means that Hypothesis 3 was only partly supported. As predicted, Psychological Distress was directly related to Emotional Exhaustion. However, there was no significant relationship between Psychological Distress and Depersonalization or between Psychological Distress and Personal Accomplishment.

7.11.5 Coping resources and personality

The relationships between coping resources and personality are displayed in Table 7.7. Of the 30 correlations, 17 were statistically significant ($p < .0001$, using the Bonferroni adjustment) and were greater than or equal to .26. The effect sizes ranged from small to large according to Cohen's (1992) criteria. As Table 7.7 demonstrates, Total Coping Resource scores were significantly related to four of the five personality sub-scale scores. The exception was the Openness to Experience sub-scale, which was not

significantly related to any of the Coping Resource sub-scales. In contrast, Neuroticism was significantly and negatively related to each of the Coping Resource sub-scales. Extroversion and Conscientiousness were related to Total Coping Resource scores and to three of the five sub-scale scores and Agreeableness was related to Total Coping Resource scores and to two of the five sub-scale scores.

In terms of the Coping Resource sub-scales, the most notable result was that Physical Coping Resource scores and Spiritual Coping Resource scores were only significantly related to Neuroticism.

The results from Table 7.7 indicated that Hypothesis 6 was supported. Total Coping Resource scores and all of the Coping Resource sub-scale scores were significantly and negatively related to Neuroticism. Hypothesis 7 was also supported. Social Coping Resource scores were directly related to Extroversion and Agreeableness. In addition, Hypothesis 8 was supported. Cognitive Coping Resources were significantly and positively related to Extroversion.

Table 7.7

Pearson product-moment correlations between coping resources, personality, and dysfunctional attitudes

	CRI	Physical	Emotion	Cogn	Social	Spiritual	N	E	O	A	C	DA
Coping resources												
Total score (CRI)												
Physical	.55****											
Emotional	.86****	.27****										
Cognitive	.89****	.50****	.71****									
Social	.85****	.32****	.76****	.75****								
Spiritual	.66****	.21**	.43****	.50****	.44****							
Personality												
Neuroticism	-.55****	-.32****	-.42****	-.61****	-.47****	-.34****						
Extroversion	.42****	.20	.44****	.45****	.52****	.12	-.43****					
Openness	.19**	.06	.20**	.13	.16	.14	-.03	.17				
Agreeableness	.26****	.14	.19**	.27****	.24****	.17	-.26****	.10	.18**			
Conscientiousness	.32****	.12	.28****	.33****	.36****	.14	-.34****	.34****	-.04	.26****		
DAS	-.51****	-.27****	-.41****	-.54****	-.45****	-.32****	.49****	-.30****	-.19**	-.27****	-.20**	

**$p < .01$, ***$p < .001$, ****$p < .0001$ (all tests 2 tailed)

7.11.6 Well-being and personality

Table 7.8 presents the relationships between well-being and personality. Seven of the 15 correlations were statistically significant ($p < .0001$, using the Bonferroni adjustment) and were greater than or equal to .27. The effect sizes ranged from small to large according to Cohen's (1992) criteria. The results indicated that Neuroticism and Extroversion were related to each aspect of well-being in the anticipated directions. The other significant relationship was a positive correlation between Conscientiousness and Positive Affect.

These results indicated that Hypothesis 4 was partially supported. Life Satisfaction and Positive Affect were significantly and negatively related to Neuroticism and significantly and positively related to Extroversion. However, there were no significant relationships between Life Satisfaction and Openness to Experience, Agreeableness, and Conscientiousness and between Positive Affect and Openness to Experience and Agreeableness. Negative Affect was significantly and positively related to Neuroticism and significantly and negatively related to Extroversion. However, there was no relationship between Negative Affect and the remaining three personality sub-scales.

7.11.7 Burnout and personality

The relationships between burnout and personality are also presented in Table 7.8. The results show that five of the 15 correlations were statistically significant ($p < .0001$, using the Bonferroni adjustment) and were greater than or equal to .25. All the effect sizes were between small and medium according to Cohen's (1992) criteria. Neuroticism scores were significantly and positively correlated with Emotional Exhaustion and Extroversion scores were significantly and negatively correlated with Emotional Exhaustion. None of the other three personality sub-scales were related to Emotional Exhaustion. There were also no significant relationships between Depersonalization scores and any of the personality sub-scale scores. Personal Accomplishment scores were significantly related to three of the five personality sub-scales. Specifically, Personal Accomplishment scores were significantly and positively related to the Extroversion, Openness to Experience, and Conscientiousness sub-scales.

These results indicate that Hypothesis 9 was only partially supported. Neuroticism was significantly and positively related to Emotional Exhaustion, but no significant relationships existed between Neuroticism and Depersonalization or between Neuroticism and Personal Accomplishment. Hypothesis 10 was supported. Personal Accomplishment was significantly and positively related to Conscientiousness. However, Hypothesis 11 was not supported. Depersonalization was negatively, but not significantly correlated with Agreeableness.

7.11.8 Dysfunctional attitudes and well-being

Table 7.8 displays the results of the correlations between dysfunctional attitudes and well-being. These results show that DAS scores were significantly correlated with each aspect of well-being ($p < .0001$, using the Bonferroni adjustment). The relationship was significant and negative with SWLS and PA scores and significant and positive with NA scores. The effect sizes were all medium according to Cohen's (1992) criteria.

7.11.9 Dysfunctional attitudes and burnout

The relationships between dysfunctional attitudes and burnout are also displayed in Table 7.8. As indicated in this table, there were no significant relationships between DAS scores and any of the three aspects of burnout.

7.11.10 Dysfunctional attitudes and personality

Table 7.8 shows the results of the correlations between dysfunctional attitudes and personality. It is evident that three of the five possible relationships were significant ($p < .0001$, using the Bonferroni adjustment) and were greater than or equal to .27. DAS scores were significantly and positively correlated with Neuroticism scores and significantly and negatively correlated with Extroversion and Agreeableness scores.

7.11.11Dysfunctional attitudes and psychological distress

The correlations between dysfunctional attitudes and psychological distress are displayed in Table 7.6. As can be seen, DAS scores were significantly and positively related to total GHQ scores and to two of the sub-scale scores; Anxiety and Insomnia and Depression.

7.11.12 Dysfunctional attitudes and coping resources

Table 7.7 displays the correlations between dysfunctional attitudes and coping resources. Of the six correlations, all six were statistically significant ($p < .0001$, using the Bonferroni adjustment) negative correlations and were greater than or equal to .27. Two of the effect sizes were large, three were medium, and one was small according to Cohen's (1992) criteria.

The collection of correlations involving the DAS indicated that Hypothesis 12 was partially supported. Dysfunctional Attitudes were related to all three aspects of well-being, to Coping Resources, to Neuroticism, and to total scores for Psychological Distress as predicted. However, no significant relationships were found between Dysfunctional Attitudes and any aspect of burnout.

Table 7.8

Pearson product-moment correlations between well-being measures, burnout, personality, and dysfunctional attitudes

	SWLS	PA	NA	EE	Dep	P Acc	N	E	O	A	C	DA
Well-being												
SWLS												
PA	.45****											
NA	-.47****	-.23***										
Burnout												
Emotional Exhaustion	-.40****	-.40****	.42****									
Depersonalization	-.13	-.15	.23***	.41****								
Personal Accomplishment	.18**	.34****	-.08	-.04	-.13							
Personality												
Neuroticism	-.52****	-.42****	.63****	.44****	.21**	-.19**						
Extroversion	.37****	.40****	-.30****	-.26****	-.03	.34****	-.43****					
Openness	-.01	.15	.13	.17	-.08	.27****	-.03	.17				
Agreeableness	.12	.11	-.14	-.11	-.22***	.19**	-.26****	.10	.18**			
Conscientiousness	.23***	.27****	-.21***	-.17	-.15	.25****	-.34****	.34****	-.04	.26****		
DAS	-.39****	-.40****	.37****	.21***	.18**	-.20**	.49****	-.30****	-.19**	-.27****	-.20**	

**$p < .01$, ***$p < .001$, ****$p < .0001$ (all tests 2 tailed)

7.12 Predictors of well-being

Three multiple linear regression analyses were performed to investigate the factors that predict the three dimensions of well-being. Predictor variables were identified from the literature and only variables that were significantly ($p < .0001$) correlated (using the Bonferroni adjustment) with each respective facet of well-being were included in the analyses.

Table 7.9 presents the results of the regression analysis for the effects of Emotional Exhaustion, Neuroticism, Extroversion, Life Spheres, Total Psychological Distress (GHQ-28), Total Coping Resources, and Dysfunctional Attitudes on Satisfaction With Life. Emotional Exhaustion ($\beta = -.117$, $p < .05$), Life Spheres ($\beta = -.323$, $p < .001$), and Total CRI ($\beta = -.009$, $p < .001$) predicted Satisfaction With Life scores accounting for 1.9%, 11.9%, and 9.6% respectively of the variance in SWLS scores, $R^2 = .533$, $F(7, 209) = 34.06$, $p < .0001$.

The results indicate that Hypothesis 13 was partly supported. Life Satisfaction was predicted by Emotional Exhaustion, Life Spheres, and Total CRI scores. However, Extroversion, Neuroticism, Psychological Distress, and Dysfunctional Attitudes were not significant predictors.

Table 7.9

Regression analysis for Satisfaction With Life

Variable	*B*	SEB	β	*t*	Partial r^2
Constant	-4.24	4.76		-0.89	
Burnout					
Emotional Exhaustion	-0.01	0.04	-.117	-2.03 *	.019
Personality					
Neuroticism	-0.01	0.06	-.115	-1.69	.013
Extroversion	0.00	0.07	.035	0.64	.002
Well-being					
Life Spheres	0.36	0.07	.323	5.34 ***	.119
GHQ total	-0.00	0.03	-.035	-0.51	.001
Coping Resources					
CRI total	0.01	0.02	.310	4.72 ***	.096
DAS	-0.00	0.01	-.019	-0.33	.001
R	.730 ***				
Total R^2	.533				
Adjusted R^2	.517				

*p< .05, **p< .01, ***p< .001

Table 7.10

Regression analysis for Positive Affect

Variable	*B*	SEB	β	*t*	Partial r^2
Constant	15.55	5.95		2.61	
Burnout					
Emotional Exhaustion	-0.15	0.04	-.227	-3.54 ***	.057
Personal Accomplishment	0.20	0.06	.192	3.34 ***	.051
Personality					
Neuroticism	0.00	0.07	.035	0.45	.001
Extroversion	0.14	0.08	.112	1.78	.015
Conscientiousness	0.00	0.07	.027	0.45	.001
Well-being					
Life Spheres	-0.01	0.08	-.055	-0.81	.003
GHQ total	-0.01	0.04	-.138	-1.79	.015
Coping Resources					
CRI total	0.01	0.02	.265	3.58 ***	.058
DAS	-0.00	0.02	-.125	-1.96	.018
R	.647 ***				
Total R^2	.419				
Adjusted R^2	.394				

*p< .05, **p< .01, ***p< .001

Table 7.10 presents the results of the regression analysis for the effects of Emotional Exhaustion, Personal Accomplishment, Neuroticism, Extroversion, Conscientiousness, Life Spheres, Total Psychological Distress (GHQ-28), Total Coping Resources, and Dysfunctional Attitudes on Positive Affect. Emotional Exhaustion (β = -.227, p < .001), Personal Accomplishment (β = -.192, p < .001), and Total CRI (β = 3.58, p < .001) predicted Positive Affect scores accounting for 5.7%, 5.1%, and 5.8% respectively of the variance in PA scores, R^2 = .419, F (9, 209) = 16.72, p < .0001.

The results indicated that Hypothesis 14 was partly supported. Positive Affect was predicted by Emotional Exhaustion, Personal Accomplishment, and Total CRI scores. However, Neuroticism, Extroversion, Conscientiousness, Life Spheres, Psychological Distress, and Dysfunctional Attitudes were not significant predictors.

Table 7.11
Regression analysis for Negative Affect

Variable	*B*	SEB	β	*t*	Partial r^2
Constant	9.74	0.53		1.85	
Burnout					
Emotional Exhaustion	-0.00	0.04	.021	0.37	.001
Personality					
Neuroticism	0.31	0.06	.326	4.78 ***	.099
Extroversion	-0.00	0.07	-.018	-0.33	.001
Well-being					
Life Spheres	-0.16	0.07	-.130	-2.19 *	.023
GHQ Somatic Symptoms	0.01	0.10	.038	0.58	.002
GHQ Anxiety & Insomnia	0.48	0.11	.312	4.74 ***	.088
GHQ Social Dysfunction	-0.01	0.15	-.018	-0.31	.000
GHQ Depression	0.31	0.12	.159	2.48 *	.029
Coping Resources					
CRI total	0.00	0.02	.082	1.28	.008
DAS	0.00	0.01	.020	0.36	.001
R	.746 ***				
Total R^2	.556				
Adjusted R^2	.535				

*p< .05, **p< .01, ***p< .001

Table 7.11 presents the results of the regression analysis for the effects of Emotional Exhaustion, Neuroticism, Extroversion, Life Spheres, Total Psychological Distress (GHQ-28), and the four GHQ sub-scales, Total Coping Resources, and Dysfunctional Attitudes on Negative Affect. Neuroticism (β = .326, p < .001), Life Spheres (β = -.130, p < .05), the GHQ sub-scale Anxiety and Insomnia (β = .312, p < .001), and the GHQ sub-scale Depression (β = .159, p <.05), predicted Negative Affect scores accounting for 9.9%, 2.3%, 8.8%, and 2.9% respectively of the variance in Negative Affect scores, R^2 = .556, F (10, 208) = 26.09, p < .0001.

The results indicated that Hypothesis 15 was partly supported. Negative Affect was predicted by Neuroticism, Life Spheres, Anxiety and Insomnia, and Depression. However, Emotional Exhaustion, Extroversion, Somatic Symptoms, Social Dysfunction, Total Coping Resources, and Dysfunctional Attitudes were not significant predictors.

7.13 Chapter summary

This chapter began with an overview of the descriptive statistics for each of the variables used in the current research. In addition, the mean scores from the current sample were compared with the respective normative mean scores. Overall, the current sample was significantly different to the normative samples on 14 of the 15 variables. Community workers were found to have average levels of emotional exhaustion, low levels of depersonalization, and high levels of reduced personal accomplishment. In terms of personality, the community workers were significantly different to the normative sample on each of the five dimensions. Specifically, they were higher in neuroticism, extroversion, openness to experience, and agreeableness, but lower in conscientiousness. Overall the well-being measures indicated that the community workers were in the *slightly satisfied* category for satisfaction with life, although they still reported lower life satisfaction than the normative sample. They were also significantly lower than a comparative sample for domain satisfaction. Regarding the affective dimension of well-being, the community workers were significantly higher in positive affect than the normative sample. No significant differences were detected for negative affect. In terms of coping resources, the community workers were reasonably well resourced with significantly higher aggregated coping resources, cognitive, social, and physical resources but lower emotional and spiritual resources than the normative sample. Levels of dysfunctional attitudes were about average.

A factor analysis of the three dimensional model of well-being revealed three orthogonal factors and provided preliminary support for the three dimensional model. In addition, correlational analyses revealed different patterns of relationships for the well-being dimensions. Regression analyses on each aspect of well-being also showed that different predictors were significant for the different dimensions. In each of the three analyses, a substantial amount of variance was predicted by the linear combination of predictor variables.

All correlational analyses to investigate the relationships among variables were performed using the Bonferroni adjustment to set a stringent level of significance ($p <$ .0001). Some notable findings emerged. In particular, 17 of the 18 correlations

between well-being and coping resources were significant. All the hypotheses were supported or partially supported.

CHAPTER 8: DISCUSSION

8.1 Chapter overview

Community workers are a subset of human service workers. Internationally there is limited research on human service workers and even less that pertains directly to community workers (Balloch et al., 1998). Therefore, the current research presents a unique opportunity to explore this under-researched sector of society.

This chapter begins with an overview of the current sample in terms of the mean scores, standard deviations, and reliability coefficients obtained on each of the measures used in the current research. In addition, mean scores from the current sample are compared with the respective normative mean scores. This is followed by a discussion of the findings of the factor analysis conducted to investigate the three dimensional model of well-being. Next a thorough overview of the correlational analyses is presented, with specific reference to each of the twelve hypotheses pertaining to these analyses. The construct of well-being is further investigated with a summary of the outcomes and implications of three multiple linear regression analyses performed to ascertain predictors of the three dimensions of well-being. The chapter concludes with a summary of the main limitations of the current research and suggestions to guide the direction of future research.

8.2 Discussion of characteristics of the sample

8.2.1 Burnout

8.2.1.1 Overall levels of burnout

The results indicated that the current sample was experiencing average levels of burnout in terms of emotional exhaustion, low burnout in terms of depersonalization, and high burnout in terms of personal accomplishment (Table 7.1). Average levels of emotional exhaustion indicate that as a group the community workers were experiencing average levels of being emotionally depleted, physically fatigued, and overloaded by their work. Low levels of depersonalization mean that as a group the

community workers were unlikely to have developed negative, callous, and cynical attitudes towards their clients and the recipients of their care. However, low personal accomplishment scores indicate high burnout in this area, which means that as a group the community workers were likely to be experiencing low levels of satisfaction with their achievements working with people and low levels of perceived professional competence.

The Emotional Exhaustion scale of the MBI is frequently used as a measure of stress as well as an indicator of a component of burnout (Maslach, 1982, 1999; Schaufeli et al., 1993; Schaufeli & Enzmann, 1998). Interpreted in this way, it appears that the community workers in the current research were experiencing average levels of stress.

The results indicated that as a group the community workers were only experiencing high burnout in terms of feelings of reduced satisfaction and competence in their work. These findings were unexpected. Higher levels of burnout were anticipated as a result of the extreme job requirements placed on community workers, especially in terms of the imbalance between high occupational demands and the limited resources typically available in community organisations to meet these demands (Brown & O' Brien, 1998). In addition, there is extensive literature suggesting that people involved in demanding human service work are particularly vulnerable to various negative stress related effects, including burnout (Fagin et al., 1996; Maslach, 1999; Nias, 1999; Rabin et al., 1999; Sauter et al., 1992).

8.2.1.2 Factors to consider when interpreting the burnout results

There are several reasons to interpret the burnout findings with caution. Firstly, the MBI does not measure the presence or absence of burnout per se. Levels of burnout fall on a continuum. The normative scores provided by the MBI are meant as guidelines only and are not intended to function as clinical cut off points (Schaufeli et al., 1993). The categories provided are based on arbitrary statistical norms where the normative sample is divided into three equally sized groups of 33.3 percent, corresponding to high, medium, and low levels of burnout respectively (Maslach & Jackson, 1986).

In addition, Maslach and Jackson (1986) provide normative samples for a variety of helping occupations, none of which include community workers. The sample chosen as most relevant for comparison with the current group is a pool of 1538 social service workers, including social workers and child protective service workers. Although similar to community workers in terms of service ethic, this group is likely to have different occupational demands, which could impact on their levels of burnout. Schaufeli and Enzmann (1998) also voice concerns over the relevance of the normative information provided by Maslach and Jackson because there is no evidence that the normative samples are based on random samples of the respective occupational groups.

The reliance on North American normative data is an issue that may have impacted on the current research. Schaufeli and van Dierendonck (1993) found that levels of emotional exhaustion, depersonalization, and reduced personal accomplishment were significantly higher in the American normative sample than in the Dutch normative sample. This raises concerns over whether the normative sample is representative for New Zealand community workers. Ideally nation specific normative data should be used. Unfortunately this does not exist for the current population. Therefore, caution must be used when classifying participants according to their level of burnout.

It is also likely that the comparative sample of social workers has a high prevalence of burnout symptoms. The implication is that although the current sample does not exhibit high burnout scores for two of the three aspects of burnout, this may not necessarily provide an accurate indication of their absolute levels of burnout. Investigating the individual items that comprise the MBI reveals a different picture. For example, the current sample reported average levels of emotional exhaustion. However, one of the items in the Emotional Exhaustion sub-scale states, "I feel used up at the end of the working day". In the current sample, 65 percent of the community workers reported that they felt this way *at least* a few times a month.

Another factor that can obscure an accurate indication of burnout is known as the "healthy worker effect". This refers to the underestimation of the effects of burnout because exclusively working and therefore at least somewhat healthy individuals are investigated. While these individuals may be in the process of burning out, they will

not have reached the end state of burnout (Schaufeli & Enzmann, 1998). The current sample of community workers were all working, although 14 percent volunteered their services and received no financial reward. In addition, all the participants were prepared to take the time and energy to participate in research. Therefore, the healthy worker effect may have had an impact because although individuals experiencing severe levels of burnout may have been interested in the research, they may have also lacked the energy to participate, effectively biasing the results towards lower levels of burnout.

In addition, Brown and O'Brien (1998) investigated stress and burnout in a population of shelter workers in the USA. This population is equivalent to Women's Refuge workers in New Zealand and therefore meets the criteria for community workers in the current research. Brown and O'Brien noted that their sample did not show high levels of burnout according to Maslach and Jackson's (1986) normative data. However, other stress measures specific to their study indicated that the shelter workers were in fact moderately stressed.

Finally, very little literature exists to make comparisons between relevant New Zealand samples. However, O'Driscoll and Schubert (1988) investigated a sample of 70 workers in a multi-function community service agency in New Zealand. Comparing the mean burnout scores for the current sample with those obtained by O'Driscoll and Schubert reveals a very similar picture. They reported a mean of 20.3 (SD = 9.8) for Emotional Exhaustion, 4.8 (SD = 3.5) for Depersonalization, and 36.5 (SD = 6.5) for Personal Accomplishment. These are consistent with the scores reported in the current sample which include a mean of 21 (SD = 11) for Emotional Exhaustion, 4.62 (SD = 4.57) for Depersonalization, and 36.95 (SD = 6.98) for Personal Accomplishment.

8.2.1.3 The Depersonalization sub-scale

One issue that may be relevant to interpreting the burnout scores for the current sample is that the Depersonalization scale of the MBI had a reliability coefficient of .68, which is the lowest reliability coefficient of all the scales used in the current research. However, it does just meet Nunnally's (1978) level of .7 acceptability. This

raises the issue of why this sub-scale is answered in the least consistent way of all the sub-scales. Schaufeli et al. (1993) suggest that the low reliability of the Depersonalization scale may be due to the fact that it is relatively short, comprised of only five items, or because there are differences in the way depersonalization is conceptualized across samples.

Support for Schaufeli et al's. (1993) suggestion that depersonalization is conceptualized differently across samples comes from the fact that there appear to be differences in the reliability of this sub-scale across countries. For example, many researchers investigating populations in North America, where the normative data originate from, have found that the Depersonalization sub-scale is reliable. Lee and Ashforth (1996) analysed 47 studies that included approximately 10, 000 North American participants and found overall reliability coefficients for each sub-scale that were well within the range quoted in the test manual: Emotional Exhaustion (.86), Depersonalisation (.76), and Personal Accomplishment (.77). In contrast, researchers investigating international samples have questioned the reliability of this sub-scale. For example, Janssen et al. (1999) used the Dutch version of the MBI (Schaufeli & van Dierendonck, 1993) to investigate a sample of 156 Dutch nurses. They reported reliability coefficients of .86 for Emotional Exhaustion, .71 for Personal Accomplishment, and .57 for Depersonalization. In addition, with their sample of New Zealand community workers, O'Driscoll and Schubert (1988) reported acceptable Cronbach's alpha for Emotional Exhaustion, (.87) and Personal Accomplishment (.76), but unacceptably low reliabilities for Depersonalization (.34). It may be the case that the North American normative samples are less relevant for comparisons with international samples on this dimension.

The burnout phenomenon is so complex (Schuafeli & Enzmann, 1998) that it is important to remember that just as levels of burnout can differ from nation to nation, patterns of burnout can also differ across occupations. For example, a study in Holland found that compared to human service professionals, secondary teachers experienced more emotional exhaustion and somatic complaints but less depersonalization and more personal accomplishment (Schaufeli et al., 1994). When interpreting burnout scores, it is obviously critical to consider the social environment in which work takes place.

There are also biographical characteristics specific to the current sample that may have impacted on the levels of burnout. For example, 85 percent of the sample of community workers is female. Although the research findings in this area are somewhat confusing (Cordes & Dougherty, 1993; Maslach & Jackson, 1981b), several studies have found that depersonalization is more likely to occur with men than women (Maslach & Jackson, 1981b, 1985). The most commonly proposed rationale is that women are less likely to cope with emotional exhaustion by exhibiting the characteristic callous and impersonal behaviour associated with depersonalization because they have been socialized to behave in a more nurturing and caring way (Maslach & Jackson, 1985; Schaufeli & Enzmann, 1998).

In addition, the biographical characteristic most consistently related to burnout is age (Cordes & Dougherty, 1993; Schaufeli & Enzmann, 1998). Burnout symptoms tend to decline with growing age or work experience over all three dimensions, but most clearly for depersonalisation and emotional exhaustion (Maslach, 1982; Maslach et al., 1996). The proposed reason for this is that as individuals gain work experience, they tend to develop more stable patterns of accommodation with their work and as a result experience less burnout (Ashforth & Lee, 1997). This may have impacted on the current research because approximately 85 percent of the community workers are aged between 30 and 59 years. Only 10 percent of the participants are under 30 years and 4 percent are over 60. The relationship with age and work experience has been likened to a "survival bias" and is similar to the "healthy worker effect". In effect, this bias states that those who burn out early in their careers are more likely to quit their jobs so that the survivors who remain show lower levels of burnout (Schaufeli & Enzmann, 1998).

8.2.1.4 The process of burnout

The widely accepted (Ashforth & Lee, 1997; Cordes et al., 1997) sequential model of burnout proposed by Leiter and Maslach (1988) suggests that burnout develops in stages. According to this model, the first component is emotional exhaustion which develops as a result of overwhelming demands. Depersonalization is the next step in the process and involves developing negative and hardened attitudes towards the

recipients of one's care. This leads to the final stage where the person begins to withdraw physically or psychologically from occupational demands and which over time leads to a lack of confidence and a reduced sense of personal accomplishment at work.

One reason that may account for the low depersonalization levels obtained by the community workers in the current sample is that depersonalization is usually thought of as a coping strategy that occurs in response to emotional exhaustion (Lee & Ashforth, 1990, Leiter, 1990). As the current sample did not report high levels of emotional exhaustion, it may be that there was also no corresponding need to use depersonalization as a coping strategy.

Reduced feelings of personal accomplishment are thought to occur at least partly in response to high levels of depersonalization (Cordes & Dougherty, 1993). However, this explanation is difficult to apply in the current research because levels of depersonalization are low which according to the sequential model (Leiter & Maslach, 1988), should halt the progress of burnout. However, in the current research, the highest levels of burnout occur in the last step of Leiter and Maslach's proposed burnout chain. Therefore, the current research may provide some support for the mixed sequential and parallel process model of burnout advocated by Leiter (1990, 1993). This model is sequential in that emotional exhaustion is thought to lead to depersonalization, as in the original model, but parallel in that lack of personal accomplishment arises somewhat independently of the other two processes. Support for this model comes from a longitudinal study (Lee & Ashforth, 1993) and a cross-sectional study (Koeske & Koeske, 1989). This model also fits with the findings of the current research and may help to explain the independence of the personal accomplishment scores.

However, these findings are speculative given that testing a process model of burnout was not the purpose of the current research. The situation may be also more complex than proposed because some consider personal accomplishment the "weak link" in the burnout concept (Lee & Ashforth, 1993). In addition, there is still a lack of certainty as to whether feelings of diminished personal accomplishment are an outcome rather than a component of burnout (Cordes et al., 1997; Kalliath et al., 2000).

8.2.1.5 Possible reasons for reduced levels of personal accomplishment

Research suggests that identifying the causes of burnout is a difficult process (Schaufeli & Enzmann, 1998) and from the current research it is not possible to determine the factors that contributed to the high levels of burnout in terms of reduced personal accomplishment. However, this finding is worrying because the key components of feelings of reduced personal accomplishment are the tendency to evaluate oneself negatively and to experience a crisis of professional competence (Cordes & Dougherty, 1993; Maslach, 1982, 1999). The potential implications of community workers feeling that that they are losing their effectiveness and potential to develop as professionals are decreased job satisfaction and increased turnover. This is unsettling because there is some research to suggest that an individual who leaves one community organisation may be more likely to withdraw from working in the community sector altogether (Hargrove et al., 1991).

Speculating on the possible reasons for the high levels of burnout in terms of reduced personal accomplishment in the current sample is difficult because there is evidence that the predictors of the three components of burnout differ in response to the unique job requirements of various occupations (Maslach, 1999). For example, supervisor support does not appear to be an important predictor of teacher burnout (Byrne, 1999) but it does appear to be a significant factor for nurses (Leiter & Maslach, 1988).

One possibility may be related to the levels of role ambiguity that many community workers experience in their day-to-day work. Role ambiguity can affect feelings of self-efficacy, which is a key component of feelings of personal accomplishment (Lee & Ashforth, 1990). Bandura (1986) defines self-efficacy as "people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances" (p. 391). It is a struggle to develop feelings of self-efficacy when there is confusion over what constitutes adequate job performance (Cherniss, 1980; Maslach, 1999). When situations are ambiguous, it becomes increasingly difficult for people to believe they are performing at an optimal level. The relationship between role ambiguity and feelings of reduced personal

accomplishment has been found in studies of teachers (Jackson et al., 1986) and human service professionals (Brookings et al., 1985).

There is no research to evaluate the relationship between role ambiguity and feelings of reduced personal accomplishment among community workers. However, in community work the standards for measuring success are often very imprecise and ambivalent (Farmer et al., 1984). In addition, if outside factors such as lack of resources impact on a community worker's ability to help a client, this can leave the person mistakenly feeling that he or she does not have the skills or abilities to perform effectively. Making an attribution of this sort in terms of personal failure has been found to lead to lowered self-efficacy (Bandura, 1986; Gist & Mitchell, 1992).

Another factor relevant to the current research that can impact on feelings of personal accomplishment is unmet expectations (Cordes & Dougherty, 1993; De Heus & Diekstra, 1999). It is thought that every person has expectations of what he or she will be able to accomplish professionally. In community work these expectations frequently contrast with the reality of human service work. If people attribute their unmet expectations to a failure to perform and attribute the failure to perform to their own personal inadequacies, this can impact on feelings of personal accomplishment (Schaufeli & Enzmann, 1998). However, the evidence for the role of expectations is inconclusive (Jackson et al., 1986; Kirk & Koeske, 1995; Schwab, 1986).

It may also be the case that the high levels of reduced personal accomplishment are reflective of the difficulties community workers face in their day-to-day work. Research suggests that community workers are consistently hampered by the constraints of high occupational demands and low resources with which to meet these demands (Brown & O' Brien, 1998; Edelwich & Brodsky, 1980; Prosser et al., 1997; Satyamruti, 1981). Perhaps the continued experience of struggling to obtain enough resources to assist the recipients of their care and attempting to make an impact in the face of great need in the community means that over time community workers begin to doubt their own professional competence or ability to make a difference. As such, they are vulnerable to experiencing reduced feelings of personal accomplishment.

In summary, the community workers in the current sample were found to be experiencing average levels of emotional exhaustion, low levels of depersonalization, and high levels of reduced personal accomplishment. Given the pressures on community workers, higher levels of burnout were expected. However, there are many reasons to interpret these findings cautiously. In particular, several concerns over the normative sample are raised, and the "healthy worker" effect may have played a part. Several reasons are proposed for the low levels of depersonalization reported by the community workers including the possibilities that this sub-scale is conceptualized differently across samples and that biographical characteristics, such as gender and age, played a role. The findings in the current research also have potential relevance to the most commonly accepted process model of burnout. Although it is not possible to definitively account for the high burnout in terms of low levels of personal accomplishment found in the current sample, factors such as role ambiguity and unmet expectations may have been influential.

8.2.2 Personality

A unique contribution of the current research is that community workers have not been investigated in terms of the five-factor model of personality. Therefore, one of the objectives of the research is to compile a personality profile of community workers.

The current sample is significantly different from the normative sample on all five of the personality dimensions measured by the NEO-FFI (Table 7.2). Specifically, the current sample is higher in Neuroticism, Extroversion, Openness to Experience, and Agreeableness, but lower in Conscientiousness. Converting the raw scores to the percentile scores provided in the manual (Costa & McCrae, 1992a) illustrates these findings. The current sample is at the 70^{th} percentile for Neuroticism, the 62^{nd} percentile for Extroversion, the 77^{th} percentile for Openness to Experience, the 62^{nd} percentile for Agreeableness, and the 48^{th} percentile for Conscientiousness.

An assessment of the overall transformed score profile suggests that as a group the community workers are highest on the dimension of openness to experience. Individuals high in this dimension tend to be curious, imaginative, willing to entertain

new ideas and unconventional values, with a broad range of interests, and open to a variety of experiences. This dimension is not a measure of intelligence, but it may be related to elements of intelligence such as divergent thinking (Digman, 1990; McCrae, 1987; McCrae & Costa, 1992a).

As a group the community workers are also reasonably high in neuroticism. In terms of stress and well-being, this is the most influential and pervasive personality domain (Matthews & Deary, 1998). It has also been shown to be particularly stable over the lifespan (Costa & McCrae, 1989). The scores obtained in the current sample raise the possibility that the community workers may have some tendency to experience negative emotions such as fear, sadness, embarrassment, anger, guilt, and disgust. These scores may also suggest a reduced ability to cope with stress (Costa & McCrae, 1992a).

Of the five personality dimensions, the community workers were lowest on the dimension of conscientiousness. Individuals high in this dimension tend to be dependable, reliable, careful, punctual, thorough, and organized (John, 1989). In addition, high conscientiousness is characterized by purposeful, strong-willed, and determined behaviour (McCrae & Costa, 1985, 1987). Perhaps as a result of these tendencies, conscientiousness is associated with high achievement in many spheres (Barrick & Mount, 1991; Digman & Takemoto-Chock, 1981; McCrae & Costa, 1992a). The community workers' scores placed them in the low-average category for conscientiousness. This does not necessarily imply the opposite of the characteristics described for individuals high in conscientiousness (McCrae & Costa, 1992a). Individuals lower in this dimension are not disorganized, but may be more casual about planning and working towards their goals. They are unlikely to be hard-driving, workaholics and are not lacking in moral principles, but may be looser about how they apply them (McCrae & Costa, 1992a).

On the final two dimensions of extroversion and agreeableness, the community workers are just above average. The scores on the extroversion dimension imply that the community workers are moderately cheerful and social. They are unlikely to have the very buoyant, upbeat, energetic, and optimistic spirits that characterize individuals

who are high on this dimension, but neither are they unhappy or pessimistic (Costa & McCrae, 1992a).

The dimension of agreeableness refers to the quality of an individual's interpersonal relationships including the specific behaviours undertaken during interpersonal interactions, such as cooperating with and trusting others. This is distinct from the extroversion factor that focuses primarily on the quantity and intensity of relationships (DeNeve & Cooper, 1998). Average scores on agreeableness reflect moderate levels of kind-heartedness, altruism, tolerance, helpfulness, and sympathy towards others (Barrick & Mount, 1991; Costa & McCrae, 1992a; Digman, 1990).

This broad profile of the community workers in the current sample must be interpreted cautiously. Firstly, group profiles are far more general than individual profiles. In addition, the NEO-FFI measures traits that approximate normal, bell shaped distributions. Therefore, the majority of scores will be near average for the scale. In the current sample the only dimension that could really be classified as high is openness to experience.

The high scores on the openness to experience dimension are difficult to account for because this is the most controversial of all the Big Five factors (DeNeve & Cooper, 1998). Trait descriptors typically associated with this dimension include intellectual curiosity, active imagination, and perception. Elements such as aesthetic sensitivity, attentiveness to inner feelings, preference for variety, and independence of judgment are also part of this factor (McCrae & John, 1992). Overall, scores on this dimension suggest something of an unconventional orientation. The NEO-FFI does not measure facet scores so it is not possible to examine the domain score in more detail. However, part of this domain involves a readiness to reexamine social, political, and religious values and an unwillingness to accept authority and traditional ways of doing things. Perhaps the high scores on this dimension reflect an unconventional group of people who are drawn to working at grass roots community level because of a desire to make changes and an unwillingness to accept the status quo.

The low-average scores on conscientiousness are also not easily explained and are in fact counter-intuitive. One would assume that involvement in such a demanding

professional domain would presuppose relatively high levels of conscientiousness. However, characteristics of conscientiousness include ambition, and a focus on achievement and meeting goals (Barrick & Mount, 1991; Digman & Takemoto-Chock, 1981). Perhaps the flat hierarchies and limited opportunities for career advancement inherent in small grass roots community organisations are either not attractive to individuals with this sort of orientation or cause individuals with high professional ambitions to leave the community sector. It may also be that individuals who are high in conscientiousness and who are drawn to community work with the desire to make a difference are ultimately disappointed about the impact they are able to make. The relentless nature of community work and the shoe-string budgets typically associated with grass roots community organisations may mean that even ambitious, goal focused, and motivated individuals may not be able to make the sort of impact that individuals high in conscientiousness require to experience job satisfaction.

Another possibility is that there is a link between the lower levels of conscientiousness in the current sample and the higher levels of burnout in terms of personal accomplishment. The majority of studies that have linked burnout and personality have focused on the links between neuroticism and emotional exhaustion and neuroticism and depersonalization (Bellecastro & Gold, 1982; Hills & Norvell, 1991; Jackson & Maslach, 1982; Manlove, 1993; Maslach & Jackson, 1981; Rudow, 1999). However, Piedmont (1993) looked more widely and investigated the other dimensions of the Big Five using a sample of occupational therapists. He found that the occupational therapists that were higher in conscientiousness at Time 1 reported less burnout in terms of personal accomplishment seven months later. In the current research, correlational analyses revealed a significant positive relationship between conscientiousness and personal accomplishment. It may be that the easy-going, somewhat disorganized and relatively low achievement striving style that characterizes individuals low in conscientiousness did not predispose the community workers to experience high levels of emotional exhaustion or depersonalization, but did lead to higher levels of burnout in terms of reduced feelings of professional competence and reduced satisfaction working with people.

The current research indicates that community workers may form a unique population in terms of personality. However, the notion that community workers adhere to norms to be selfless and put others' needs first (Maslach, 1999) or to a "dedicatory ethic; that is, they view their work as a calling, and reward is considered to be inherent in the act of giving" (Kadushin, 1974, p. 706), is not necessarily supported. This would imply higher scores on the agreeableness and conscientiousness dimensions. In particular, a component of agreeableness is altruism, which is implied by these statements.

In addition, the idea proposed by Pines and Kafry (1978) that community workers are a "rather homogeneous group emotionally whose sensitivity to clients' problems makes them more vulnerable to stress" (p. 500) is somewhat supported. Vulnerability to stress is characterized by high Neuroticism scores and the current sample has average to high levels on this dimension.

8.2.2.1 Gender differences in personality

There were significant gender differences in personality in the current sample. Women were higher in Openness to Experience, Agreeableness, and Conscientiousness (Table 7.3). Research suggests that gender differences in personality are usually quite modest in magnitude (Costa & McCrae, 1992a), but that women do tend to obtain higher scores than men on the Agreeableness and Neuroticism domains (Costa & McCrae, 1992a; Eysenck & Eysenck, 1968). Although in the current sample, higher levels of Neuroticism were not found.

An assessment of the overall transformed score profile for men and women presents a slightly different picture for each gender. Male community workers just make it into the high category for Neuroticism and Openness to Experience (77^{th} and 76^{th} percentile respectively) and have average-high levels of Extroversion and Agreeableness (64^{th} and 70^{th} percentiles respectively), and average levels of Conscientiousness (51^{st} percentile).

In comparison, female community workers have high levels of Openness to Experience (78^{th} percentile) and average levels of Neuroticism, Extroversion, and

Agreeableness (64th, 60th, and 55th percentiles respectively) and average-low levels of Conscientiousness (45th percentile).

These findings indicate that overall the male community workers have more extreme scores. Community workers are generally women so perhaps the few men who are drawn to community work are a more homogeneous group than the larger number of women. Particularly as a result of the high neuroticism scores, this group of men may be more vulnerable to stress, although it is possible that this vulnerability is somewhat tempered by the average-high scores on extroversion and agreeableness. Once again, it is important to interpret these findings cautiously because the personality differences between genders are quite modest (Costa & McCrae, 1992a) and because the number of men in the current sample is relatively small (n = 34).

Overall, the current sample of community workers displays an interesting personality profile. The most notable feature is the high levels of openness to experience suggesting an unconventional orientation. Low levels of conscientiousness are also counter-intuitive. In addition, there are significant gender differences in the current sample and it is possible that male community workers are more vulnerable to stress.

8.2.3 Well-being

8.2.3.1 Levels of well-being

The community workers obtained mean scores for Satisfaction With Life that are just above the neutral point, placing them into the *slightly satisfied* category for Life Satisfaction. In terms of Positive Affect, the mean scores for the current sample are also above average (Table 7.1). The Satisfaction With Life scores provide a cognitive evaluation of a person's global life satisfaction (Diener et al., 1985), while the Positive Affect scores are more indicative of the affective dimension of well-being. Positive affect is an indication of the extent to which a person feels enthusiastic, active, and alert. Individuals high in positive affect tend to lead active, busy lives and be satisfied with their situations (Danna & Griffin, 1999; Watson & Pennebaker, 1989).

The finding that the current sample scored above the neutral point on both the cognitive and affective measures of well-being does not necessarily indicate above average levels of well-being for the community workers. One of the most frequent and widely replicated findings in non-clinical Western samples is that participants generally score above the neutral point on measures of subjective well-being (Andrews & Withey, 1976; Andrews & Robinson, 1991; Campbell et al., 1976; Diener et al., 1999; Kamman & Flett, 1983; Pavot & Diener, 1993). Research suggests that the majority of well-being scores tend to hover between *slightly satisfied* and *satisfied* and between *slightly happy* and *happy* (Diener et al., 1999; Folkman, 1997; Pavot & Diener, 1993). Lykken and Tellegen (1996) suggest that this tendency may be genetic. Kamman (1984) proposes that it is unlikely that people calculate their happiness relative to some average level and states that it is far more likely that people evaluate their happiness in terms of an internal scale ranging from their worst to best feelings, resulting in more positive than negative evaluations.

As a result of the widespread tendency for positive skew in well-being measures, the mean scores for the current sample are significantly lower than the normative mean scores for Satisfaction With Life and significantly higher than the normative sample for Positive Affect (Table 7.2). This finding reinforces suggestions in the literature which state that the cognitive and affective aspects of well-being are independent constructs (Andrews & Robinson, 1991).

The mean scores for the current sample are below the neutral point for Negative Affect (Table 7.1). Negative affect is a measure of subjective psychological distress and includes dimensions of anger, contempt, disgust, fear, and nervousness (Bradburn, 1969; Watson & Pennebaker, 1989). However, just as with the positive aspects of well-being, low scores on negative affect do not necessarily indicate that the community workers are experiencing low levels on this dimension. Findings of below average negative affect with the PANAS have also been consistent (Watson et al., 1988). In addition, the mean scores for Negative Affect are not significantly different to the normative sample (Table 7.2).

The terminology used by the PANAS suggests that positive affect and negative affect are opposites. However, Bradburn (1969) states that positive and negative affect are

independent components of well-being in the sense that high positive affect does not necessarily accompany low negative affect. In addition, both aspects correlate with different variables. Positive affect correlates significantly with variables such as social participation, income, and education while negative affect correlates with symptoms of ill-health, depression, and anxiety (Bradburn, 1969). Positive and negative affect have emerged as highly distinctive dimensions in studies of affect (Diener et al., 1995). Watson et al. (1988) found consistently low correlations between the scales that ranged from -.12 to -.23, indicating that the scales share only approximately 1% to 5% of their variance. In the current research, a correlation of -.23 was obtained between positive affect and negative affect (Table 7.5), adding confidence to the assertion that the scales measure distinctive aspects of affect.

8.2.3.2 Satisfaction with life

There are two main approaches to measuring the broad construct of satisfaction with life. The first approach asks an individual for an overall judgment of his or her life. The second approach asks an individual to indicate his or her satisfaction with various specific life domains, such as work satisfaction. The results are summed to give an overall measure. The Satisfaction With Life Scale represents the first approach and the Life Spheres measure of domain satisfaction represents the second approach.

Originally the literature favoured the first approach on the basis that although domains such as health may be desirable, it is likely that different people place different values on each domain. For example, an individual could be satisfied with most domains of his or her life, but still experience dissatisfaction overall because of the disproportionate impact of a single domain. Therefore, asking people directly for an overall evaluation of their life allows them to integrate and weight particular domains as they choose and according to their own criteria. The end result is a global, cognitive judgment of a person's life (Diener et al., 1985).

In recent times some researchers (e.g. Diener et al., 1999; Pavot & Diener, 1993) have begun to see the merits of also using the second approach to provide valuable additional information to life satisfaction. Assessing domain specific well-being has proven to be a powerful statistical predictor of global well-being (Andrews &

Robinson, 1991). In the current research, a measure of domain satisfaction was included to supplement the information provided by the Satisfaction With Life Scale. Both of these measures contributed information on the cognitive aspects of well-being.

The Life Spheres measure of domain satisfaction used in the current research has good face validity and is comprehensive, focusing on specific personal and professional areas of satisfaction. The domains assessed are those that are close and immediate to an individual's life, such as assessments of family, friends, health, and leisure. Research suggests that these are the domains with the most influence on subjective well-being (Andrews & Withey, 1976; Campbell et al., 1976). It appears that assessments of life domains that are more remote from the individual, such as assessments of government, make independent, but much smaller contributions to explaining global well-being (Hart, 1999).

The main limitation of the Life Spheres measure is the lack of normative information available. However, Tomkins (1999) recently used this measure in a study investigating 161 psychologists in New Zealand. This is obviously not a normative sample, but the fact that it is from New Zealand and assesses a sample also working in a helping profession, means that cautious comparisons can be made. The current sample is significantly lower than the Tomkins sample on the Life Spheres measure. This measure and the Satisfaction With Life Scale both assess the cognitive aspects of subjective well-being. Given that the current sample is also significantly lower than the normative sample for Satisfaction With Life, this is evidence of consistency of measurement for this domain and strengthens the finding that the community workers may be lower than average in terms of cognitive well-being.

The Satisfaction With Life Scale provides an indication of a global, cognitive judgment of a person's life (Diener et al., 1985). The global nature of this measure means that it is not possible to ascertain the contribution that community work makes to the overall evaluation. However, the Life Spheres measure of domain satisfaction does include a question pertaining to the work domain. The mean score obtained by the community workers on this domain placed them into the *somewhat satisfied* category. Examining the distribution of scores revealed that approximately 60 percent

of the community workers were *somewhat satisfied* with their work, approximately 20 percent were *completely satisfied*, and the majority of the remaining 20 percent were *dissatisfied*, with a few participants *completely dissatisfied* with their work. Although these scores are indicative of the positive skew associated with well-being measures, there is no indication that dissatisfaction with community work contributes to lowered Satisfaction With Life scores.

The measure of Psychological Distress used in the current research, the 28 item General Health Questionnaire (GHQ-28, Goldberg & Williams, 1988) is also hampered by a lack of normative data. However, overall the community workers obtained relatively low levels of Psychological Distress (Table 7.1). This is consistent with the findings for negative affect, but once again is not necessarily an indication of low absolute levels of psychological distress.

Overall, the well-being scores for the sample of community workers are unremarkable. Positive skew is expected with positive well-being measures (Andrews & Withey, 1976; Campbell et al., 1976; Diener et al., 1999; Kamman & Flett, 1983; Pavot & Diener, 1993) and negative skew is expected with negative well-being measures (Watson et al., 1988). Therefore, the scores obtained by the current sample are average. However, the finding that the community workers may be experiencing lower than average levels of life satisfaction and domain satisfaction is of concern. These areas represent the cognitive aspects of well-being. It may be that there are links between lowered life satisfaction and domain satisfaction and the burnout component of reduced feelings of personal accomplishment at work. Perhaps experiencing high burnout in this area is pervasive and spills over to lowered levels of well-being in terms of the cognitive domains of life satisfaction and domain satisfaction.

8.2.4 Coping resources

Separate profiles for Coping Resource sub-scale scores and aggregated scores were plotted for males and females. An examination of these profiles revealed generally similar profiles for men and women, with the exception of the Emotional Coping

Resources sub-scale where women obtained significantly higher scores than men (Table 7.3).

The finding that female community workers were significantly higher than their male colleagues in Emotional Coping Resources is also replicated in the wider population (Hammer & Marting, 1988). This domain measures the extent to which an individual can accept and express his or her emotional responses. It appears that this task is generally easier for women than for men. The advantage in terms of stress management is that expressing emotions can reduce the long-term negative consequences of stress (Auerbach & Gramling, 1998).

A further investigation of both the male and female profiles taking into consideration the confidence band values created by the standard error of measurement (Hammer & Marting, 1988) revealed that within each gender profile, no sub-scales were significantly higher or lower than any other. Given the similar profiles and only one significant difference, the rest of the coping resource analyses considered the combined scores for men and women.

Comparing the mean scores obtained by the current sample with the normative mean scores revealed significant differences on each of the five Coping Resource sub-scales and on the aggregated Coping Resource score (Table 7.2). The current sample had higher Total Coping Resources, Physical Resources, Cognitive Resources, and Social Resources, but lower Emotional and Spiritual Resources than the normative sample. In each case, higher scale scores indicate higher resources. In theory this indicates that the current sample are well resourced overall. However, Hammer and Marting (1988) warn users of the CRI that the normative sample is inadequate in size and lacks diversity. As a result they advise caution in interpreting the scores. There is also no New Zealand normative data available for this measure.

The highest group scores were obtained for the Physical Resource sub-scale. The current sample was nearly one and a half standard deviations above the mean on this dimension. This implies that as a group the community workers are reasonably active in terms of engaging in health-promoting behaviours, such as exercising and eating well. The benefit of these behaviours is that they can decrease the level of negative

responses to stress (Sapolsky, 1994). However, this finding is in contrast to that of Bennett and Marsh (1999) who reported that their sample of Auckland community workers rarely took any time for self-care activities.

The next highest group score was for Social Resources. As a group the community workers were nearly one standard deviation above the mean on this dimension. This domain measures whether an individual feels connected to social networks that can provide support in times of stress. The role of social support in reducing the negative effects of stress is well documented (Eckenrode, 1991; Ganster et al., 1986). This finding is consistent with the findings of Bennett and Marsh (1999), although they used an alternative measure of social coping resources.

The current sample was also significantly higher in Cognitive Resources and significantly lower in Emotional and Spiritual resources than the normative sample. However, conclusions will not be drawn regarding these differences due to concerns over the adequacy of the normative sample and because in each case the current sample was only approximately half a standard deviation above or below the mean.

Although findings from this measure must be interpreted cautiously, overall the community workers appear to have a reasonably high level of coping resources available for managing stress.

8.2.5 Dysfunctional attitudes

Comparing the mean score for the current sample with the original normative mean score reported by Weissman (1979) revealed that the community workers were significantly lower in Dysfunctional Attitudes (Table 7.2). As higher scores indicate the endorsement of more dysfunctional attitudes, this implies that the community workers were only experiencing moderate levels of dysfunctional thoughts. However, this sample may not provide a valid comparison for two reasons. Firstly, the normative sample is comprised of 355 American undergraduate students, whose life experience is likely to be different to that of New Zealand community workers. Also, Weissman combined the normative data from the DAS A and DAS B forms and recent research suggests that these forms may not be equivalent (Power et al., 1994).

Relevant comparative samples are difficult to come by because the DAS is most frequently used with clinical populations. However, although still not ideal, possibly more useful comparisons can be obtained by comparing the mean score obtained in the current sample with that reported by Power et al. (1994) of 109.6 (SD = 29.7) for their sample comprised of mature students, former hospital patients, and their relatives. Another possibility is the sample of 53 people without a history of psychiatric illness reported by Zimmerman, Croyell, Corenthal, and Wilson (1986). They reported a mean score of 106.5 (SD = 22.4). T-tests revealed that the current sample is not significantly different to either of these samples.

In the current sample, women had significantly lower scores than men for Dysfunctional Attitudes (Table 7.3). Gender differences in dysfunctional attitudes have not been widely investigated. However, the limited research on this issue has generally found the opposite to the current research, that women are more likely to exhibit higher levels of dysfunctional attitudes than men. This may be because women are also more prone to depression, and dysfunctional attitudes are thought to be precursors to depression (Spangler, Simons, Monroe, & Thase, 1996). This finding may indicate that just as the male community workers displayed more extreme personality scores indicating a possible vulnerability to stress, they are also more vulnerable to experiencing dysfunctional thoughts.

In summary, the levels of dysfunctional attitudes reported by the community workers are consistent with other non-clinical samples, although male community workers may be more vulnerable to dysfunctional attitudes than female community workers.

8.3 Dimensions of well-being

As discussed in chapter 4, there is emerging evidence for a three dimensional model of well-being consisting of an individual's emotional responses and global cognitive judgments of life satisfaction (Andrews & Robinson, 1991; Andrews & Withey, 1976; Christopher, 1999; Diener, 1984; Diener et al., 1998; Diener & Lucas, 1999; Feist et al., 1995; Headey & Wearing, 1989; Maxwell et al., 1990; Pavot et al., 1991; Pavot & Diener, 1993).

In the current research the construct of well-being is comprised of a cognitive component involving the rational and intellectual aspects of well-being operationalised as global judgments of Life Satisfaction, and an affective component comprised of the emotional aspects and operationalised as Positive Affect and Negative Affect.

In order to investigate the viability of the three dimensional model of well-being in a population of community workers, a factor analysis was performed. The results indicated preliminary support for the three dimensional model (Table 7.4). The Satisfaction With Life Scale (SWLS; Diener et al., 1985) representing the cognitive component of well-being and the Positive and Negative Affect Schedule (PANAS, Watson et al., 1988) representing the affective components of well-being clearly emerged as three separate and distinct factors.

Other researchers have also found that measures of satisfaction are more reflective of cognition (Andrews & Robinson, 1991) and that life satisfaction forms a factor separate from the two affective factors (Andrews & Withey, 1976; Diener & Lucas, 1999). Lucas et al. (1996) found that the Life Satisfaction factor remained separate from the affective factors over time frames as long as two years and with multiple methods of assessment, such as self and informant reports. Other researchers (e.g. Pavot & Diener, 1993) are less convinced that the affective and cognitive components of well-being are completely independent, but still agree that they can provide complementary information when assessed separately

Positive and Negative Affect also emerged as independent components of well-being. Studies of affect show that these two aspects of mood are highly distinctive dimensions (Bradburn, 1969; Feist et al., 1995; Watson et al., 1988). That is not to say that all emotional experience can be reduced to these two variables, but that the essence of mood at a general level can be captured by positive affect and negative affect (Watson & Tellegen, 1985). Others have also found that these two dimensions contribute separate information to the well-being construct (Bradburn, 1969; Diener, Smith, & Fujita, 1995).

The emergence of such a clear and parsimonious solution raises questions over whether the three well-being dimensions can be combined into a well-being index to provide a single well-being score. The theoretical implications of combining the information from the three separate dimensions into a single score requires serious consideration. On the surface a well-being index sounds like an excellent an expedient option. However, Lucas et al. (1996) argue that life satisfaction, negative affect, and positive affect must be measured separately to gain a complete picture of well-being. Diener and Lucas (1999) also state that these constructs are related but should be measured separately. They explain that a person experiencing large amounts of positive affect and small amounts of negative affect would be labeled "happy". In contrast, someone experiencing high levels of both positive and negative affect would be labeled "highly emotional" and a person experiencing limited positive affect and large amounts of negative affect might still be convinced that the conditions of their life are good and claim high life satisfaction.

A useful analogy to well-being is the construct of burnout. Some have suggested that the three components of the MBI can be summed to provide an overall measure of burnout (Golembiewski & Munzenrider, 1988; Meier, 1984). Meier suggests that combining all of the items would increase the reliability of the MBI by providing a total score with greater internal consistency. He reported a coefficient alpha of .88 when he combined all the sub-scales in his study. Golembiewski and Munzenrider investigated a total burnout score and found that it covaried significantly and in the expected directions with various occupational variables.

However, Maslach (1982) is adamant that burnout is not a unitary construct. She asserts that Emotional Exhaustion, Depersonalization, and Personal Accomplishment are three conceptually distinct factors. Support for this comes from findings that different patterns of correlations emerge between each component and other variables, such as age and workload (Jackson et al., 1986; Maslach & Jackson, 1984). Cordes and Dougherty (1993) summarized the situation by stating that combining the burnout variables into a single score results in a loss of information. They also noted that if other variables have different associations with the burnout variables, then it is possible that intervention strategies could have different effects depending on the particular aspect of burnout that is being addressed.

Maslach's (1982) statements on burnout are relevant to well-being in the current research. The regression analyses conducted revealed that different predictors were significant for each aspect of well-being. In addition, the correlational analyses revealed different patterns of correlations between each well-being aspect and specific variables. These findings imply that combining the three dimensions into one score would result in a loss of information and might obscure possible relationships. For example, the contradictory finding that older adults tend to show lower levels of happiness than younger adults, but more life satisfaction (Campbell et al., 1976) can be more easily understood when the cognitive and affective aspects of well-being are taken into consideration. The possibility then emerges that cognitive evaluations of an individual's life-as-a-whole may increase with age while positive affect may decline, suggesting that emotional intensity decreases with age and that positive and negative affect are experienced more intensely by the young (Diener, 1984; Diener et al., 1999). It may also indicate that as people age, their achievements increase or their expectations become more realistic. These distinctions would remain hidden if these aspects were combined into a single score.

8.4 Confirmation of hypotheses

Hypotheses 1 to 12 were investigated using correlational analyses. Pearson product-moment correlation coefficients were computed for the three dimensions of well-being that correspond to the three factor model of well-being; Satisfaction With Life, Positive Affect, and Negative Affect, the two additional indicators of well-being; Psychological Distress and Domain Satisfactions, the three dimensions of burnout, the five personality sub-scales of the NEO-FFI, the five sub-scales and the total score for Coping Resources, and Dysfunctional Attitudes. Computing so many correlations increases the chances of Type I errors. Therefore, using the Bonferroni approach, a stringent p-value of less than .0001 was required for significance.

8.4.1 Well-being and coping resources

Hypothesis 1 predicted that Life Satisfaction and Positive Affect would be directly related to Total Coping Resources, and Negative Affect would be inversely related to

Total Coping Resources. The results clearly supported this hypothesis. Of the 18 correlations computed between the well-being scores and coping resource scores, 17 were statistically significant with predominantly medium to large effect sizes. The only non-significant relationship was between Spiritual Coping Resources and Negative Affect.

Very little research has investigated coping resources. The coping literature has been dominated by research on coping styles and strategies and coping resources have been overlooked (Carver et al., 1989; Folkman & Lazarus, 1980). The findings from the current research suggest that coping resources have a substantial role to play in well-being. This finding makes intuitive sense. An individual with a high level of coping resources should be in a better position to cope with all aspects of life and therefore enjoy high levels of well-being.

8.4.2 Well-being and burnout

Hypothesis 2 predicted that Life Satisfaction and Positive Affect would be inversely related to Emotional Exhaustion and Depersonalization and directly related to Personal Accomplishment, and Negative Affect would be directly related to Emotional Exhaustion and Depersonalization and inversely related to Personal Accomplishment.

The results indicated that Hypothesis 2 was only partially supported. All three aspects of well-being were significantly related to Emotional Exhaustion in the anticipated directions and Positive Affect was significantly and positively related to Personal Accomplishment. However, there was no significant relationship between Life Satisfaction and Depersonalization and Life Satisfaction and Personal Accomplishment. There was also no significant relationship between Positive Affect and Depersonalization, between Negative Affect and Personal Accomplishment, and between Negative Affect and Depersonalization.

The findings pertaining to Hypothesis 2 are very similar to those from Hypothesis 3, which predicted that Psychological Distress would be directly related to Emotional Exhaustion and Depersonalization and inversely related to Personal Accomplishment.

This hypothesis was also only partly supported. The results clearly indicated that Psychological Distress was directly related to Emotional Exhaustion with medium effect sizes found for the relationships between the total score for Psychological Distress and for each of the Psychological Distress sub-scales and Emotional Exhaustion. However, no significant relationships were evident between Psychological Distress and Depersonalization or between Psychological Distress and Personal Accomplishment.

The finding that Emotional Exhaustion is the only burnout dimension that is significantly related to all aspects of the three dimensional model of well-being and to Psychological Distress supports the findings of many researchers who state that emotional exhaustion is the key dimension of the burnout experience (Maslach, 1982, 1999; Schaufeli & Enzmann, 1998; Shirom, 1989). It is also the dimension that is most closely linked to stress (Jackson et al., 1986; Maslach et al., 1997).

Surprisingly little research has investigated the links between well-being and burnout. Therefore, further research is needed to ascertain if the findings in the current research are specific to community workers or have wider implications.

8.4.3 Well-being and personality

Hypothesis 4 predicted that Life Satisfaction and Positive Affect would be inversely related to Neuroticism and directly related to Extroversion, Openness, Agreeableness, and Conscientiousness, and that Neuroticism would be directly related to Negative Affect and Openness and inversely related to Extroversion, Agreeableness, and Conscientiousness.

The results indicated that Hypothesis 4 was partially supported. Life Satisfaction and Positive Affect were significantly and negatively related to Neuroticism and significantly and positively related to Extroversion. However, there were no significant relationships between Life Satisfaction and Openness to Experience, Agreeableness, and Conscientiousness and between Positive Affect and Openness to Experience and Agreeableness. Negative Affect was significantly and positively

related to Neuroticism and significantly and negatively related to Extroversion but not to any of the remaining three personality dimensions.

In summary, Neuroticism and Extroversion were related to each aspect of well-being in the anticipated directions. The other significant relationship was a positive correlation between Conscientiousness and Positive Affect.

These findings are generally in agreement with the literature. In particular, neuroticism and extroversion are the personality traits most strongly and consistently associated with subjective well-being (Diener & Lucas, 1999). There is general acceptance that neuroticism influences negative affect and extroversion influences positive affect (Costa & McCrae, 1980; Diener & Lucas, 1999; Watson & Clark, 1984, 1997).

However, there is currently no agreement as to how neuroticism and extroversion influence affect. Some researchers suggest that negative affect filters perceptions of daily experience (Watson & Clark, 1984; Watson & Pennebaker, 1989). Others have proposed a dynamic equilibrium model (Headey & Wearing, 1989) which suggests that each individual has an equilibrium level of subjective well-being that is predicted by personality characteristics, in particular extroversion and neuroticism. The temperamental view proposes that personality traits such as extroversion and neuroticism are enduring dispositions and as such lead directly to subjective well-being. This view in a nutshell says that neuroticism leads to negative affect and extroversion to positive affect mainly because of temperament. As such extroverts are cheerful and individuals high in neuroticism are more prone to experience negative mood states (McCrae & Costa, 1991). As a result of these tendencies other variables come into play. For example, extroverts are likely to have greater social support because of their more positive interpersonal relationships and individuals high in neuroticism may experience higher negative affect due to their less effective coping skills (Diener, 1996).

The current research may provide some support for the temperamental view. The current findings are similar to those obtained by DeNeve and Cooper (1998) who found that neuroticism does seem to predispose a person to experience less subjective

well-being. In their study they found that of all the Big Five personality traits, Neuroticism was the highest predictor for Life Satisfaction (r = -.24), happiness (r =-.25), and Negative Affect (r =.23). In the current study the findings are the same, although the effect sizes are substantially larger. For example, Neuroticism was the highest predictor of Life Satisfaction (r = -.52), Positive Affect (r = -.42), and Negative Affect (r = .63).

DeNeve and Cooper (1998) did not find such straightforward relationships for extroversion. They did find that the best predictor of happiness was Extroversion, but they also found that Positive Affect was predicted equally by Extroversion and by Agreeableness. This led them to suggest that the critical factor for positive affect is a connection to others but that two dimensions of this factor are equally important: quantity of relationships (extroversion) and quality of relationships (agreeableness). The current research did not support this aspect of DeNeve and Cooper's findings. There was no significant relationship between Agreeableness and any aspect of well-being. However, Extroversion was a strong predictor of Life Satisfaction (r = .37), Positive Affect (r = .40), and Negative Affect (r = -.30). This is more in line with Diener (1996) who has reported correlations for Extroversion and Positive Affect that are as high as .71.

According to the instrumental view, traits such as agreeableness are instrumental in the sense that they encourage life situations that then impact on an individual's well-being. The assumption is that because agreeableness is linked to more satisfying interpersonal relationships, this trait will facilitate more positive social experiences which will ultimately, but indirectly, influence subjective well-being (Larsen & Ketelaar, 1991; McCrae & Costa, 1991). The current research did not provide any support for this notion. There was no evidence that agreeableness was linked to any aspect of well-being.

DeNeve and Cooper (1998) found that the trait with the strongest positive relationship to life satisfaction was conscientiousness. The explanation they provide for this relationship is that although relationships contribute to happiness, behaviours associated with conscientiousness, such as working towards goals and exerting control over oneself and the environment, enhance the overall quality of a person's

life and contribute to life satisfaction. This explanation is supported by evidence suggesting that people high in conscientiousness set high goals for themselves and tend to be high achievers in work settings (Barrick & Mount, 1991).

Although DeNeve and Cooper's (1998) logic is compelling, their findings are not completely supported by the current research. Instead, Conscientiousness was significantly related to Positive Affect (r = .27), but the relationships between Conscientiousness and Life Satisfaction and Conscientiousness and Negative Affect just failed to reach the stringent level of significance ($p < .0001$) set for correlations in the current research. The fact that the current sample of community workers is significantly lower than the normative sample for the trait of Conscientiousness may have impacted on these results.

A prediction about the trait of Openness to Experience being directly related to Life Satisfaction, Positive Affect, and Negative Affect was made in Hypothesis 4 on the basis of suggestions by Diener and Lucas (1999) who obtained this result. However, the prediction was tentative because Openness to Experience is the most controversial factor of the Big Five factor taxonomy (McCrae & Costa, 1992a). In addition, this personality dimension obtained the lowest correlations with each measure of subjective well-being in DeNeve and Cooper's (1998) study. However, there is some evidence that this factor may predispose individuals to experience both positive and negative emotions more intensely (McCrae & Costa, 1991). In the current research, the trait of Openness to Experience was not significantly related to any aspect of well-being.

8.4.4 Coping resources and burnout

Hypothesis 5 predicted that Total Coping Resources would be inversely related to Emotional Exhaustion and Depersonalization and directly related to Personal Accomplishment. The results indicated partial support for this prediction. Two of the three aspects of the hypothesis were supported. Coping Resources were inversely related to Emotional Exhaustion and directly related to Personal Accomplishment, but there was no inverse relationship to Depersonalization.

This finding may be a reflection of the low level of Depersonalization found in the sample of community workers. The limited research on coping resources means that it is not clear why coping resources would play a role in the other two aspects of burnout, but not in the development of callous and cynical attitudes towards the recipients of one's service or care. It is commonly agreed that depersonalization is an attempt to cope with the emotional stresses of work and is self-protective at first but can turn into dehumanization (Ashforth & Lee, 1997; Cordes et al., 1997; Wright & Bonett, 1997). Perhaps once a person enters the state of dehumanization and begins to treat clients as objects rather than people (Cordes & Dougherty, 1993), this state is self-perpetuating and the impact of coping resources is greatly reduced.

This finding may also support the mixed sequential and parallel process model of burnout proposed by Leiter (1990, 1993) as opposed to the sequential model proposed by Leiter and Maslach (1988). Leiter's model is sequential in that emotional exhaustion is thought to lead to depersonalization, as in Leiter and Maslach's model, but parallel in that lack of personal accomplishment arises somewhat independently of the other two processes. The fact that coping resources are linked to emotional exhaustion and personal accomplishment but not to depersonalization may support the assertion that personal accomplishment develops independently.

8.4.5 Coping resources and personality

Hypothesis 6 predicted that Total Coping Resources would be inversely related to Neuroticism. Hypothesis 7 predicted that Social Coping Resources would be directly related to Extroversion and Agreeableness. Hypothesis 8 predicted that Extroversion would be directly related to Cognitive Coping Resources. All of these hypotheses were supported. Total Coping Resource scores and all of the Coping Resource sub-scales were significantly and negatively related to Neuroticism. Social Coping Resources were directly related to Extroversion and Agreeableness and Cognitive Coping Resources were significantly and positively related to Extroversion.

Although coping resources have been overlooked in the majority of coping research in favour of coping strategies, the findings in the current research suggest that coping resources are worthy of further attention. In addition, these findings are supportive of

recent research emphasizing the pivotal role of personality in the coping process (Mayes et al., 2000; O'Brien & Delongis, 1996).

The finding that aggregated coping resources and each of the coping resource sub-scales were negatively related to neuroticism is notable. The implication is that individuals who are high in neuroticism may be less able to develop adequate levels of coping resources. Mayes et al. (2000) suggest that the emotionally reactive style typically associated with people high in neuroticism, makes them more prone to becoming overwhelmed by stress which results in a desire to seek relief as quickly and expediently as possible. Perhaps this also means that people high in neuroticism devote less time and energy towards enhancing their coping resources.

This possibility is consistent with a substantial body of research that has linked emotion focused coping strategies to neuroticism (Bolger, 1990; Carver et al., 1989; David & Suls, 1999; Deary et al., 1996; Endler & Parker, 1990; Hart, 1999; McCrae & Costa, 1986; O'Brien & DeLongis, 1996; Saklofske & Kelly, 1995; Vollrath & Torgersen, 2000). It appears that individuals high in neuroticism may focus their coping efforts on relieving the short-term symptoms of distress, rather than on extending their coping resources to reduce future distress.

Individuals high in extroversion have a tendency to be gregarious and seek the company of others both in pleasant situations and when under stress (Amirkhan et al., 1995; David & Suls, 1999; Watson & Hubbard, 1996). In addition, individuals high in agreeableness tend to be pleasant, co-operative and trustworthy (Costa & McCrae, 1992a). As a result, both groups are likely to have well-developed social networks. The Social Coping Resource sub-scale measures the extent to which a person feels connected to social networks that can provide support in times of stress. Therefore, it was anticipated that Extroversion and Agreeableness would be related to Social Coping Resources. The current research supported this finding. The effect size for Extroversion and Social Coping Resources was particularly large (r = .52).

The prediction that Extroversion would be directly related to Cognitive Coping Resources was made because Extroversion is characterised by a positive, optimistic, and upbeat nature (Costa & McCrae, 1992a) and Cognitive coping resources provide

an indication of a person's sense of self-worth, their orientation towards others, and how optimistic they are about life in general (Hammer & Marting, 1988). The results from the current research supported this hypothesis.

8.4.6 Burnout and personality

Relatively little research has investigated links between burnout and personality (Piedmont, 1993; Shriom, 1989). This area has been dominated by investigations of job factors, such as caseload (Maslach & Jackson, 1984), on the assumption that job factors would shed the most light on the burnout phenomenon (Maslach, 1999; Schaufeli & Buunk, 1996). However, more recently personality is emerging as an area worthy of investigation (Lee & Ashforth, 1996).

Hypothesis 9 predicted that Neuroticism would be directly related to Emotional Exhaustion and Depersonalization and inversely related to Personal Accomplishment. The results indicated that Hypothesis 9 was only partially supported. Neuroticism was significantly and positively related to Emotional Exhaustion, but no significant relationships existed between Neuroticism and Depersonalization or between Neuroticism and Personal Accomplishment.

It is interesting that the only significant relationships were between Neuroticism and Emotional Exhaustion. This relationship was expected because neuroticism is the trait most strongly and consistently related to stress symptoms (Bolger & Schilling, 1991; Costa et al., 1987; Eysenck & Eysenck, 1968; McCrae & Costa, 1988) and neuroticism is frequently associated with higher levels of emotional exhaustion (Deary et al., 1996; Hills & Norvell, 1991; Manlove, 1993; Piedmont, 1993). However, other researchers have also found a relationship between neuroticism and depersonalization (Manlove, 1993; Piedmont, 1993) and between neuroticism and reduced feelings of personal accomplishment (Bellani et al., 1996; Deary et al., 1996).

There are several possible explanations for the relationship between neuroticism and burnout. Neuroticism may make individuals more vulnerable to burnout by moderating the effect of stressful situations and actually enhancing the likelihood of a negative outcome (Schauflei & Enzmann, 1998). It is also possible that neuroticism

biases the self-report responses of participants so that people high in neuroticism are more likely to respond negatively to questions than people low in neuroticism (Geurts et al., 1998). Another possibility is that the consistent positive relationship between neuroticism and emotional exhaustion may simply be the result of overlapping items so that the relationship is actually more indicative of both constructs sharing some common variance (Schauflei & Enzmann, 1998).

Given that most burnout research has investigated human service populations and considering that community workers are a sub-set of human service workers, it is not clear why the current research does not find a relationship between neuroticism and depersonalization and/or between neuroticism and personal accomplishment. Further research could identify if these results are specific to community workers or are reflective of the way burnout is conceptualized in New Zealand.

Hypothesis 10 predicted that Personal Accomplishment would be directly related to Conscientiousness. Hypothesis 10 was supported. Personal Accomplishment was significantly and positively related to Conscientiousness. In fact, in the current research, of all the burnout dimensions, Personal Accomplishment was significantly related to the most personality traits (Extroversion, Openness, and Conscientiousness). Schuafeli and Enzmann (1998) also found that Personal Accomplishment was significantly related to four of the Big Five personality factors: Neuroticism, Extroversion, Openness to Experience, and Conscientiousness, with 25 percent shared variance. The implication is that personal accomplishment may be more reflective of an individual's personality than his or her reaction to a stressful situation (Schaufeli & van Dierendonck, 1993; Shirom, 1989).

Hypothesis 11 predicted that Depersonalization would be inversely related to Agreeableness. Hypothesis 11 was not supported. Depersonalization was negatively but not significantly correlated with Agreeableness. Schaufeli & Enzmann (1998) analysed data supplied by Deary et al. (1996) to ascertain the contribution of all the Big Five personality factors in terms of the variance shared with burnout. They found that Depersonalisation was negatively related to Agreeableness with 20 percent shared variance. They stated that this finding can be partly explained by the fact that agreeableness is part of the interpersonal circumplex characterised by altruism, caring,

and social support as opposed to hostility, indifference to others, self-centredness, and non-compliance. In the current research the relationship would be significant if a less stringent p value (.001) were applied.

8.4.7 Dysfunctional attitudes, well-being, burnout, personality, coping resources, and psychological distress

Dysfunctional attitudes are a cognitive concept commonly used in clinical studies of depression and only recently used in stress research (e.g. Bond & Bunce, 2000; Brown et al., 1995; Spangler et al., 1997). As such there was little research to guide the formulation of Hypothesis 12. This hypothesis predicted that Dysfunctional Attitudes would be directly related to Psychological Distress, Neuroticism, Negative Affect, Emotional Exhaustion, and Depersonalization and inversely related to Life Satisfaction, Positive Affect, Personal Accomplishment, and Coping Resources.

Overall the results indicated that Hypothesis 12 was partially supported. Dysfunctional Attitudes were related to all three aspects of well-being, to Total Coping Resources, Neuroticism, and Psychological Distress as predicted. However, there were no significant relationships between Dysfunctional Attitudes and any aspect of burnout.

There is no obvious explanation for the lack of relationships between dysfunctional attitudes and burnout. There is evidence that dysfunctional attitudes make an individual more vulnerable to depression (Dobson & Breiter, 1983; Dobson & Shaw, 1986; Hamilton & Abramson, 1983; Newman & Haaga, 1995; Parks & Hollon, 1988). It is also likely that dysfunctional attitudes are involved in the stress process given that stress and depression are both forms of emotional distress (Goh & Oei, 1999). The Emotional Exhaustion sub-scale of the Maslach Burnout Inventory (Maslach et al., 1997) is sometimes also used as a measure of stress (Maslach, 1982, 1999; Schaufeli & Enzmann, 1998). Therefore, the absence of links between dysfunctional attitudes and emotional exhaustion in particular is unexpected.

Perhaps what is more notable is not the lack of relationships between dysfunctional attitudes and burnout, but the presence of a relationship between dysfunctional

attitudes and all aspects of well-being, coping resources, personality, and psychological distress. As a group the community workers do not exhibit high levels of dysfunctional attitudes and yet the current research suggests that dysfunctional attitudes play a distinct role in all of these areas. Examining the nature of this role is an area for further investigation.

8.5 Predictors of well-being

Three multiple linear regression analyses were performed to investigate the factors that predict the three aspects of well-being that correspond to the three dimensional model of well-being. Predictor variables were determined by a thorough review of the literature and each variable had to correlate significantly ($p < .0001$) with each respective facet of well-being to be included in the analyses. Overall, different factors emerged as significant predictors for the three well-being dimensions.

8.5.1 Satisfaction with life

The first linear multiple regression analysis predicted Satisfaction With Life. Hypothesis 13 predicted that Satisfaction With Life would be predicted positively by Extroversion, Life Spheres, and Total Coping Resources, and negatively by Emotional Exhaustion, Neuroticism, Psychological Distress, and Dysfunctional Attitudes. Three of these predictor variables emerged as statistically significant predictors of Satisfaction With Life. These were Emotional Exhaustion, the Life Spheres measure of domain satisfaction, and Total Coping Resources. The sample multiple correlation coefficient (.73) indicated that the linear combination of predictor variables accounted for a substantial 53 percent of the variance in Life Satisfaction. Of the three significant predictors, the Life Spheres measure accounted for the largest proportion of variance (12%), Total Coping Resources accounted for approximately 10%, and Emotional Exhaustion contributed only approximately 2%.

It is no surprise that the Life Spheres measure of domain satisfaction contributed the largest amount of variance given that satisfaction with life and domain satisfactions both provide slightly different indications of the cognitive aspect of well-being (Pavot & Diener, 1993). In addition, there is an intuitive link between coping resources and

life satisfaction. In theory the community workers with more coping resources would cope more effectively, which should translate to higher levels of satisfaction with life.

8.5.2 Positive affect

The second multiple regression analysis predicted Positive Affect. Hypothesis 14 stated that Positive Affect would be predicted positively by Personal Accomplishment, Extroversion, Conscientiousness, Life Spheres, and Total Coping Resources, and negatively by Emotional Exhaustion, Neuroticism, Psychological Distress, and Dysfunctional Attitudes. Hypothesis 14 was partially supported. Three predictor variables emerged as statistically significant predictors of Positive Affect. These were Emotional Exhaustion, Personal Accomplishment, and Total Coping Resources. The sample multiple correlation coefficient (.65) indicated that the linear combination of predictor variables accounted for 42 percent of the variance in Positive Affect. All of the three significant predictors contributed approximately the same amount of variance, accounting for between five and six percent each.

The most interesting findings from the second multiple regression analysis are less to do with the predictor variables that were statistically significant and more to do with the variables that did not emerge as significant predictors. It is certainly notable that the burnout sub-scales of Emotional Exhaustion and Personal Accomplishment were significant predictors of Positive Affect in community workers. Indeed, little research has investigated this link. However, positive affect is an indication of the extent to which a person feels excited, enthusiastic, active, and alert (Watson et al., 1988) and low levels of emotional exhaustion would certainly contribute to these feelings. In addition, personal accomplishment is an indicator of a person's feelings of professional competence and the degree that satisfaction is derived from achievements working with people (Maslach, 1999). Satisfaction in these areas would also contribute to positive affect, as would levels of coping resources. Perhaps the converse also applies, that community workers who are high in positive affect are somehow insulated from developing symptoms of burnout.

The predictor of Positive Affect that is most notably absent is the personality variable Extroversion. A substantial amount of research has strongly linked extroversion to

positive affect (Costa & McCrae, 1980; Diener & Lucas, 1999; Headey & Wearing, 1989; Watson & Clark, 1984, 1997). It is unclear why the relationship does not hold true for community workers. One possible explanation involves Diener et al.'s (1999) suggestion that the characteristics of extroverts are actually an outcome of higher levels of positive affect. This would imply that extroversion, although highly correlated with positive affect, is a poor predictor of positive affect.

8.5.3 Negative affect

The third multiple regression analysis predicted Negative Affect. Hypothesis 15 predicted that Negative Affect would be predicted positively by Emotional Exhaustion, Neuroticism, the four Psychological Distress sub-scales: Somatic Symptoms, Anxiety and Insomnia, Social Dysfunction, and Depression, and Dysfunctional Attitudes and negatively by Extroversion, Life Spheres, and Coping Resources. Hypothesis 15 was also partly supported. Four of the predictor variables emerged as statistically significant predictors of Negative Affect. These were Neuroticism, Life Spheres, and two of the Psychological Distress sub-scales; Anxiety and Insomnia and Depression. The sample multiple correlation coefficient (.75) indicated that the linear combination of predictor variables accounted for a sizable 56% of the variance in Negative Affect. The four significant predictor variables contributed approximately 9.9%, 2.3%, 8.8%, and 2.9% of the variance respectively.

The findings in the third multiple regression analysis were not unexpected. The link between neuroticism and negative affect is widely documented (Costa & McCrae, 1980; Diener & Lucas, 1999; Headey & Wearing, 1989; Watson & Clark, 1984, 1997). There is no doubt that the constructs are very closely aligned (Watson & Pennebaker, 1989). In fact, over the years the terms have frequently been used interchangeably (Schaubroeck et al., 1992; Spector et al., 2000; Watson & Clark, 1984) or neuroticism has been used as a manifest indicator of negative affectivity (Heinisch & Jex, 1998; Parkes, 1990). However, in terms of the regression analysis an important consideration is whether this link is actually meaningful or is more indicative of an overlap in constructs.

A related issue concerns the Psychological Distress sub-scales of Anxiety and Insomnia and Depression. These variables combined predicted approximately 12 percent of the variance in Negative Affect. However, it is important to note that Watson and Pennebaker (1989) describe negative affectivity as a construct that "subsumes a broad range of aversive mood states, including anger, disgust, scorn, guilt, fearfulness, and depression" (pp. 234-235). In addition, Watson and Clark, (1984) emphasize the pervasiveness of negative affect and state that it includes subjective feelings of nervousness, tension, and worry. Costa and colleagues note that high neuroticism is associated with poorer personal adjustment and with increased somatic complaints (Costa & McCrae, 1987; Costa et al., 1981). In light of these findings, it is important to critically evaluate whether the sub-scales of Anxiety and Insomnia and Depression are predictors of negative affect or just share some common variance with negative affect.

8.5.4 Summary of predictors of well-being

The three regression analyses highlight several notable issues. Firstly, the findings reinforce the importance of burnout, especially the emotional exhaustion component as a critical variable in terms of the positive aspects of well-being. It would be interesting to ascertain if this is an artifact of a sample of human service workers or if this finding also holds for other populations.

Secondly, it is notable that no personality variable is predictive of Satisfaction With Life or Positive Affect. The literature is brimming with suggestions that personality has a substantial role to play in subjective well-being (Costa & McCrae, 1980; Diener, 1984; Diener & Larsen, 1993; Diener & Lucas, 1999; McCrae & Costa, 1991; Myers & Diener, 1995). The current research indicates that at least with this sample of community workers, it is more accurate to refine the suggestions to a less dramatic statement regarding the role that neuroticism plays in negative affect.

In terms of personality, a question remains over the absence of Extroversion as a predictor of Positive Affect for community workers. The explanation proposed in the current research is sparked by Diener et al.'s (1999) suggestion that the characteristics of extroverts are an outcome of higher levels of positive affect, implying that

extroversion would then function as a poor predictor of positive affect. This explanation would be strengthened if neuroticism were also a poor predictor of negative affect. Given the strong links in the literature between both neuroticism and negative affect and extroversion and positive affect, a similar relationship should apply. The fact that only one of these relationships holds true with the sample of community workers may indicate that Diener et al.'s suggestion is not valid, that the community workers are an anomalous sample, that other unknown variables have affected the outcome, or that the relationship is more complex than previously anticipated.

In addition, the fact that the Life Spheres measure is not a predictor of Positive Affect, but is a substantial predictor of Satisfaction With Life, is further evidence that the cognitive and affective aspects of well-being are separate and distinct. The finding that the Life Spheres measure also contributes approximately 2 percent of the variance to Negative Affect muddies the waters somewhat. However, the discrepant sizes of the variance contributed mean that this finding is still worthy of further investigation.

Finally, in terms of enhancing well-being, the results of these regression analyses suggest that assisting individuals to raise their levels of coping resources would be an effective option.

8.6 Limitations of the current research

There are three main areas that may have limited the first phase of the current research. The first area concerns the content of the questionnaire, the second concerns the reliance on self-report measures including the predominance of correlational analyses, and the third concerns the sample. Each of these issues will be discussed in turn.

8.6.1 Limitations of the questionnaire

In a perfect world, all the measures included in the questionnaire would meet psychometric requirements of internal consistency, reliability, and validity and also be short, easy to understand, quick to administer, viewed as relevant by the participants,

and free from response bias effects. However, as Parkes (1994) notes, some degree of compromise is generally unavoidable.

In the current research several compromises were made in the questionnaire. For example, more thorough personality information could have been obtained by using the NEO Personality Inventory Revised (NEO PI-R, Costa & McCrae, 1992a). This is a 240 item measure that has the advantage of providing information on six specific facets within each broad personality domain. The combination of five domain scales and thirty facet scales allows the NEO-PI-R to provide a particularly comprehensive assessment of personality (Digman, 1990). However, in the current research the 60 item NEO-FFI was used to provide more global information on personality. The primary reason for the compromise was the time saving. The NEO-FFI provides global information on personality in approximately ten minutes versus approximately forty minutes for the NEO-PI-R. Including the NEO-PI-R would have taken the total time to complete the questionnaire up to approximately one hour, which was considered prohibitively long for the sample of community workers.

An additional compromise in the questionnaire was the lack of psychometric data on the Life Spheres measure of domain satisfaction and the absence of provision for qualitative data.

8.6.2 Limitations of relying on self-report data

There are several implications of relying on self-report measures. The main issue is that relying exclusively on self-report measures can increase the problem of common method variance (Meyer, Allen, & Smith, 1993). Operationalizing the independent and dependent variables as subjective self-report scales means that when a correlation is observed between two variables it is unclear whether that covariation is reflective of a true relationship or whether it is artifactual due to common method variance. Unfortunately the strength of this variance can't be tested. However, recent research (Boumans & Landeweerd, 1993; Semmer, Zapf, & Greif, 1996; Spector, 1992) suggests that in a study such as the current research, common method variance may not be as problematic as first expected. For example, Semmer et al. noted that patterns of correlations were similar in studies where self-reported stressors and

observed stressors were related to variables of health and well-being. In addition, Spector, Dwyer, and Jex (1988) found that self-reports of work stressors have been shown to converge with non-self-report measures.

In the current study, several attempts were made to reduce the problem of shared method variance. For example, measures of particular constructs, such as well-being, were positioned in separate locations throughout the larger questionnaire and many of the measures used different response categories (Scheck, Kinicki, & Davy, 1997).

An additional issue with self-report measures that is not so easily overcome is the problem of social desirability bias (Auerbach & Gramling, 1998; Liebert & Liebert, 1995; Schuafeli & Enzmann, 1998). It is certainly possible for participants who are motivated to disguise their true levels of well-being, coping resources and so on, and to "fake good" or provide answers that they believe are socially acceptable. The logic of self-report measures is based on the assumptions that individuals possess enough self-insight to be able to answer questions correctly and that they are willing to truthfully report information about themselves. Heinisch and Jex (1998) state that both of these assumptions are questionable. The risk of bias is certainly high with constructs such as burnout, which may be associated with negative connotations. A final disadvantage of self-report measures is that they are inflexible and may not provide the participants with adequate scope to personalize their experience (Schaufeli & Enzmann, 1998).

However, there are also advantages to using self-report measures. For example, with constructs such as personality, the individual concerned is theoretically in the best position to provide information about themselves. In addition, according to the transactional model of stress and coping (Lazarus & Folkman, 1984), it is an individual's perception of stress, burnout, and well-being, not objective measures of these constructs that determines his or her experience. As perceptions are by necessity self-reported, the use of self-report measures remains a useful option for researchers in this area (Cordes et al., 1997). Finally, there are practical advantages to using self-report measures. Specifically, they are efficient, cost-effective, and particularly suitable to administer a battery of measures to groups. They are also

relatively easy to score and interpret and in principle, they are reliable because standardisation eliminates the assessors' subjectivity.

8.6.3 Limitations of the sample

The final area of concern involves the sample. Although there is value in investigating a specific sub-group, such as community workers, this also places immediate constraints on how widely the findings can be generalized. In addition, although every attempt was made to canvass a broad a range of community workers in the greater Auckland region, this may not be a representative sample.

A second factor pertaining to the sample that must be acknowledged as limiting the current research is the "healthy worker effect" (Schaufeli & Enzmann, 1998). By investigating individuals who were exclusively working, even with the inclusion of voluntary workers, and who had the time, energy, and desire to participate in the research, it is possible that the true levels of some of the constructs under investigation were underestimated. This is particularly the case for burnout. Several researchers have noted that the reliance on volunteers in studies of occupational stress has meant that the samples studied may differ from the population in general (Ganster et al., 1982). Beehr (1995) notes that the samples used in studies similar to the current research may be biased in many ways. For example, the samples may be over-represented by people with large amounts of occupational stress who take a particular interest in the research, or by people with low stress levels because those who are very stressed are too anxious, exhausted, and overloaded to volunteer. In addition, when relying on voluntary samples, it is always possible that the sample will be over-represented with people who are predisposed to volunteering in general. Therefore, it is possible that the internal validity of the results is impaired because self-selection of individuals systematically obscures the importance of some factors. For example, individuals under time pressure might choose not to participate in which case the role of time pressure on burnout could be underestimated (Schaufeli & Enzmann, 1998).

One final unknown consideration in the sample concerns the participants' expectations of engaging in research on stress and well-being. It is possible that their "mind-set" may have influenced their responses (Maslach, 1987).

8.7 Suggestions for future research

It is notable that of the 15 *t*-tests performed to compare the mean scores of the variables in the current sample with the mean scores of the respective normative samples, 14 yielded a statistically significant result. This suggests that there is something about the current sample of New Zealand community workers that sets them apart from those who form the normative samples. In addition, given the lack of research evaluating New Zealanders in general, perhaps this suggests that New Zealanders as a group are distinct. An important area for future research is to investigate New Zealanders in terms of health and well-being variables, such as those used in the current research.

New Zealand as a nation should be indebted to the huge amount of international research that has illuminated complex areas such as stress, well-being, and burnout. However, perhaps the wealth of information from overseas has done New Zealanders a disservice in that little is known about the New Zealand situation. If the findings in the current research are anything to go by, it is time to use the international findings to focus research towards learning about what sets New Zealanders apart in specific areas and establishing how this information can most effectively guide future research. For example, the current research, combined with a previous New Zealand study on community workers (O'Driscoll & Schubert, 1988), suggests that the depersonalization aspect of burnout may be conceptualized differently with New Zealanders.

8.7.1 Burnout

Many interesting areas for future research in the burnout area arose from the current research. For example, is there something about the state of depersonalization that renders a person impervious to the benefits of coping resources or is this an anomaly in the current research? In addition, given that most burnout research has investigated

human service populations and considering that community workers are a sub-set of human service workers, it is not clear why there is no relationship between neuroticism and depersonalization and neuroticism and personal accomplishment. Further research could identify if these results are specific to community workers or are more reflective of the way burnout is conceptualized in New Zealand. The collection of normative data from New Zealand is obviously an important first step towards investigating these issues.

More research is also needed to investigate the process of burnout. If Leiter and Maslach's (1988) sequential model of the process of burnout is not supported, as is tentatively indicated in the current research, and a mixed sequential and parallel model like Leiter's (1990, 1993) is more appropriate, this could require a total rethink in the way burnout is treated.

Despite widespread awareness of the possible relevance of the role of unmet expectations and unrealistic attitudes in burnout (Cordes & Dougherty, 1993; Cherniss, 1980, 1995; De Heus & Diekstra, 1999; Farber, 1983; Freudenberger, 1989; Freudenberger & Richelson, 1980; Gold & Roth, 1993; Jackson et al., 1986; Lyall, 1989; Schaufeli & Buunk, 1996), the area is still plagued with confusion and conflicting findings (Jackson et al., 1986; Kirk & Koeske, 1995; Schaufeli & Enzmann, 1998; Schwab, 1986). A valuable contribution to future research would be to explore more fully the role of expectations in burnout. Qualitative methodology is likely to be most suitable for teasing out the issues in this complex area.

The recent findings of Bakker et al. (2000) concerning the role of reciprocal relationships in burnout are another interesting area for future research, especially the finding that negative attitudes from health professionals and clients can reinforce each other. Little is known about the fine line between "detached concern", involving a blend of professional care and appropriate emotional distance (Maslach, 1982; Schaufeli & Enzmann, 1998), and depersonalization. Researchers who are interested in tackling this area should be guided by Bakker et al.'s suggestion that to understand the development of burnout, it is essential to consider many factors, including the way individuals perceive, interpret, and construct the emotionally demanding behaviour of others.

Another area for future research is to explore more fully the role of organisational commitment in burnout. Kalliath et al. (1998) took this variable, which is usually thought of as an outcome of burnout (Lee & Ashforth, 1996), and investigated it from the opposite perspective, as a determinant of burnout. They found that greater organisational commitment directly reduced levels of emotional exhaustion and depersonalization and indirectly impacted on personal accomplishment. Other researchers have found similar findings in different areas. For example, job satisfaction and career commitment have been found to mediate the relationship between stress in the workplace and psychological strain (O'Driscoll et al., 1992; Reilly, 1994). Perhaps this sort of logic could also be applied to investigating work commitment and family commitment in the area of well-being.

8.7.2 Personality

The finding that the community workers in the current research were significantly different to the normative sample on each of the five personality traits opens a huge area for future research, both in terms of further investigations with community workers and with more diverse samples. In particular, the use of the longer NEO-PI-R is recommended for future research because the facet scales can provide valuable additional information.

The current research suggests that a prime area for future research concerns the link between personality and coping resources. In particular, it would be valuable to know what role conscientiousness plays in coping resources. Mixed results have been obtained from the few investigations of conscientiousness and coping strategies (David & Suls, 1999; O'Brien & Delongis, 1996; Vollrath & Torgersen, 2000; Watson & Hubbard, 1996) which suggests that a thorough investigation of this area is needed for both coping resources and coping strategies.

Research has also barely skimmed the surface in terms of the traits of agreeableness and openness to experience. The finding that the community workers as a group are highest in the dimension of openness to experience is intriguing. Future research could investigate if this finding is unique to community workers, is reflective of

human service workers in general, or is indicative of something distinct to New Zealanders. An additional area for future research, albeit a highly complex one, is to follow the lead of Vollrath and Torgersen (2000) who investigated combinations of personality traits. Given the complexity of the personality domain, it is likely that personality traits are more expressive and meaningful in combination than they are in isolation. This area is wide open for future research.

A very valuable contribution to future research would be to clarify the distinctions between neuroticism and negative affect. Recent research emphasizes the similarities between the two constructs, so much so that they are frequently used interchangeably (Schaubroeck et al., 1992; Spector et al., 2000; Watson & Clark, 1984), but even subtle differences could obscure and confuse research findings if the distinctions are not clarified.

To date the focus in research on occupational stress and well-being has overwhelmingly been on the detrimental effects of high neuroticism and negative affect. Although there is still much to learn in this area (Spector et al., 2000), it may be time to take the recommendation of Heinisch and Jex (1997) and focus research efforts on the positive effects of low levels of neuroticism and negative affect.

8.7.3 Well-being

The factor analysis performed in the current research provides further evidence of the validity of the three factor model of well-being. Currently researchers who draw conclusions about well-being based on only measuring one aspect of well-being may inadvertently be reaching inaccurate conclusions because it appears that all three aspects are needed to fully understand the complex construct of well-being.

In terms of future research, the whole question of the viability of a well-being index remains unanswered. A large sample and expertise in structural equation modeling could provide many answers in this area. In addition, questions remain over which is the more effective measure of cognitive life satisfaction – a global measure, such as the Satisfaction With Life Scale (Diener et al., 1985), or a measure of domain

satisfaction, such as the Life Spheres sub-scale of the Life Satisfaction Scale (Kopina, 1996).

8.7.4 Coping resources

Several possible areas for future research present themselves in relation to coping resources. Firstly, there is the issue of whether the significant differences between the Total Coping Resources score and all five sub-scale scores and the normative data are indicative of inadequate norms, or the less likely possibility that the current sample is an unusually well resourced group of community workers. Secondly, the finding that 17 out of the 18 correlations between coping resources and well-being were significant with medium to large effect sizes, suggests that future research on enhancing well-being could benefit from investigating ways to increase coping resources. It would be interesting to know if coping resources are stable over time or are responsive to changes in the individual and/or in the environment. Finally, as discussed, the relationship between coping resources and personality presents many opportunities for future research.

8.7.5 Dysfunctional attitudes

Little is known about dysfunctional attitudes in non-clinical populations. The findings in the current research suggest that they play a role in all aspects of well-being, coping resources, personality, and psychological distress. Uncovering the nature of this role is an area that is ripe for further investigation. Particularly intriguing and counter-intuitive is the lack of relationships in the current research between dysfunctional attitudes and any aspects of burnout.

8.7.6 General suggestions for future research

The majority of the findings from phase one of the current research come from correlational evidence and therefore must remain speculative. Currently subjective reports dominate in stress and burnout research (Cooper et al., 2001; Rudow, 1999). Heinisch and Jex (1998) state that exclusive reliance on self-reports of stressors and strain leads to an "incomplete, unidimensional view of the process by which stressful job conditions impact employees" (p. 156). Future research could benefit from less

reliance on self-report measures. This issue will be discussed more fully in the discussion of phase two (chapter 12).

8.8 Chapter summary

This chapter begins with an overview of the current sample of community workers in terms of the obtained levels of each variable investigated in the current research. In general, the community workers exhibited average levels of emotional exhaustion, low levels of depersonalization, and high burnout in terms of reduced personal accomplishment. Levels of well-being and dysfunctional attitudes were average while levels of coping resources were relatively high. The most notable aspect regarding personality was the high level of openness to experience. However, many reasons are provided to interpret these findings cautiously. In addition, the implications of and possible reasons for any unexpected findings are discussed.

A discussion of the results of the factor analysis performed to investigate the three dimensional model of well-being is also included in this chapter. Overall, the factor analysis provided clear support for the three dimensional model. This is followed by an overview of each of the correlational analyses, with specific reference to the relevant hypotheses. The chapter continues with a discussion of three multiple linear regression analyses performed to further investigate the construct of well-being. These analyses revealed several notable, and at times unexpected, findings. The chapter concludes with a summary of the main limitations of the current research and a selection of suggestions to guide the direction of future research.

CHAPTER 9: THE WELL-BEING INTERVENTION

9.1 Chapter overview

This chapter provides a detailed rationale for the well-being intervention implemented in the current research. The chapter begins with an explanation of the philosophy behind the intervention and the theoretical orientation guiding the intervention. The goals of the intervention are discussed and a rationale is given for each of the eight modules comprising the intervention. The modules are presented in sequence following the order they appear in the intervention.

9.2 Philosophy and theoretical orientation for the intervention

The "Thriving in the Stress Place" well-being intervention was developed as a result of a stress audit of community workers in the North Shore of Auckland (Bennett & Marsh, 1999) which identified the need for an intervention to assist community workers to manage stress and enhance their well-being.

The overriding assumption for devising an intervention is that community work is inherently stressful and a stressful work environment can impact on individual well-being. In addition, short of massive restructuring of the entire community sector, community work will remain a stressful occupation. Therefore, in terms of reducing occupational stress there are three options: an intervention that targets the level of the individual, the level of the organisation, or an intervention that targets both the individual and the organisational level (Burke, 1993). The current intervention is based on the first option. The rationale is that given the hugely diverse range of small community organisations, combined with consistently low levels of resources and job security, an intervention targeting organisational change was beyond the scope of the current research. This leaves the first option of enhancing the coping skills and resources of individual community workers to enable them to cope more effectively with stress and ultimately enhance their well-being.

Wynne (1997) has called for "a radical shift in perspective and methods" (p. 302) in workplace health promotion. He asked for a move away from an expert driving the process, to a facilitator supporting the process, with particular awareness that stress

management must be voluntary and has to incorporate the concerns of the participants. The current intervention is designed with Wynne's comments in mind. In particular, the intervention acknowledges that effective stress management must be participative and holistic and consider an individual's entire life, not just the issues that they face at work. This is based on research which states that it is common for stress to "spill over" from work to home and vice versa (Bunker, 1994; Dolan, 1994; O'Driscoll, 1996; Sauter et al., 1992; Warren & Toll, 1993).

Lazarus (1999) has highlighted a need for a greater focus on the individual in stress management. However, as many researchers (e.g. Brief & George, 1995) have pointed out, there are practical limitations to consider. Given that the experience of stress is personal and subjective, as far as is possible in a group setting, the intervention is designed to allow each individual to identify and work on their own stressful issues.

A criticism frequently levelled at stress management interventions is that they are only weakly grounded in theory (Auerbach, 1989; Ivancevich et al., 1990; Ivancevich & Matteson, 1987; Murphy, 1995b). The well-being intervention described in the current research is an attempt to translate the theory of stress, coping and well-being into practice by integrating findings from the literature and making them available to the participants in a practical form.

The integrative transactional model of stress and coping (Milner & Palmer, 1998) guided the design of the current intervention. This model is transactional in that it emphasizes the transaction between the person and their environment. It is integrative in that it uses a core theoretical framework into which other ideas and approaches can be integrated. This goes beyond an eclectic approach because while it is recognized that different people will require different approaches to deal with stress, this model is flexible within the guidelines of one theoretical framework (Milner & Palmer, 1998; Palmer & Dryden, 1996).

In the current intervention, stress is defined in transactional terms with an emphasis on the relationship between the individual and the environment. A full discussion of the transactional model of stress and coping is provided in chapter two. In summary,

stress is seen as relational in nature and arising from a judgment that the demands of a situation will tax an individual's physical or psychological resources, thereby threatening his or her well-being (Lazarus, 1966; Lazarus & Folkman, 1984; Lazarus & Launier, 1978). The entire process is dynamic with the person-environment relationship constantly being appraised and reappraised (Lazarus & Folkman, 1984; Monat & Lazarus, 1991). Few researchers have attempted to take the transactional model of stress and coping beyond the conceptual level (Cooper et al., 2001). However, the implication inherent in adhering to this model is that the intervention must emphasize the relationship between the individual and the environment (Dewe, 1997). This means that issues such as the interpretation of events and the enhancement of coping resources are particularly important.

In the current research stress is viewed as a multifaceted phenomenon (Matheny et al., 1986). As such, a multidimensional array of options is provided to assist the participants to manage stress and enhance well-being. Many of these options are influenced by Lazarus' (1981) multi-modal therapy which systematically covers seven basic modalities of human functioning: behaviour, affect, sensation, imagery, cognition, interpersonal relationships, and drug taking/physiological (Lazarus uses the acronym BASIC ID). The multi-modal framework comprises elements of general systems theory, social learning theory, and communication theory (Lazarus, 1987).

The rationale for the multi-modal approach is four-fold. Firstly, a multi-modal approach is consistent with the integrative transactional model of stress and coping adhered to in the current research (Lazarus, 1981; Milner & Palmer, 1998). Secondly, the lack of evaluative research to date has constrained the development of any truly comprehensive stress management programme (Dewe, 1994). Therefore, it is difficult to know which are the "best" methods to treat stress. Adopting a comprehensive and holistic approach acknowledges that it is unlikely that any single technique will be effective alone (Roskies, 1991). In addition, offering a variety of techniques and providing a rationale for their usefulness increases the chances that the participants will find one that suits them and that they will continue using, effectively increasing the transfer of training (Ellis et al., 1997). Finally, research supports the multi-modal approach (Palmer & Dryden, 1991). Multi-modal interventions have produced more consistent results than single technique approaches (Bunce, 1997) possibly because

the combination of somatic and cognitive techniques provides a balance that is more effective in combination than alone (Murphy, 1996).

Bunce (1997) notes that the technical orientation of the majority of stress management interventions can be educational information, cognitive-behavioural, arousal reduction, or personal skills training (e.g. time management training), or more effectively, some combination of these. The well-being intervention in the current research has an educational component, giving a conceptual overview of stress, including causes, manifestations, and warning signs. It also has a cognitive behavioural component based on the rationale that the way an individual conceptualises a situation will determine their emotional reaction. In addition, the intervention utilises arousal reduction strategies in the form of various relaxation exercises. Finally, the intervention comprises an element of personal skills training focusing on problem solving. However, the primary theoretical basis of the intervention is cognitive adhering to the transactional philosophy that both the internal and external worlds of a person are important in the stress process. This means that it is not just the stressful event, but also the thoughts a person has about it that make a difference. The importance of this appraisal/perception process cannot be underestimated in stress management (Ellis & Dryden, 1987; Greenberger & Padesky, 1985; Lazarus, 1984; Lazarus 1989; McKay et al., 1981).

9.3 Principles of adult learning guiding the intervention

The main principles of adult learning are adhered to in the design and delivery of the intervention. In particular, several key points are prioritized. These include recognition that adults learn throughout their lifetime, that they construct frameworks to assist with meaning, and that these frameworks are based on past experiences and need to be integrated with current learning. Overall the process of learning is most effective when it is active, experiential, and enjoyable (Brookfield, 1988; Morgan, Ponticell, & Gordon, 1998; Schafer, 1987, Tovey, 1997). In practical terms it is essential to present information clearly and simply, to introduce variety into the teaching process, to recognize that adults exhibit a wide range of learning strategies, and to give the participants the opportunity to learn from each other as well as the researcher. Finally, adult learning theory links effectiveness to relevance (Martin,

1997). Therefore, all examples and exercises are designed to be as relevant as possible to the professional lives of community workers.

9.4 Goals of the intervention

The overall goal for the participants who take part in this stress management intervention is to increase individual well-being. In addition there are several more specific sub-goals. These are:-

- To increase awareness of what experiencing stress means to each individual in terms of physical and emotional symptoms, behaviour, and thoughts.
- To present a range of coping strategies thus providing an opportunity for each participant to increase his or her repertoire of coping skills and resources.
- To learn to recognize ways of thinking that can contribute to stress and how to refute these ways of thinking.
- To put into place mechanisms that allow the stress management skills learnt on the course to be transferred to post-course situations.

9.5 Overview of the intervention

The well-being intervention is run for two days, one week apart. One or two day workshops provide a common and convenient option for interventions of this type (Ellis et al., 1997; Hart, 1995). The first day of the intervention focuses mainly on proactive strategies appropriate for stressors that can be changed, including identifying sources of stress and applying problem solving techniques. The second day concentrates on techniques that do not eliminate the stressor but that modify the cognitive appraisal processes that lead to or exacerbate the perception of stress. Cognitive restructuring and analysis of coping resources are central to this component.

The first module is rather generic involving introductions, ground rules, participants' expectations, and an overview of what the participants can expect for the rest of the intervention. The purpose of the second module is to increase the participants' understanding of the things they value most and assist them to gain clarity over the

areas of their lives where their values are not expressed. Values may seem tangential to the stress management process, however, assisting each individual to obtain an accurate overview of his or her current situation is an essential prerequisite to a well-being intervention (Fontana, 1989). In addition, values are a useful starting point because they are precursors to attitudes and behaviour (Deal & Kennedy, 1982).

The third module involves teaching the participants a problem solving model. Problem solving is useful in a well-being intervention because in general, efforts to remove or reduce stressors tend to be more effective than efforts to tolerate them (Matheny et al., 1986; Wagenaar & La Forge, 1994). The purpose of the fourth module is for the participants to increase their understanding and awareness of the stress process. This is an important and achievable part of any intervention (Aronson & Mascia; 1981; Dolan, 1994; Goliszek, 1987; Schell, 1997). The fifth and sixth modules comprise aspects of cognitive therapy and are designed to reinforce the core message that stress and anxiety are the product of an individual's thoughts and that by learning ways of changing their thinking, stress can be reduced and well-being enhanced (Beck, 1976). Module seven is focused on assisting the participants to reduce demands and increase coping resources. A particular emphasis is placed on self-care, given that community workers are notoriously poor at this (Bennett & Marsh, 1999). The final module is designed to give the participants a sense of closure and allow them to evaluate the intervention.

9.6 Module 1: Overview

Module 1 includes an initial period of putting the participants at ease, completing introductions, exploring expectations, and formulating group guidelines. This general format is reasonably standard for many types of interventions (e.g. Ellis et al., 1997).

Prior to starting any exercises, a realistic overview of the workshop is provided. This is done for several reasons, including recognition of one of the main principles of adult learning which states that the participants should be as actively involved in the learning process as possible (Morgan et al., 1998; Schafer, 1987). It is also easier for the participants to learn when they have a sense of what will be expected of them (Tovey, 1997).

However, the main reason for providing the participants with an accurate overview of the content of the workshop is based on the same logic as the realistic job preview given to candidates at job interviews (Berry & Houston, 1993). That is to say, it is assumed that the stress management process will be most effective when the participants are under no illusions about what is required to manage their stress and enhance their well-being (Maslach, 1982; Schaufeli & Enzmann, 1998). The point is clearly made that stress management is not a 'one shot deal'. The participants are warned in a light hearted way that there are no 'magic bullets' and that it is not possible to pick up a few new techniques which will suddenly and miraculously enhance the quality of their lives. They are advised that the purpose of the workshop is to encourage the adoption of a long term perspective on well-being, so that each person leaves at the end of the two day workshop more committed to caring for his or her own needs and future health. The participants are made aware that their active participation and involvement is essential to this process (Murphy, 1987).

9.7 Module 2: "Under the microscope"

The questions in the second module are designed to help the participants take stock of their lives, or to examine them as if under a microscope. The purpose of this module is to increase the participants' understanding of the things they value most and to encourage them to have a clearer idea of the areas of their lives where their values are not expressed. The first exercise in the module uses a card sort format to identify key values (adapted from Knowdell, 1994). The second exercise (adapted from Barrow & Place, 1981; Huygens, 1993) allows participants to get a sense of how their time is spent in an average week and to compare this with an ideal week. Finally, participants are encouraged to consider changes they could make to incorporate more of what they value into their lives.

The rationale for an exercise of this type is that many community workers are so busy assisting others that they may have lost sight of what is most important to them in their work and personal lives. However, an understanding of what is and is not working well in a person's life is an essential prerequisite to stress management (Fontana, 1989). An honest appraisal of one's situation is also a necessary prelude to

the next module involving problem solving. In addition, gaining greater clarity over values can assist the participants to reduce the impact of conflicting values (McKay et al., 1981) and allow them to take steps to bring their work more closely in line with their primary values. It is thought that when actions and values are in line that stress is reduced (Lazarus, 1999) and the risk of burnout is lowered (Maslach, 1984).

Attempting to uncover and understand values has been an issue almost since the beginning of time (McKay et al., 1981). The importance of values stems from the fact that value systems are central to an individual's cognitive structure and provide the core elements of beliefs, attitudes, and behaviours (Homer & Kahle, 1988). In terms of stress management, values have been largely ignored. However, this module on values is included in the current research because values are precursors to attitudes and behaviour (Deal & Kennedy, 1982) and as such they have a direct impact on what an individual actually does (Levy, 1990). Therefore, attempting to intervene at the level of values is a good option for increasing awareness and possibly facilitating behaviour change.

Work values are a subset of general values. Work values are core dimensions of attitudes towards work and are not linked to a specific job or organization (Wollack, Goodale, Wijting, & Smith, 1971). Sagie, Elizur, and Koslowsky (1996) define work values as "the importance individuals give to a certain outcome obtained at work" (p. 503). Knoop (1994) states that work values "represent learned and therefore subjective qualities that embody what individuals consciously or unconsciously want in a job" (p. 595). It is generally considered that work values reflect an employee's attitudes to aspects of their work such as preferences for autonomy, attitudes towards financial rewards, and desire for upward career mobility (Cherrington, 1980).

No research has been done on the work values of community workers. It is possible that as a group they would make an interesting population because community work is notoriously underpaid, suggesting perhaps that other values make community work attractive. Traditionally it has widely been accepted that in terms of job satisfaction, the content of the work itself appears to be more important than economic rewards (Brief & Aldag, 1994). However, Chackow (1983) suggests that the impact of pay on job and life satisfaction is underestimated. Schwab, Rynes, and Aldag (1987) have

stated that self-report data concerning the importance of work outcomes, such as pay, may be distorted as a result of socially desirable responses.

Pay is not the only issue that is possibly relevant for community workers. Research suggests that individuals are likely to choose jobs with values that are similar to their own (Judge & Bretz, 1992). Congruence between the values of the individual and those of his or her manager appears to be particularly important and can lead to increased satisfaction and commitment, especially with longer tenured employees (Meglino, Ravlin, & Adkins, 1989). Incongruency between individual and organizational values has been linked to reduced job satisfaction, lower organizational commitment, and lower job performance (Apasu, 1987). Value congruency is linked to greater organizational effectiveness (Badovick & Beatty, 1990; Barney, 1986), willingness to work longer hours, lower levels of stress between work and home (Posner, Kouzes, & Schmidt, 1985), and increased satisfaction and commitment (Meglino et al., 1989).

It is not possible to achieve congruency between personal values and organisational values without first gaining clarity over personal values. It may also be satisfying for an individual to reconnect with the values that initially attracted him or her to community work as these may have become less clear over time. These issues may appear tangential to well-being. However, individuals who achieve clarity over their values and devise strategies to incorporate more of what they value into their work and personal domains are actively laying the foundation for enhancing well-being.

9.8 Module 3: Problem solving

As a prelude to the problem solving exercise, this module begins with two exercises designed to highlight issues that are critical to the appraisal process of the transactional model of stress and coping (Lazarus, 1966; Lazarus & Folkman, 1984). These exercises are included because adhering to the transactional model means that it is essential to emphasize the relationship between the individual and the environment (Dewe, 1997). The first exercise involves assisting the participants to distinguish between situations that they can change and situations that they cannot change. This distinction between stressors which are fixed and those that can be altered is

fundamental to successful coping (Folkman et al., 1991; Michie & Ridout, 1990). Even the realization that often the only thing that can be controlled in a situation is the self, is important to problem solving. As long as an individual views others or the system as responsible for his or her stress, there is no obligation to change or work to change the system (Farmer et al., 1984; Froggatt, 1997). Essentially this is the same as the key message from rational-emotive behaviour therapy (Palmer & Dryden, 1994) which states that each individual is responsible for his or her own levels of distress.

The second exercise involves assisting the participants to distinguish between global stressful conditions and specific stressful conditions (Folkman et al., 1991). The reason for refining stressors from global to specific is that thinking about stress in global terms can be overwhelming, therefore making the coping process more difficult. For example, thinking about a broad stressful situation such as "my job" can be both ambiguous and complex. However, refining the issue to a specific aspect of work, such as faulty equipment, facilitates the coping process. When a global stressor is disaggregated into specific stressful situations, particular demands can be identified and goals for coping can be put into place. The more precisely defined the situation is, the easier it is to identify appropriate coping strategies and options (Folkman et al., 1991). Even the act of identifying the sources of stress in one's life is considered an active and important coping skill (Meichebaum, 1985).

A problem solving module is included in the intervention because problem solving plays a critical role in stress management. In general, efforts to remove or reduce stressors tend to be more effective than efforts to tolerate them (Matheny et al., 1986; Wagenaar & La Forge, 1994). The use of problem solving skills constitutes a direct effort to cope with specific external demands, especially as in the current intervention, when the participants have been actively involved in problem analysis and generating solutions (Pierce, 1995; Wynne, 1997). However, to date this method has not been used with the same frequency as emotion-focused strategies (Auerbach & Gramling, 1998).

There is extensive evidence that acquiring good problem solving skills enhances an individual's effectiveness at coping with stress and can positively impact on overall

psychological adjustment. For example, there appear to be differences between individuals who view problems as challenges and actively attempt to manage them, compared with those who perceive problems as threats and avoid facing them. The former report fewer dysfunctional thoughts and irrational beliefs, appear to be less anxious and depressed (Heppner, Reeder, & Larson, 1983), and tend to experience less stress (D'Zurilla & Sheedy, 1991).

Individuals who consider themselves effective problem solvers also appear to be different to those who consider themselves poor problem solvers. Effective problem solvers tend to see less threat in stressful situations, find more options for coping, and are more likely to use problem focused coping than emotion focused coping (MacNair & Elliot, 1992). In addition, among American college students effective problem solving ability is more predictive of effective study habits than academic ability (Elliot, Goodshall, Shrout, & Witty, 1990). Even patients with spinal cord injuries who are effective problem solvers tend to experience less depression and psychosocial impairment (Elliot, Goodshall, Herrick, & Witty, 1991). Overall it appears that just being in a position to engage in problem solving is associated with lower stress (Jackson, 1983).

There are many problem-solving approaches used in stress management training programmes (e.g. Aronson & Mascia, 1981; D'Zurilla & Goldfield, 1971; Hawton & Kirk, 1989; McKay et al., 1981; Meichenbaum, 1985; Palmer, 1994). These models vary in complexity but all follow a step-by-step approach. The model taught in the current intervention is a seven-step problem solving model adapted from Milner and Palmer (1998), Palmer and Burton (1996), Palmer and Dryden (1995), and Wasik (1984). This step-by-step problem solving model is used because it is thorough, logical, and allows each participant to address individual stressful issues in a methodical and solution focused manner, therefore facilitating more effective decision making. In addition, once the method is learned, the individual can use the steps to actively manage future stressors and prevent them from becoming overwhelming (Hawton & Kirk, 1989).

Although the basic content of the seven-step model is retained, various steps were added to or simplified to make them more appropriate for New Zealand community

workers. For example, aspects of stress inoculation training (Meichenbaum, 1985) were included. The focus of stress inoculation training is to enhance individuals' levels of self-efficacy for identifying problematic situations and assist them to be more effective at exercising control over their behaviour by using appropriate coping strategies (Machin & Creed, 1999).

Self-efficacy is one of the primary factors that determines an individual's likelihood of applying a problem solving approach to stress management (Bandura, 1986). Without the sense that they are capable of carrying out the behaviours needed to modify the stressful situation, a person is unlikely to begin the process or persist in the face of difficulties (Auerbach & Gramling, 1998). Therefore, a key part of teaching this model is to encourage the participants to focus on an issue that they have some control over and that is not too complex so there is a reasonable likelihood of success. The participants are also made aware that they are free to choose any issue they consider stressful, including sources of stress outside of the work domain. This is in recognition of the increasingly blurred boundaries between work and home (Bunker, 1994; O'Driscoll, 1996, 1994; Sauter et al., 1992; Warren & Toll, 1993).

The participants are asked to implement the problem solving model in pairs. Working with a partner harnesses the value of social support (Dolan, 1994; Ganster et al., 1986) and allows the participants to take advantage of another person's insight (Ellis et al., 1997). In addition, making commitments to another person, rather than the self, increases the likelihood that the individual will continue to apply the steps to a stressful situation once the training is completed (Morgan et al., 1998; Schafer, 1987; Tovey, 1997).

9.9 Module 4: Stress awareness

The primary purpose of module four is for the participants to increase their understanding of the stress process. Increasing knowledge and awareness of stress is a key component of many stress management interventions (e.g. Aronson & Mascia; 1981; Goliszek, 1987; Schell, 1997). It is also one of the more achievable aspects of stress management. Changing levels of knowledge is far easier than attempting to change behaviour (Dolan, 1994). In this module, information is provided on the

individual nature of the stress process, including the roles of primary and secondary appraisal, and how the appraisal process can impact on physiological, psychological, and behavioural outcomes. The interactive nature of stress is emphasized, including the fact that there is always an interaction between the individual and his or her work and non-work environment. Information for this section of the module is loosely based on the Organizational Stress Framework (Ivancevich & Matteson 1987) and is influenced by the ideas of many stress theorists including Lazarus (1999), Lazaus and Folkman (1984), Lazarus and Monat (1991), Palmer and Dryden (1995), and Milner and Palmer (1998).

Often the biology of stress is overlooked in stress management programmes. However, in the current intervention, a simple description of the biology of the stress response is included based on the rationale that understanding what is happening physiologically can enhance the effectiveness of stress management. It appears that understanding this process increases the chances that a person will adopt and adhere to a stress management strategy. In particular, knowledge of this type raises awareness and allows an individual to see the relevance of different coping strategies, such as the relaxation response, and lifestyle changes, thereby promoting their effectiveness (Gegson & Looker, 1996; Palmer & Dryden, 1996).

An additional purpose of module four is to introduce the participants to a simple structure for analyzing stressful experiences. The CABB model provides a method of dividing a stressful experience into four categories: cognition, affect, biology, and behaviour (Milner & Palmer, 1998). These four categories are frequently used in the integrative-transactional model of stress. Due to the complex nature of the stress process, there will be constant interaction between the four modalities. However, for the participants, separating a stressful experience into these four modalities means that they can get a clearer picture of how they experience stress, one that looks at the whole person and not just the presenting problem. Understanding the stress process is a prerequisite for effective coping (Meichenbaum, 1985, 1993). Distinguishing between these aspects of stress also it makes it easier for the participant to identify the parts of the experience that are most in need of change (Greenberger & Padesky, 1995; Warren & Toll, 1993). In addition, identifying the relationship between cognitions, affect, and behaviour prepares the participants for the next module

(Twisted Thinking) when they are required to look more closely at their thoughts and the effects of their thoughts.

The learning from the CABB model is consolidated with homework that is given for completion in the week between workshop days. The purpose of the homework is to reinforce the learning from the first day, specifically the distinction between thoughts, feelings, behaviour, and physical symptoms. Homework is considered a critical element of various types of cognitive therapy (Beck, 1995; Ellis & Dryden, 1997) and is frequently used to enhance transfer of training (Tovey, 1997).

The homework is in the form of a diary in which the participants are asked to record types and frequency of stressful incidents as well as physical and emotional reactions to each incident. Many researchers advocate the use of stress diaries (e.g Cook, 1992; Cooper, 1995; Davis et al., 1995; Ellis et al., 1997; Goliszek, 1987; Maslach, 1982; Peeters, Buunk, & Schaufeli, 1995; Suls, Green, & Hills, 1998). The main reason for their use in the current intervention is that they allow each individual to focus on their personal signs, symptoms, and patterns of stress. Increasing awareness of these factors is essential because typically much stress occurs out of conscious awareness (Kagan et al., 1995; Maslach, 1982). The process of keeping a stress diary can also highlight stress patterns that could otherwise be difficult for an individual to detect (Hart, 1995). Essentially stress diaries operate on the principle that the starting point for self-understanding is self-observation (Maslach, 1982; Schaufeli & Enzmann, 1998). An additional benefit of the diary methodology is that the individual does not have to rely on memory for information on specific stressors later in the intervention (Pierce, 1995). Each person has a ready source of information that can be used in various exercises. Finally, using a diary allows the participants the flexibility of choosing when and what they record and this element of choice should increase compliance (Pierce, 1995).

The first day of the intervention concludes with a relaxation exercise. Relaxation exercises are ubiquitous in stress management interventions with good reason. There are numerous advantages to relaxation. For example, stress related problems such as insomnia or tension headaches can be alleviated or reduced, an individual's ability to deal with stress can be enhanced, and overall levels of tension reduced (Auerbach &

Gramling, 1998; Barrow & Place, 1981; Beech, Burns, & Sheffield, 1982; Davis, Robbins-Eshelman, & McKay, 1995; Fontana, 1989; Horn, 1986; Huygens, 1993; Kindler & Ginsburg, 1990; Rose, 1992; Thompson, Murphy, & Strandling, 1994; Winsborough & Allen, 1997). However, some suggest that the benefits of relaxation may be attributed to the placebo effect by motivating clients to assume responsibility for constructive life changes (Wagenaar & La Forge, 1994). In addition, it must be acknowledged that relaxation techniques alone are not effective in reducing stress. They are useful in reducing the stress response when it does occur, and may make it easier for a person to tolerate stressors that they cannot change (Matheny et al., 1986), but they do not address any underlying causes (Sapolsky, 1994).

Relaxation is frequently among the first skills to be taught in stress management because most people can develop a degree of proficiency reasonably quickly. This early acquisition of an active coping skill is desirable because it can increase an individual's self-efficacy, which can facilitate training in other coping skills (Meichenbaum, 1985).

The relaxation exercise used in the current intervention is the multimodal relaxation method developed by Palmer (1993) and used in Palmer and Dryden (1996) and Milner and Palmer (1998). The main benefit of this relaxation exercise is that it is very inclusive offering elements of affective, sensory, imagery, and cognitive modalities. The exercise comprises three parts that flow together. The first part focuses on encouraging physical relaxation, the second part focuses on meditation (adapted from Benson, 1980) and involves clearing the mind of unwanted thoughts, and the third part includes a visualization of a relaxing scene. Allowing the participants to experience a variety of different modalities recognizes that different approaches to relaxation have different effects and work for different people (Auerbach & Gramling, 1998). Providing several options increases the chances that each individual may find a type of relaxation that appeals to them (Smith, 1990), which should increase the likelihood that they will continue to practice. This is essential because the greatest gains from relaxation come with regular practice (Maslach, 1982).

There are also many practical benefits to this particular exercise. It is quick (designed to take between 8 and 12 minutes), suitable for use with groups, easy to use, and it does not require excessive time for the participants to become adept at the technique. In addition, because it can be done sitting up, it makes it easier for participants who do not feel comfortable lying down in a group. The simple nature of the exercise also means that the participants have a better chance of incorporating it into their lifestyle for example, during a quiet time at work.

This technique is also safe. When working with groups it is important to take a moderate approach as the medical histories of the participants are unknown. For example, progressive relaxation can be contraindicated with individuals who suffer from high blood pressure or cardiac disorders (Palmer & Dryden, 1995). In addition, this method is culturally appropriate. During the visualization aspect of the exercise, participants are asked to generate their own images. This eliminates the situation where the facilitator suggests an image that is unsettling or not appropriate for that individual. Most forms of meditation have some rituals or religious or quasi-religious beliefs associated with them which are thought to be essential to the success of the meditation. However, the Benson (1980) method used in the exercise does not have any of these associations and was developed with a more pragmatic approach in mind; to capture the benefits of meditation without delving into the accompanying philosophy. Therefore, it is appropriate for use with diverse groups of individuals.

9.10 Modules 5 and 6: The cognitive behavioural approach

Cognitive-behavioural therapies cover a variety of approaches that differ according to the techniques employed and the rationale used for integrating cognitive and behavioural factors. This is a particularly rapidly growing area. In 1980 there were approximately six types of cognitive psychotherapy, by 1990 there were more than twenty different types (Mahoney, 1993). The term "cognitive" is somewhat misleading because there is actually an emphasis on the interaction between the environment, biology, affect, behaviour, and cognition. However, in the 1960s less attention was paid to the cognitive aspects of an individual's problem (Datillio & Padesky, 1990). In general, cognitive methods help people to restructure their thinking patterns. This is accomplished via an assortment of techniques designed to

help participants modify their appraisal processes and develop behavioural skills for managing stressors. One of the main benefits of the cognitive behavioural approach is that it provides strategies to deal with disordered thinking, which is a fundamental symptom of stress.

In terms of reducing stress, cognitive behavioural interventions are becoming increasingly recognised as a useful option (Auerbach & Gramling, 1998; Davis et al., 1982; Ellis et al., 1997; Froggat, 1997; Pierce, 1995). Three major cognitive therapy systems are particularly relevant to stress management: Meichenbaum's (1977, 1985) stress inoculation training, Beck's (1991, 1995) cognitive therapy and Ellis's rational-emotive behaviour therapy (Ellis, 1962; Ellis & Dryden, 1987; Ellis & Grieger, 1973; Ellis & Harper, 1975).

9.10.1 The Self-Instructional Therapy approach of Donald Meichenbaum

Meichenbaum (1977, 1985) developed a method of cognitive therapy called self-instructional training (SIT). This therapy includes the use of problem solving training, exposure, relaxation training, and cognitive restructuring methods similar to cognitive therapy and rational-emotive behaviour therapy (Beech et al., 1982; Pierce, 1995). However, the essence of this approach is that it advocates the replacement of negative self-statements with statements that are more adaptive and more useful for problem solving and coping. The key is that self-talk is used as a *primary* method of change. The logic is that because self-talk defines the meaning people give to events and the actions they take in response to those events, changing the self-talk is a way of changing the outcome. For example, reciting confidence related statements before a difficult event such as, "I know I can do this because I have done it before". This emphasis on cognitively coping with environments, rather than altering perceptions of them is what sets SIT apart from other cognitive methods. Rational-emotive behaviour therapy tends to focus on the presence of maladaptive cognitions and irrational beliefs, whereas SIT focuses on the absence of adaptive cognitive-behavioural responses (Schaufleli & Enzmann, 1998).

Meichenbaum's methods are perhaps best known for their use in a subsidiary of self-instructional training called stress inoculation training, aspects of which are included

in module three of the current intervention. Stress inoculation training (Meichenbaum, 1985, 1993) is a flexible system that has been used effectively to teach individuals to cope with stress in a variety of situations ranging from acute to chronic stressors (Auerbach & Gramling, 1998). This system advocates a variety of emotion-focused and problem-focused coping strategies depending on the demands of the particular situation. The term 'inoculation' refers to the process of exposure to manageable amounts of stress in order to increase coping skills. At its simplest, stress inoculation involves reaching an ultimate goal by progressing through many smaller tasks of increasing difficulty (Beech et al., 1982). Meichenbaum (1985) states that, "Analogous to medical inoculation, stress inoculation training is designed to build 'psychological antibodies' or coping skills, and to enhance resistance through exposure to stimuli that are strong enough to arouse defenses without being so powerful as to overcome them" (p. 21).

Three broad phases of treatment are identified in stress inoculation training (Meichenbaum, 1985):

1. **Conceptualization**. The purpose of this phase is to put the stress response into context, define as precisely as possible the target behaviours for change, and gain an overview of existing coping strengths and resources as well as new strategies that need to be acquired.
2. **Skills acquisition and rehearsal**. This phase involves teaching and practising the required coping strategies. Meichenbaum (1985) states that the purpose of this phase is "to ensure that the client develops the capacity to effectively execute coping responses" (p. 53).
3. **Application and follow-through**. This phase involves exposure to manageable amounts of stressors through imagery and role-playing. A basic principle of stress inoculation training is that "people learn to deal with stress by *dealing with stress*" (Pierce, 1995, p. 309). Therefore, coping skills are practised in realistic situations and in progressively more difficult situations.

9.10.2 Evaluation of Self-Instructional Therapy

Overall SIT has not been as widely examined or as fully documented as cognitive therapy and rational-emotive behaviour therapy. However, it does appear to be well suited to relatively specific problems. For example, in combination with problem solving training (D'Zurilla & Goldfield, 1971), SIT has had some success in treating conduct disorder (Kazdin, Bass, Siegel, & Thomas, 1989) and impulsivity problems in children (Meichenbaum & Goodman, 1971). SIT has also been effective in the management of chronic pain (Puder, 1988), including arthritis (Keefe et al., 1990) and back pain (Linton, Bradley, Jensen, Spangfort, & Sundell, 1989).

9.10.3 The cognitive theory of Aaron Beck

Cognitive therapy has become synonymous with Aaron Beck to the extent that the label 'Beck's Cognitive Therapy' is often used to describe cognitive therapy in general. Beck is most well known for his contribution to the treatment of depression (Beck, Emery, & Greenberg, 1985; Kendall & Bemis, 1983; Mahoney, 1993). However, his therapy has applications far beyond this one area. The premise of Beck's cognitive therapy is that dysfunctional or maladaptive thinking has relevance beyond depression to all psychological disturbance and to common problems. The rationale for this is that the serious biases which occur with very disturbed clients are actually just exaggerated versions of those occurring in individuals with less extreme problems (Beck, 1991; 1995). As such, Beck's version of cognitive therapy has had many applications (Beck, 1993). For example, it has been used to treat anxiety disorders (Chambless & Gillis, 1993; Wilkinson, Moore, & Moore, 2000), substance abuse (Beck, Wright, Newman, & Liese, 1993; Beck, 1995), eating disorders (Beck, 1995), and stress-related problems (Auerbach & Gramling, 1998).

The core theory of Beck's approach states that many psychological disturbances arise from a systematic bias in information processing (Beck & Weishaar, 1995). A bias can take many forms but is essentially a distortion in the interpretation of an event. In Beck's (1976) opinion these distortions take seven major forms:

Arbitrary inference: a conclusion made in the absence of evidence or when the evidence is contrary to the conclusion.

Selective abstraction: a conclusion based on a specific and possibly irrelevant detail, ignoring the context from which the information was taken.

Overgeneralisation: the use of a context-specific conclusion to make general assumptions about a variety of circumstances, some of which are totally unrelated.

Magnification and minimisation: interpreting an event as far more or far less significant than it actually is.

Personalisation: interpreting an event as having direct personal relevance without clear support for a causal connection.

Dichotomous thinking: categorizing events or people as one extreme or the other without recognizing any middle ground between the extremes.

Ignoring the positive: selectively attending to negative events and thoughts while ignoring any positive aspects.

Beck (1976) considers it essential to focus not only on the specific content of biased thought processing, but also on the underlying cognitions or general beliefs that lead to these distortions. One mechanism of achieving this is to assist the individual to identify any automatic thoughts that arise after stressful events. If it becomes clear that maladaptive assumptions have been made, more plausible interpretations can be substituted. Long-term change occurs when the person independently begins to re-evaluate stressful situations in a more adaptive and balanced way. This is a gradual process that Beck (1976) calls the 'cognitive shift'.

Beck's cognitive therapy is problem-oriented, therapist-directed, and usually short-term consisting of between 12 to 16 treatments (Beck & Weishaar, 1995). This type of cognitive therapy has a distinctly behavioural theme. For example, clients are frequently encouraged to seek out new situations and try new activities when testing their assumptions about the world. However, unlike behaviourism which assumes that the environment is the primary controller of behaviour, Beck states that the environment is secondary to the influence of belief systems on an individual's decisions and actions (Beck, 1991).

9.10.4 Evaluation of Beck's cognitive therapy

Since its inception, cognitive therapy has been the subject of research. However, as with the majority of cognitive therapies, cognitive therapy frequently uses a wide variety of techniques which means that empirically it is difficult to clearly evaluate its efficacy (Auerbach & Gramling, 1998; Ziegler, 1989). Studies investigating the efficacy of cognitive therapy for depression have generally been supportive. For example, Dobson (1989) conducted a meta-analysis of 29 studies and found cognitive therapy more effective for treating unipolar depression than behaviour therapy, pharmacotherapy, or other psychotherapies. However, this study has critics. For example, Robin and Hayes (1995) raised issues of the placebo control group and whether the pharmacotherapy was sufficient. In addition, although many studies have supported the efficacy of cognitive therapy, there have been possible issues of bias in that some of the studies were conducted by proponents of cognitive therapy (Hollon & Beck, 1994).

The fact remains that cognitive therapy is widely used and enjoys a great deal of support (Beck & Weishaar, 1995; Datillio & Padesky, 1990; Newman & Haaga, 1995). Cognitive therapy has also developed rapidly since Beck's early therapeutic work with depression and has now been adapted to a large variety of disorders from anxiety to couples therapy (Beck, 1993). In addition, cognitive therapy is comprehensive and clearly operationally defined, with specific and detailed guidance manuals for therapists (Haaga & Davison, 1993).

9.10.5 Rational-emotive behaviour therapy

Albert Ellis is the founder of rational-emotive behaviour therapy. He states that the core of anxiety, stress, and other negative emotions is illogical thinking and that to varying degrees everyone endorses and acts on beliefs that are self-defeating. These irrational beliefs are partly learned and partly constructed and contribute to a large proportion of psychological difficulties (Ellis, 1962; Ellis & Dryden, 1987; Ellis & Grieger, 1973; Ellis & Harper, 1975). Ellis has identified a core group of common beliefs that he thinks contribute to emotional distress. His term for these beliefs is "musturbatory" ideas because they are based on rigid, perfectionistic, and

unobtainable goals that will invariably lead to stress. The distinction between rational and irrational beliefs is one of rational-emotive behaviour therapy's unique contributions to the field of cognitive-behaviour therapy (Ellis & Dryden, 1997). Although rationality is not defined in any absolute sense, rational beliefs are practical, flexible, empirically consistent with reality, and generally consist of preferences, hopes, and wishes. Irrational beliefs tend to be empirically inconsistent with reality, illogical, and absolute, consisting of shoulds, oughts, and musts (Ellis, 1996; Ellis et al., 1997).

The essence of rational-emotive behaviour therapy involves disputing these irrational ideas and replacing them with rational beliefs and attitudes. Techniques used in rational-emotive behaviour therapy include verbal persuasion, role playing, modeling, and imagery. Homework is also used in this type of therapy where people are encouraged to engage in activities that they have previously avoided because of their old belief system (Ellis, 1993; Ellis & Dryden, 1997).

The core element of rational-emotive behaviour therapy (Ellis, 1962) is cognitive restructuring. This is also perhaps the most popular of all the cognitive behavioural techniques (Schaufeli & Enzmann, 1998). The rationale behind cognitive restructuring is that irrational thoughts and beliefs can lead to stress and therefore restructuring these thoughts can reduce stress. Achieving this requires the use of a variety of cognitive, emotive, and behaviour-modification methods that are all incorporated into one conceptual framework. In rational-emotive behaviour therapy this framework is the ABCDE model:

A: Activating Experience or Event (the original disturbing experience)
B: Belief, generally an irrational belief about A
C: Consequence, this belief leads to an emotional and behavioural consequence
D: Disputing, Debating, Discriminating, and Defining are questioning techniques that are used to overcome irrational beliefs
E: Effect, the individual gains a new more rational and constructive way of thinking

This model can be clearly explained with an example (adapted from Beech et al., 1982). At point A (the Activating Event), something happens for example, a woman

is made redundant. At point C (the emotional or behavioural Consequence), the woman responds to the situation at A with emotions, such as depression and anger. As the consequence follows so closely behind the activating event, she makes the common assumption that A is the cause of C and arrives at the irrational conclusion that losing her job is the cause of her depression. However, according to rational-emotive behaviour therapy, the emotional reaction stems from B, which is the belief about A. For example, an irrational belief in this case could be, "being made redundant is a disaster". If the irrational beliefs continue or escalate along the lines of "I will never get another job again", the possible consequences at C include debilitating depression, which may eventually mean that the woman is unable to compete in the job market. In contrast, more rational beliefs about A, perhaps that she was not happy in that job anyway, would result in a different consequence at C.

In order to dispute these irrational beliefs, the next step of the framework is used. This is D (Disputing, Debating, Discriminating, and Defining). The disputing involves several types of cognitive restructuring including:

- Detecting the irrationalities
- Debating against the irrationalities
- Discriminating between rational and irrational thinking
- Defining in order to prevent cognitive distortions and maintain close contact with reality

Ellis (1995) states that there are three basic demands that are linked by rational-emotive behaviour therapy to emotional distress. In his opinion, the root of emotional disturbance is this set of 'musturbatory ideologies' towards self, others, and life conditions in general. These are " 'I absolutely *must* perform well!' 'You always *have* to treat me nicely!' [and] 'Conditions *must* completely be as I want them to be!' " (Ellis, 1995, p. 108). These absolutist demands create thought disturbances including the cognitive distortions described by Beck (1976) and other cognitive-behavioural therapists. At this point in the model, clients are taught that no evidence exists for any of the Basic Demands. Rational-emotive behaviour therapists forcefully argue with their clients against the Basic Demands and attempt to change

their demands to preferences (Ellis, 1995). Ellis states that by challenging an individual's attitudes and beliefs through asking logical (how does it logically follow?), empirical (where is the evidence?), and pragmatic (where is holding onto these beliefs getting you?) questions, the person may start to alter his or her self-defeating beliefs and become less distressed.

The final point of the framework is E where individuals acquire a new Effect or philosophy that enables them to think more rationally about their situation. In the current example, the woman could be concerned about her lack of work, but focus on keeping her self-esteem high so that she could look for another job. This is a central premise of rational-emotive behaviour therapy, that when negative outcomes are defined as unpleasant rather than awful, emotional and behavioural upset is reduced. In addition, clients are taught that they must take some accountability for creating their own distress with illogical thinking and that just as they were able to create it, they have the power to "uncreate" it (Ellis, 1995). The culmination of the entire model is that clients learn to overcome their tendency to succumb to irrational demands and thought processes so that the accompanying emotional distress and ineffective behaviour are lessened (Ellis, 1962).

9.10.6 The rational-emotive behaviour perspective on stress

According to rational-emotive behaviour therapy, stress does not exist. That is to say that this perspective considers that the essence of stress lies in the way people perceive, interpret, and evaluate various situations. If they interpret a situation as being stressful, it becomes stressful for them although the characteristics of the situation remain unchanged (Ellis et al., 1997). The core assumption of rational-emotive behaviour therapy is that what a person calls stress is determined not by the situation but by the person's irrational beliefs about what the situation means to him or her. An individual's perceptions determine how he or she responds emotionally and behaviourally. This explains why the same event can be very distressing for one individual and have no impact on another individual. The key concept is that there is nothing intrinsically stressful and that individuals create stress with their thoughts. Therefore, replacing irrational thoughts with more rational thoughts will improve well-being and enable people to behave in healthier more constructive ways. This is

the foundation of the rational-emotive behaviour treatment for stress related disorders (Abrams & Ellis, 1994).

The primary goals of rational-emotive behaviour therapy are to show individuals suffering from stress that (Ellis et al., 1997):

- Events do not cause distress although they may contribute to it.
- Feelings of distress and self-defeating behaviours arise from and are maintained by distorted inferences and irrational beliefs about stressful situations.
- Replacing irrational thoughts with more rational thoughts will improve well-being and enable the person to behave in healthier, more constructive ways.

There are parallels between the rational-emotive behaviour perspective on stress and the transactional view of stress and coping (Lazarus, 1966; Lazarus & Launier, 1978; Lazarus & Folkman, 1984). An individual's perception of his or her situation or environment is also critical in this model. Lazarus (1990) states that stress is a "continually changing relationship between the person and the environment" (p. 4). He makes it clear that there is nothing specific that can be identified as stress because the entire stress process is part of a complex whole that is linked by cognitive processes. In addition, because both the individual and the environment are amenable to change, there is acknowledgment that the individual is not bound by the past, but can change their cognitions and behaviour from one stressful situation to another or even during a stressful situation (Roskies, 1991).

9.10.7 Criticisms of rational-emotive behaviour therapy

Generally rational-emotive behaviour therapy is considered a very effective form of therapy, although the methodological adequacy of some of the supporting studies has been questioned (Engels, Garnefski, & Diekstra, 1993; Haaga & Davison, 1993; Kendall, et al., 1995; Mahoney, Lyddon, & Alford, 1989). One of the main criticisms of rational-emotive behaviour therapy is that (unlike Beck's cognitive model) it is not clearly operationally defined (Haaga & Davison, 1993). In particular, it is common for rational-emotive behaviour therapy, and other cognitive therapies, to utilize an increasingly broad number of techniques, therefore making it difficult to evaluate

(Auerbach & Gramling, 1998; Ziegler, 1989). Kendall and colleagues (1995) also state that some studies of rational-emotive behaviour therapy have been less than ideal. They note that many outcome studies have failed to measure treatment adherence, the competency of the therapist, and the integrity of implementation. Another critical voice is that of Lazarus (1989). He states that the rational-emotive behaviour therapy position on irrational beliefs is overly rigid and that the model lacks details of the mediational roles of appraisal and coping.

9.10.8 Support for rational-emotive behaviour therapy

Supporters of rational-emotive behaviour therapy state that it is the first contemporary therapy system that can be considered cognitive behavioural and that it has been very influential, especially in terms of stimulating research (Ellis et al., 1997; Kendall & Bemis, 1983). It is also considered to be an effective form of therapy. For example, Silverman, McCarthy, and McGovern (1992) reviewed 89 outcome studies assessing the effectiveness of rational-emotive behaviour therapy across a range of clinical disorders from 1982-1989. These included outcome studies testing rational-emotive behaviour therapy alone, combined with other approaches, and against other types of treatment. Of the 89 studies, 49 showed clinically significant results at follow-up.

In addition, rational-emotive behaviour therapy is broad in scope and has been used to address a variety of human problems (Ziegler, 1989). The assumptions about human nature inherent within this type of therapy have led to a structure of theoretical concepts that are internally consistent. This system is particularly useful as a self-management technique because of the self-help forms and instructional procedures that Ellis has developed (e.g. Ellis & Bernard, 1985) and because the ABCDE model is straightforward and is easily grasped by lay people.

Rational-emotive behaviour therapy may be a powerful technique with human service professionals because there is some indication that irrational beliefs are widespread in this sector (Edelwich & Brodsky, 1980). Farmer, Monahan, & Hekeler (1984) highlight common stress-inducing myths that occur in human service work. For example, many community workers believe that they are "only" a community worker and therefore not really qualified to help their client. The assumption is that someone

with more qualifications could do a better job, which over time can create a crisis of confidence in the person. The opposite of this myth is when the community worker believes that they are the only person who can help their client because more qualified professionals do not understand or are more interested in financial rewards than the needs of the client. This irrational fantasy of being all powerful obviously also creates stress. In addition, irrational beliefs can stem from the fact that the standards for measuring success are often very imprecise in community work. If clients cannot be helped, does this mean that the community worker has failed? In contrast, if the client is helped, how much help constitutes success (Farmer et al., 1984)? These vague standards of success and failure can breed irrational thoughts.

9.10.9 Similarities between cognitive therapy and rational-emotive behaviour therapy

Some practitioners adhere strictly to one particular model of cognitive therapy. However, an increasing number are adopting an eclectic approach and utilizing strategies from different models (Mahoney, 1993). It has been suggested that the future for cognitive behaviour therapy and rational-emotive behaviour therapy will be even more eclectic and integrative (Ellis, 1997). One of the main reasons for this is that there is growing evidence that although some effects are specific to particular techniques, there appear to also be large common effects across therapies (Lambert & Bergin, 1994). In addition, both types of therapy have grown and developed since their inception so that both are now considerably more multi-modal than they were in the 1950s and 1960s (Ellis, 1996).

Both forms of therapy are effective and popular. Together they have been tested in over 500 outcome studies that have mainly shown them to be more effective than other forms of therapy or waiting list groups (Ellis, 1997). However, it must be noted that many of these treatments used combined cognitive and behavioural methods making it difficult to demonstrate the efficacy of one method of cognitive therapy over the other (Robin & Hayes, 1995).

The essence of all cognitive behavioural techniques is that individuals do not respond directly to their environment. Instead they respond to their own interpretation of that

environment. The critical factor is always the individual's interpretation of events as a causal factor in his or her experience of stress, rather than the reality of the actual situation. Thoughts are therefore seen as a key point of intervention. Both types of therapy state that cognitive distortions are a feature of psychological disturbance and that individuals can gain more control over their thoughts and actions. In both approaches the therapist works to gather a specific idea of the client's thoughts and beliefs. Clients are taught to identify and report on their dysfunctional thoughts especially in terms of how they impact on their feelings. The end result is that individuals are encouraged to substitute more realistic interpretations of events and put coping strategies into place to deal with their problems. Even more importantly, both therapies share the goal of wanting not only to change the content of the client's thinking, but to assist the person to learn an improved *process* of thinking with fewer faulty inferences so they are able to apply the new techniques to subsequent problems (Auerbach & Gramling, 1998; Datillio & Padesky, 1990; Ellis & Dryden, 1997; Ellis et al., 1997; Newman & Haaga, 1995).

9.10.10 Differences between cognitive therapy and rational-emotive behaviour therapy

There is a great deal of overlap between cognitive therapy and rational-emotive behaviour therapy. Some differences are purely semantic and will not be discussed here. There are also many relatively minor differences. For example, both types of therapy state that cognitive distortions are a feature of psychological disturbance, the difference is that according to the rational-emotive behaviour therapy perspective, such distortions almost always stem from musts (Ellis & Dryden, 1997). These minor differences will also not be catalogued. It appears that there are two fundamental theoretical differences between the approaches. The first difference lies with thoughts and the second difference with the level of empiricism.

In cognitive therapy there are assumed to be three interconnected levels of thoughts. The first level refers to the most accessible thoughts called automatic thoughts. These thoughts are situation specific. For example, "My husband is late. He doesn't care about my feelings". The second level of thoughts is called underlying assumptions. Thoughts at this level are at the root of automatic thoughts and often involve rules that

cross situations and that inevitably guide perceptions. For example, "Men are unreliable". At the deepest level are core beliefs called schemas that are inflexible, unconditional, and often unconscious beliefs. For example, "I will always be alone" (Datillio & Padesky, 1990).

Although thoughts are acknowledged as a key point of intervention in both types of therapy, Beck and Ellis differ in their therapeutic approach regarding which level to target first to effect change. In Beck's cognitive therapy, less initial emphasis is placed on particular types of beliefs that may be a cause of stress. The primary focus is on identifying stress inducing automatic thoughts that are associated with specific stressful situations and questioning the logic of this thinking (Auerbach & Gramling, 1998). This is because automatic thoughts are considered to be the most flexible and testable (Datillio & Padesky, 1990). Once a person can easily identify and test their automatic thoughts, they are helped to identify the assumptions underlying the automatic thoughts. The deepest level is the last level to be addressed. In contrast, Ellis (1980) states that the initial focus should be on contesting and identifying underlying beliefs and that automatic thoughts should be considered later. The rationale for this is that if core beliefs are not addressed, individuals will just keep on creating new irrational beliefs from them, but if the core beliefs can be addressed, the irrational beliefs will disappear (Ellis et al., 1997; Ellis & Dryden, 1997).

The second fundamental difference is that Beck's cognitive therapy places greater emphasis on empiricism and is more likely to use behavioural components. For example, participants in Beck's cognitive therapy are encouraged to experiment behaviourally to examine the accuracy of their self-beliefs. Homework assignments are frequently used to help people test their new viewpoints in real settings. In rational-emotive behaviour therapy, the focus is more on reason and logic with the aim that the individual will experience a philosophical change (Datillio & Padesky, 1990; Hollon & Beck, 1994). In practical terms, a rational-emotive behaviour therapist is likely to challenge a client's irrational beliefs, whereas the cognitive therapist would be more likely to assist the person to test this belief. Therefore, although both types of therapy encourage a collaborative relationship between client and therapist, the client-therapist relationship in cognitive therapy has been described as "collaborative empiricism". Collaborative in the sense of a partnership and

empiricism referring to the process of collecting data to evaluate the evidence for current and alternative beliefs (Newman & Haaga, 1995).

9.10.11 The cognitive perspective in the intervention

Modules five and six adhere to a multi-modal perspective and incorporate elements of cognitive therapy and rational-emotive behaviour therapy. Aspects of stress inoculation training are also included in the intervention but are in the problem solving module. Adopting an eclectic approach and using techniques from all the major schools of cognitive therapy, as opposed to espousing one theory, provides the flexibility to use the most appropriate and effective techniques in the intervention. The purpose of modules five and six is that the participants understand the core message that stress and anxiety are a product of thoughts and that by learning ways of changing thinking, stress can be reduced and well-being enhanced. It is not necessary for the participants to understand the theoretical rationale of each exercise. Instead the intention is simply to utilize the most appropriate techniques to reinforce the message of each exercise in the module.

In terms of the transactional model of stress and coping (Lazarus, 1966; Lazarus & Folkman, 1984), cognitive therapy works on the "demands" side of the stress transaction. In overly simple terms, if perceived demands can be reduced, fewer coping resources will be required (Matheny et al., 1986; Pierce, 1995). A variety of techniques are used in the intervention to help the participants reframe stressful events. These include changing self-talk and reassessing the meaning of events and the level of coping resources an individual has at his or her disposal.

The key exercise in modules five and six involves teaching the ABC model advocated by rational-emotive behaviour therapy (Ellis & Dryden, 1997). This model clearly demonstrates the concept that stress is frequently caused not by the event itself, but by a person's thoughts, evaluations, and interpretations of the event. It is critical that the participants understand this fundamental concept (Newman & Haaga, 1995). Several examples and exercises (adapted from Davis et al., 1982 and Greenberger & Padesky, 1995) are used to demonstrate the links between the activating event, beliefs, and consequences.

While explaining the beliefs component of the ABC model, the concept of "self talk" is introduced. Self talk is normal behaviour but some of the messages that arise from self talk are untrue, unhelpful, and not based on fact. This can result in thinking that is distorted or "twisted" and that can cause stress (Davis et al., 1982; Greenberger & Padesky, 1995). Beck (1984) highlights the fact that initial appraisals of stress inducing situations are not "cool, deliberate computations, but are to a large degree automatic....and prone to considerable error" (p. 257). The term "twisted thinking" is used in the intervention as a blanket term to refer to any irrational thoughts or unhelpful self-talk. The participants are made aware that this term is not derogatory and are given techniques to identify and refute twisted thinking. Some of these techniques involve exploring previous stressful experiences. Reliving stressful experiences might seem counter-productive in terms of enhancing well-being, but it is essential to confront patterns of thoughts and behaviour from previous stressful situations so that more adaptive coping strategies can be introduced for the future (Pierce, 1995).

The participants are also encouraged to become aware of the ways automatic thoughts are reflections of underlying beliefs. The 'downward arrow' technique adapted from cognitive behaviour therapy (Newman & Haaga, 1995) is used to demonstrate this. In rational-emotive behaviour therapy similar techniques of 'inference chaining' and 'conjunctive phrasing' are used (Ellis et al., 1997). However, the downward arrow technique is used in the intervention because it is simple, easily explained, and most importantly, easy for the participants to remember.

Once the participants have a sense of twisted thinking and how it relates to underlying beliefs, they are introduced to examples of ten common types of twisted thinking and encouraged to recognize any that may apply to them. The examples used in this exercise are adapted from Beck (1976), Froggatt (1997), McKay et al. (1981), Palmer and Dryden (1996), and Palmer and Burton (1996) and are reworded to be more appropriate for community workers. These examples of twisted thinking are not intended to be representative of a particular theoretical perspective, but are included because the researcher, in conjunction with the community workers who pre-tested the module, considered that they would be most relevant to community workers. This

is essential because adult learning theory links effectiveness to relevance (Martin, 1997). The participants are also encouraged to generate their own examples as a way of increasing relevance and facilitating transfer of training (Morgan et al., 1998; Schafer, 1987, Tovey, 1997).

The final part of modules five and six involves seven simple techniques to untwist twisted thinking. This is essentially steps D and E of the ABC model. A range of techniques is presented in recognition of the fact that not all strategies will be suitable for all participants. The participants are encouraged to check, audit, and review their personal belief systems so that irrational beliefs, such as perfectionism, can be revealed and discussed (Newman & Haaga, 1995; Teasdale & McKeown, 1994). Irrational beliefs can be evaluated in terms of how logical they are, how much evidence for them there is, and how practical they are (Palmer & Dryden, 1994). Ultimately the message is that each individual is responsible for his or her own levels of distress.

9.11 Module 7: Coping

To date the majority of research on coping with occupational stress has focused on creating or confirming taxonomies of coping styles. As a result it is difficult to ascertain the effectiveness of specific coping techniques by referring to the literature (Beehr, 1995). In the absence of empirical evidence, the coping techniques introduced in the current intervention are guided by the transactional model of stress and coping (Lazarus & Folkman, 1984) which views stress as an appraised imbalance of demands over resources. In terms of coping, this means that the intervention must contain strategies to assist the participants to reduce demands, increase resources, or some combination of the two (Pierce, 1995). The exercises in the coping module are designed to assist participants with both processes.

Some aspects of reducing demands are included in the cognitive behavioural modules (modules 5 and 6) which advocate a realistic assessment of demands. In this coping module, the focus is on practical strategies to assist the participants to become more aware of the demands upon them and to set boundaries in their personal and professional lives. For example, one exercise involves learning to say "no" (Coleman,

1988; Fontana, 1989; Warren & Toll; 1993). On the surface it would appear that this is a skill that does not need to be taught. However, this is not always the case for community workers. Nias (1999) states that many members of care-based professions are socialized into a service ethic that encourages them to ignore their own needs and in some cases to sacrifice their physical and emotional health in order to meet the needs of others in the community. It may even be possible that some of the satisfaction of working in the community depends on taking more care of others than of oneself. As the stress audit of Auckland community workers suggested (Bennett & Marsh, 1999), the majority of those surveyed reported that they rarely took any time out for themselves. It may be the case that many community workers simply have never experienced taking care of their own needs.

Additional exercises are included to encourage the participants to evaluate their levels of coping resources and to reinforce the mindset that reducing commitments and making self care a priority is essential for enhancing well-being (Aronson & Mascia, 1981). Lyall (1989) states that one of the main reasons those in the helping professions are poor at self-care is that they hold unrealistic attitudes about their work. Many community workers state that they were drawn to their profession out of altruism and a desire to make a difference. The reality of this type of work is that there is no limit to the tasks that can be done and the temptation to keep increasing the workload and pace of work can be high, especially in the face of great need. Pushing the limits of what one is capable of can become a dangerous source of personal satisfaction, especially when society still admires those who work excessively long days and neglect their health and personal lives (Lyall, 1989). In addition, it is often not just individuals or groups of workers that set unrealistically high expectations. Many community organisations expect employees to routinely work longer hours than they are paid for and to be available after hours when required.

Coping is enhanced by the ability to distinguish between situations that can and cannot be changed. Attention is given to situations that can be changed in the problem solving module (module 3). In this coping module, strategies are suggested for the equally important process of coping with situations that cannot be changed (Michie & Ridout, 1990). Cognitive strategies include options such as selective attention, use of humour, and reframing the situation. Behavioural strategies include

options such as exercise, relaxation, and engaging in pleasant activities (Folkman et al., 1991). In addition, simple breathing techniques are taught as useful options for situations that require palliative coping (Kindler & Ginsburg, 1990; Lazarus & Folkman, 1984; Rose, 1992). The participants are encouraged to become familiar with their preferred emotion-focused strategies and identify any with the potential to become maladaptive, such as overeating.

The most difficult aspect of this module is translating the suggested coping strategies into practical changes that will increase the participants' resources and enhance their well-being. Facilitating lasting behavioural change is a difficult and complex process. Behavioural change first involves changes in knowledge and awareness. This is comparatively easy to achieve. Next attitudes and beliefs have to change. This is far more difficult, but it is an essential precursor to changing behaviour (Dolan, 1994). A common finding is that people are inconsistent in attending to preventive coping especially with stressors that are not immediately troubling them (Auerbach & Gramling, 1998). For example, it is widely recognized that the health benefits of exercise are extensive (Aronson & Mascia, 1981; Davis et al., 1982; Gebhardt & Crump, 1990; Huygens, 1993; Maslach, 1982; Sapolsky, 1994; Schaufeli & Enzmann, 1998) and yet in the USA approximately 70 percent of adults are inactive. Remarkably even with coronary heart disease patients who are prescribed exercise routines to increase their chances of survival, 40-50 percent of patients stop exercising within 6 months (Ivancevich & Matteson, 1994).

However, there are some techniques that can increase the likelihood of successful behavioural change. For example, strategies such as goal setting, contracting, and the development of a self-reward system (Ivancevich & Matteson, 1994) are all included in the "Making Changes" exercise in this coping module. In this exercise participants are encouraged to commit to a small lifestyle change of their choice. Small changes are obviously considerably easier to sustain than large changes (Aronson & Mascia, 1981, Maslach, 1982) and fortunately often relatively simple lifestyle changes can produce dramatic results (Wagenaar & La Forge, 1994). Research suggests that if goals to facilitate changing behaviour are correctly set (for example, determined by the individual, positive, specific, challenging, concise, broken into realistic steps, and with a target date for review), then self-efficacy is more likely and the individual

should remain more motivated (Hart, 1995; Maslach, 1984). In addition, it appears that contracts with a witness are more effective than those made just with the self (McKay et al., 1981).

An additional strategy to increase the likelihood that the chosen lifestyle change will be sustained involves the participants writing themselves a "conscience pricking" letter that is given to the facilitator in a sealed envelope to post approximately three weeks after the conclusion of the workshop. The rationale behind the participants writing to themselves is that it is normal for enthusiasm to fade over time and a reminder letter from themselves may give them a boost to continue with their self-care options. There is no research to support the efficacy of this method. However, it is a simple, quick, and cost effective option that may enhance transfer of training and make the intervention more enduring over time.

9.12 Module 8: Evaluation

The final module is devoted to providing a sense of closure to the workshop. The content of the workshop is reviewed and any outstanding issues from the participants' expectations in the first module are addressed. Allowing the participants to set their own expectations and ensuring that they are all covered is an essential courtesy with adult learners (Tovey, 1997). In addition, the participants are given the opportunity to evaluate the workshop and complete the questionnaires for the research. This evaluation process is an important part of any intervention (Morgan et al., 1998; Schafer, 1987, Tovey, 1997).

9.13 Chapter summary

This chapter discusses the theoretical rationale for the eight modules that comprise the intervention implemented in the current research. This intervention is comprehensive and theory based. It adheres to the transactional model of stress and coping (Lazarus, 1966; Lazarus & Folkman, 1984) and is multi-modal in nature. Each module has a different focus. The first module sets the scene and the second module paves the way for the rest of the intervention by encouraging the participants to look at their lives in terms of fundamental values. The third module moves on to the more concrete

approach of problem solving and the fourth module is designed primarily to increase awareness about signs and symptoms of stress. The fifth and sixth modules have a cognitive orientation and are included to reinforce the message that stress is a product of a person's thoughts and that by altering these thoughts, stress can also be reduced. The seventh module focuses on coping and the final module creates a sense of closure and gives the participants an opportunity to evaluate the intervention.

9.13.1 Chapter aim

The aim of this chapter is to describe and provide a rationale for the components of the well-being intervention. It is anticipated that as a result of the intervention, satisfaction with life, positive affect, and aggregated coping resources will increase and negative affect, psychological distress, and dysfunctional attitudes will decrease.

CHAPTER 10: METHODOLOGY FOR PHASE II

10.1 Chapter overview

The aim for the second phase of the current research was to design, deliver, and evaluate the outcomes of a two-day well-being intervention called "Thriving in the Stress Place". This chapter begins with a summary of the demographic characteristics of the participants in the experimental and control groups. Statistical analyses revealed no significant demographic differences between the groups on any variables. Next an overview of the materials used in the current research is provided along with a discussion of the procedures used to recruit participants into the experimental or control groups. The chapter concludes with a summary of the measures used in the research and an overview of the data analyses conducted in the results chapter.

10.2 Participants

A total of 223 community workers participated in the current research. All participants met the definition of a community worker described in the phase one method section (chapter 6) and came from a variety of community organisations in Auckland, or within a 200km radius of Auckland, New Zealand. The experimental group consisted of 146 participants. Although 159 community workers attended the intervention, 146 participants completed the first questionnaire (a 92% response rate). The second questionnaire was completed by 122 participants and the third questionnaire was completed by 90 participants, resulting in retention rates of 84% and 61% respectively.

The control group was formed by 77 community workers who met the same definition as the community workers in the experimental group and who volunteered to complete the three questionnaires but who did not attend the workshop. A total of 231 questionnaires were sent out and usable completed responses were received from 77 participants who formed the control group. This equated to a 33% response rate. The second questionnaire was completed by 64 participants and the third questionnaire was completed by 57 participants, resulting in retention rates of 83% and 74% respectively.

General demographic information comparing the participants in the experimental and control groups is presented in Table 10.1. As can be seen, chi-square tests showed no significant differences between the experimental and control groups on any of the demographic variables. The distribution of participants for the majority of variables was remarkably similar. For example, the variables gender and ethnicity were comprised of 84% and 87% females and 82% and 80% Pakeha/Europeans in the experimental and control groups respectively. In addition, both groups had 10% of Maori participants and similar distributions for the remaining 10% of participants.

The similarities continued in terms of the ages of the participants with 83% of experimental participants and 87% of control participants aged between 30 and 59 years. In addition, the distribution of participants into these age groups was within two percentage points in each of these three age groups. There was some variation at either end of the spectrum, with more younger participants in the experimental group (13% compared with 5% in the 20 to 29 age group) and slightly more older participants in the control group (7% compared with 3% in the 60 plus age group).

The majority of the participants in both groups (57% in the experimental group and 60% in the control group) were also married or living with a partner, with similar numbers of singles (26% in the experimental group and 21% in the control group) and an almost identical number of divorced participants (approximately 16%). In terms of the highest level of education completed, both groups of participants were relatively evenly distributed from School Certificate to postgraduate qualifications and the percentages of participants in the various education categories were also relatively similar.

There was almost an even split between the participants who did have dependents and those who did not have dependents in both groups. Of those who did have dependents, the majority had children between 5 and 18 years of age (63% in the experimental group and 49% in the control group). Both groups had very similar percentages of participants with children under five (approximately 13%) and the control group had a higher percentage of dependents aged over 18 years living with them (31% compared with 22% for the experimental group) and elderly dependents (6% compared with 2% for the experimental group).

In terms of employment status, most participants in both groups were permanent employees with the remaining approximately 14% comprised of volunteers or casual workers. The distributions of full-time staff and part-time staff were similar with 55% of participants working full-time in the experimental group and 58% in the control group. Of the participants who had experienced a significant life event in the past six months, slightly more of the experimental participants said they had been affected a great deal by the life event (46% compared with 36% in the control group). Similar percentages in both groups reported that they had either been only moderately affected by the life event or had not experienced any significant life events in the past six months.

Several demographic questions asked the participants to provide time estimates related to job tenure and hours worked. This information is presented in Table 10.2. As shown in Table 10.2, *t* tests revealed no significant differences between the experimental and control group on any of the demographic variables. The length of time participants had been employed in their current jobs was very similar for the experimental and control groups with the majority of participants holding their current positions for approximately three and a half years. In addition, the average length of time participants had been employed in community work was similar at approximately seven and a half years. The range shows that in both groups, at least one participant had devoted many years to community work. In both groups, the average hours the participants are paid to work is approximately 28 hours, although the actual hours worked each week averages around 35 hours per week, resulting in an average of approximately seven hours unpaid work each week for both groups.

Table 10.1
Demographic variables comparing experimental and control participants at Time 1

		Experimental (% of total) $n = 146$	Control (% of total) $n = 77$	χ^2	*df*
Gender	Female	122 (84%)	67 (87%)	0.47	1
	Male	24 (16%)	10 (13%)		
Age	20-29 years	19 (13%)	4 (5%)	4.32	5
	30-39 years	35 (24%)	20 (26%)		
	40-49 years	47 (32%)	26 (34%)		
	50-59	39 (27%)	21 (27%)		
	60 plus	5 (3%)	5 (7%)		
	Missing	1 (1%)	1 (1%)		
Ethnic group	Pakeha/European	119 (82%)	61 (80%)	2.06	4
	Maori	14 (10%)	8 (10%)		
	Pacific Island	4 (3%)	4 (5%)		
	Asian	2 (1%)	-		
	Other	7 (5%)	3 (4%) 5		
	Missing	-	1 (1%)		
Marital status	Single	38 (26%)	16 (21%)	0.64	2
	Married/with a partner	83 (57%)	46 (60%)		
	Divorced	24 (16%)	13 (17%)		
	Missing	1 (1%)	2 (2%)		
Education	School Certificate	22 (15%)	16 (21%)	3.05	5
	University Entrance	19 (13%)	9 (12%)		
	Technical College	25 (17%)	9 (12%)		
	University Degree	28 (19%)	19 (25%)		
	Postgrad Qualification	24 (17%)	11 (14%)		
	Other	16 (11%)	7 (9%)		
	Missing	12 (8%)	6 (7%)		
Dependents	Dependents	72 (50%)	37 (48%)	0.19	1
	No dependents	73 (49%)	39 (51%)		
	Missing	1 (1%)	1 (1%)		
No. of dependents*	Under 5	12 (13%)	6 (14%)	1.80	1
	5-18 years	59 (63%)	22 (49%)	2.80	4
	18 years plus	21 (22%)	14 (31%)	3.35	3
	Elderly dependents	2 (2%)	3 (6%)		
Employment status	Permanent staff	123 (84%)	67 (87%)	1.26	3
	Volunteers/casual staff	22 (15%)	10 (13%)		
	Missing	1 (1%)	-		
Full or part-time	Full-time	80 (55%)	45 (58%)	0.33	1
	Part-time	65 (44%)	31 (41%)		
	Missing	1 (1%)	1 (1%)		
Life events	No life events	50 (34%)	31 (40%)	0.72	1
	Affected a great deal	66 (46%)	28 (36%)		
	Moderately affected	26 (18%)	17 (22%)		
	Missing	3 (2%)	1 (2%)		

*Note. Participants can have dependents in more than one category.

Table 10.2

Work related demographic variables for experimental & control participants at Time 1

		Experimental (n = 146)	Control (n = 77)	t (df)
Present job tenure	*M*	3.40	3.70	0.63 (217)
	SD	3.30	3.00	
	Range	1 month to 16 years	1 month to 11 years	
Tenure in community work	*M*	7.50	7.90	0.41 (213)
	SD	7.30	6.40	
	Range	1 month to 41 years	1 month to 28 years	
Hours paid to work	*M*	27.80	29.50	0.87 (211)
	SD	13.70	12.50	
	Range	3 to 40 hours	0 to 50 hours	
Average hours worked/week	*M*	34.80	36.40	0.83 (211)
	SD	13.20	13.40	
	Range	3 to 60 hours	4 to 70	

10.3 Intervention

The primary aim of the "Thriving in the Stress Place" workshop was to provide a brief intervention that would have a positive and enduring impact on the well being of the participants.

In order to reduce confounding variables, it was considered essential to standardize as many aspects of intervention as possible. Therefore, the same researcher facilitated each of the 13 workshops according to the same schedule and with the same content. Each workshop was run over two days, one week apart. The workshops ran from 9.30 a.m. to 4.30 p.m. with an hour for lunch and two fifteen minute breaks, one in the morning and one in the afternoon. This gave a total training time of approximately 5 and ½ hours.

10.3.1 Materials

10.3.1.1 Information sheets and consent forms.

The questionnaire pack contained the following information:

- An Information Sheet (Appendix A).
- A Participation Consent Form (Appendix C).
- A questionnaire (Appendix B).
- A postage paid, self-addressed envelope.

An Information Sheet was provided for each participant involved in the research, both in the experimental and control group (Appendix A). The Information Sheet explained the duration and purpose of the research, the commitment required by each participant, contact details for the researcher and supervisor, and the participant's rights according to the Massey University Human Ethics Guidelines.

Each participant in the experimental group was also asked to complete a Participation Consent Form on the morning of the first day of the workshop (Appendix C). This form was required by the Massey University Human Ethics Committee and clearly stated that the researcher could guarantee complete confidentiality and anonymity for all information provided in the questionnaires, but that this same guarantee could not extend to any information shared by the participants within the training group. Without exception participants agreed to sign this form. In addition, at the beginning of each workshop the researcher asked the group to generate and agree to some group guidelines. Each time the issue of confidentiality was raised as an essential group guideline.

The survey method of research was used to assess the outcomes of the research intervention. This method was considered appropriate for accessing the sensitive and personal information that was required from each participant. As Schweigert (1994) suggests, it is much easier for participants to believe their responses are anonymous when an interviewer is not recording their information. The survey method also has the advantage of being completed at the participant's convenience (except for

Questionnaire 2 in the experimental group which was completed at the end of the second day of the workshop) and avoids the issue of experimenter bias.

10.3.1.2 Work books and training manuals.

A work book was provided for each participant in the experimental group (Appendix D). In addition, the researcher prepared a detailed facilitator's training manual (available from the author). Although the researcher was the facilitator for every workshop, the training manual contained sufficient detail to allow a person with training experience and some knowledge of stress management to successfully conduct a workshop. This was done to safeguard the research in case the researcher was unable to facilitate a workshop and with the intention of making the training material available to community workers at the conclusion of the research.

10.4 Procedure

10.4.1 Experimental group

All 159 participants in the experimental group volunteered to attend one of the 13 "Thriving in the Stress Place" workshops held between May 26th and October 25th 2000. The participants attended two full days of training one week apart. The second day of the workshop was attended by a total of 139 participants resulting in an 87.5% retention rate. The workshops were held in a variety of community venues around greater Auckland. Four additional workshops were also planned but did not proceed due to insufficient numbers. The minimum number of participants in a workshop was seven and the maximum number was 21, with an average of 12 participants per workshop.

Participants were recruited into the workshops through a variety of channels. Many of the contacts for community groups, agencies, and organisations were provided by the community organisation, Raeburn House. As previously mentioned (chapter 6), Raeburn House is a community support, resource, and information centre. Massey University and Raeburn House formed an alliance to expedite the research.

Using the extensive network of contacts provided by Raeburn House, the primary method of publicising the intervention was targeted mail postings to community groups, agencies, and organisations that met the criteria for the research. In total 3155 brochures were sent out. For financial reasons the brochures were included within existing mailouts whenever possible. To ensure that the brochure stood out in the mail out it was always printed on either purple or yellow paper. In addition to the 3155 brochures, five small articles about the workshops appeared in local newspapers, details were included in at least six community newsletters, the researcher spoke at many meetings attended by various community workers, made personal phone calls to 43 well respected and influential community figures to enlist their support in publicising the workshops, and encouraged participants in the workshops to talk to their coworkers if they thought the workshop had merit. Staff members from Raeburn House also spoke about the workshops to colleagues and at the frequent community meetings they attended.

In the design stage of the intervention, a Research Advisory Group formed by members from a variety of local community organisations was established to provide advice and support, monitor the research process, and ensure that the process was culturally appropriate for Maori and all other ethnic groups.

Intervention modules were also pre-tested on community workers who volunteered their assistance and who did not participate in the experimental or control groups. As a result, changes were made to the placement and timing of modules and extra information, such as a discussion on burnout, was included. In addition, several minor changes were made to the wording of items in the questionnaire to make them more appropriate to the New Zealand situation. All changes are noted in chapter 6. To ensure consistency the workshops all followed as closely as possible to the programme in the facilitator's manual.

Once a participant decided to attend a workshop, they registered their interest by phone, fax or mail with Raeburn House and paid a $50.00 course fee. The course fee was kept as low as possible and the $50.00 was used to cover costs such as venue hire, training materials, and postage. Another reason for charging a nominal amount was in

accordance with research suggesting that people tend to place a higher value on things they have to pay for (Franzoi, 1996).

Approximately one week before attending the workshop, participants received Questionnaire 1 in the mail with an Information Sheet and a handwritten personal note from the researcher stating that she was looking forward to meeting them at the workshop and requesting that they bring the completed questionnaire with them on the first day. Whenever possible the questionnaires were mailed out at the beginning of the week as suggested by De Vaus (1995) to maximize response rates in postal surveys. Questionnaire 2 was administered at the conclusion of the second day of the workshop. Questionnaire 3 was posted to each participant approximately 8 weeks after the conclusion of the workshop. Included with Questionnaire 3, all participants received another personal handwritten note from the researcher asking after their well being and thanking them for their help with the questionnaires. The handwritten notes were included both out of courtesy and in an effort to boost retention rates in the research.

Two to three weeks after the third questionnaire was sent out, the researcher began follow-up procedures in an effort to maximize the number of questionnaires returned. This consisted of a total of three reminder calls at two week intervals or a letter if the person was unavailable by phone. As the questionnaires were anonymous, each person had to be contacted. These extensive follow-up procedures and the rapport established in the workshop resulted in good retention rates in the research with 84 percent of the experimental participants who completed Questionnaire one also returning Questionnaire two and 62 percent returning Questionnaire three. The cut off date for accepting late questionnaires was December 22nd 2000. No questionnaire was accepted after this time due to the potentially confounding nature of the Christmas holiday period.

10.4.2 Control group

The experimental design used for this evaluation was a "non-equivalent control group design". That is to say that assignment to the experimental and control groups was not random (Campbell & Stanley, 1963). Participants in both groups were subject to the same eligibility requirements, but were not selected in the same way. The use of quasi-experimental designs is a frequent finding in applied research where it is not always possible to randomly assign participants to various conditions (e.g. Bunce & West, 1996; Reynolds, 1997). In this case, a quasi-experimental design was used in an attempt to balance practical constraints with maximum rigor (Stone, 1978). Difficulty attracting participants to the intervention and initially very low participant numbers meant that it was not feasible to randomly assign participants to an experimental group and a wait-list control group. As only small effects were anticipated, power was a major consideration (Allison, Gorman, & Primavera, 1993), especially given the nature of a longitudinal investigation where some participant attrition is expected. Therefore, practical constraints dictated that all participants wishing to attend a workshop formed the experimental group and the researcher solicited volunteers for the control group.

The participants for the control group were sourced in two major ways. At the conclusion of each workshop the researcher asked the experimental participants if they could provide names of colleagues that could be contacted regarding becoming part of the control group. This is similar to the qualitative technique of "snowball sampling" (Hakim, 1987). In addition, the researcher "cold called" community organisations meeting the eligibility criteria throughout the greater Auckland area, explained the research and asked for volunteers to participate in the control group.

Once a person agreed to participate in the control group, they were mailed Questionnaires 1, 2, and 3 at three separate time intervals that corresponded to the same schedule as the experimental group i.e.; Questionnaire 2, two weeks after Questionnaire 1, and Questionnaire 3, approximately eight weeks after Questionnaire 2. The research design is shown in Table 10.3. Each of the 3 postings contained a questionnaire, a stamped envelope to return the questionnaire, and a handwritten note expressing thanks for the person's continued participation in the research. As a token

of appreciation, a packet of sunflower seeds was included with the final questionnaire. The data for the control group were collected over the same period of time as the experimental group, from May 25th 2000 to December 22nd 2000.

As with the experimental group, two to three weeks after the third questionnaire was sent out, the researcher began follow-up procedures in an effort to maximize the number of questionnaires returned. This resulted in good retention rates of 83% for Questionnaire 2 and 74% for Questionnaire 3.

Table 10.3
Research design

	Time 1 (pre-test) Week 1	**Time 2 (post-test)** Week 3	**Time 3 (follow-up)** Week 11
Experimental group	Questionnaire 1 Before the intervention	Questionnaire 2 After the intervention	Questionnaire 3 8 weeks after the intervention
Control group	Questionnaire 1	Questionnaire 2	Questionnaire 3

10.5 Measures

The measurement instruments consisted primarily of widely used standardised measures and are listed below. A full discussion of the psychometric properties of these measures is provided in the phase one method section (chapter 6). In addition, one measure designed by the researcher and specific to the research intervention was included in the research and this measure is described below.

All participants in the experimental and control groups completed three questionnaires at pre-training, post-training, and follow-up. Data were collected on (1) basic demographic information, (2) burnout, (3) personality (only included on Time 1), (4) psychological well being (life satisfaction, positive and negative affect, domain satisfaction, and psychological distress), (5) coping resources, and (6) dysfunctional attitudes. In addition at Times 2 and 3 the experimental group were asked to complete a third section containing questions relevant to the workshop. All three questionnaires are included in Appendix B.

In the second and third questionnaires the experimental participants were asked to rate several aspects of the workshop including:

- how helpful they found the workshop on a six-point scale from 1 = *extremely helpful* to 6 = *extremely unhelpful*
- how much they thought the workshop would enable them to be more effective at managing their stress on a five-point scale from 1 = *made a dramatic difference* to 5 = *made no difference at all*

In Questionnaire 3, the experimental participants were asked to rate over the past six weeks how much they had used the techniques, skills, and ideas that they had learnt in the workshop on a six point scale from 1 = *very frequently* to 6 = *never*.

Also in Questionnaire 3, the participants were asked to rate nine statements on a six-point scale from 1 = *strongly agree* to 6 = *strongly disagree*. Three of the statements related to the participants' perceptions of the usefulness of the workshop. A sample item is "Once I got back to 'real life' I no longer thought any of the strategies I developed in the workshop would be useful". Three questions related to how motivated the participants felt to incorporate the stress management and well-being strategies into their lives as a result of the workshop. A sample item is "I wanted to put some strategies from the workshop into place, but I just never seemed to get around to it". Three questions related to how much time the person had available to incorporate strategies from the workshop. A sample item is "After the workshop I found I didn't have any time to think about stress management".

This nine item measure was designed specifically to provide additional information about the participants' orientation to the intervention. As a result, no psychometric data is available. However, coefficient alphas taken from the current sample were uniformly high: .76 for the three questions relating to the quality of the intervention, .76 for the three questions relating to the participant's motivation to incorporate strategies, and .75 for the three questions relating to the time available to implement strategies. The overall coefficient alpha for the measure was .88.

10.6 Overview of data analyses

The main aim of the analyses conducted in phase two of the current research was to investigate whether the intervention made significant differences to well-being, coping resources, or dysfunctional attitudes. In order to answer this research question, several analyses were conducted. Firstly, pre-intervention differences between the experimental and control group on the dependent variables were identified using a multivariate analysis of variance. Next, various analyses were conducted to investigate participant attrition. Firstly, chi square analyses compared the proportions of participants who dropped out of the research versus the proportions of participants who stayed in the research both between Time 1 and Time 2 and between Time 2 and Time 3. Secondly, MANOVAs investigated pre-intervention differences and interaction effects between the participants who dropped out between Time 1 and 2 and between Time 2 and 3. Chi square analyses investigated the pre-intervention demographic differences between the participants who dropped out between Time 1 and 2 and between Time 2 and 3.

The procedure adopted to compare the experimental group with the control group at pre-training, post-training, and follow-up was a series of separate repeated measures analyses of variance (ANOVA). The analyses were carried out using a between group factor (experimental and control) and an across time factor (Time 1, Time 2, and Time 3).

In addition, separate repeated measures ANCOVAs were calculated for each of the dependent variables using the same between group factor (experimental and control) and the same across time factor (Time 1, Time 2, and Time 3) with the addition of Time 1 Neuroticism scores as a covariate. The rationale of using neuroticism as a covariate is that this process controls for any differences between the experimental and control group on the dependent variables that are due to the influences of neuroticism. As discussed in chapter 5, there is controversy over the degree to which negative affectivity influences self-report measures of occupational stress and symptoms of distress (Brief et al., 1998; Burke et al., 1993; Cooper, 2000). Some researchers (e.g. Brief et al., 1988; McCrae, 1990; Payne, 1988) have suggested that the effects of negative affectivity should be statistically controlled with some form of

partialling to reduce this potential bias. Other researchers (e.g. Spector et al., 2000) have argued strongly against partialling. As a result, this issue was investigated in the current research.

A further series of separate repeated measures ANOVAs was calculated for each of the dependent variables using an indicator of whether the experimental participants attempted to implement the skills they learnt in the intervention ("tryers" versus "non-tryers") as the between group factor and Time 1, Time 2, and Time 3 as the across time factor. The tryers measure was obtained by re-coding Question 4 from Section C in Questionnaire 3 (Appendix B). This question asked "Over the past six weeks how much would you say you have implemented the techniques, skills, and ideas that you learnt in the workshop?" Responses falling into one of the three categories ranging from *very frequently* to *quite often* were re-coded as tryers and responses in the categories of *sometimes, rarely,* or *never* were re-coded as non-tryers. A multivariate analysis of variance (MANOVA) was also conducted to investigate pre-intervention differences between the tryers and non tryers on the outcome variables and chi square analyses were conducted to investigate demographic differences between the groups.

A final series of repeated measures ANOVAs was conducted to investigate gender differences using two between group factors (male and female, and experimental and control) and the across time factor (Time 1, Time 2, and Time 3).

Unless otherwise noted, the maximum level set for significance was $p < .05$. In addition, Mauchly's test of sphericity was conducted for each repeated measures ANOVA. Where sphericity could not be assumed, the Huynh-Feldt adjustment was used in calculating the degrees of freedom for within subjects effects. Also, in each case, tests of within subjects contrasts were inspected to identify whether the relationship between variables was linear or quadratic.

10.7 Chapter summary

This chapter began with a summary of the demographic characteristics of the participants in the experimental and control groups. Several analyses revealed no significant differences between the groups on any demographic variables. An

overview of the materials used in the current research was also provided along with a short rationale for the different procedures that were used to recruit participants into either the experimental or control groups. The chapter concludes with a summary of the measures used in the research and an overview of the data analyses conducted in the forthcoming results chapter.

CHAPTER 11: RESULTS OF PHASE II

11.1 Chapter overview

The main aim of phase two of the current research was to investigate whether the intervention made significant differences to well-being, coping resources, or dysfunctional attitudes. In order to answer this research question, several analyses were conducted. Firstly, pre-intervention differences between the experimental and control group were identified using a multivariate analysis of variance. Next various analyses were conducted to investigate participant attrition. This was followed by a series of repeated measures analyses of variance performed to detect significant differences between the experimental and control group over time as a result of the intervention. The influence of neuroticism was also investigated because there is controversy over the degree to which neuroticism influences self-report measures of stress and symptoms of distress. Next the experimental group was split into two groups comprised of participants who attempted to implement the strategies they learnt in the intervention and participants who did not attempt to do so. Pre-intervention differences between the two groups were investigated and a further series of repeated measures analyses of variance was performed to detect significant differences between these two experimental groups over time as a result of the intervention. The chapter concludes with an investigation of gender differences using a further series of repeated measures analyses of variance.

11.2 Pre-intervention differences between the experimental and control group

A multivariate analysis of variance (MANOVA) was conducted to investigate differences between the experimental group and the control group on the dependent variables. The MANOVA resulted in a Wilks' Lambda of .780 which was significant, F (28, 168) = 1.69, $p < .05$.

The results of the MANOVA are displayed in Table 11.1. As indicated in the Table, the experimental group obtained significantly different scores to the control group on 14 of the 24 outcome variables. Of these, the experimental group had significantly higher scores on the burnout sub-scale Emotional Exhaustion, F (1, 195) = 10.83, $p <$ .001, the personality variable Neuroticism, F (1, 195) = 11.00, $p < .001$, the component

of well-being Negative Affect, F (1, 195) = 10.56, $p < .001$, the total score for Psychological Distress, F (1, 195) =14.49, $p < .001$, and on three of the Psychological Distress sub-scales including Somatic Symptoms, F (1, 195) =11.92, $p < .001$, Anxiety and Insomnia, F (1, 195) = 16.04, $p < .001$, and Depression, F (1, 195) =8.09, $p < .01$.

In addition, the experimental group had significantly lower scores than the control group on the personality variables of Extroversion, F (1, 195) = 9.22, $p < .01$, Conscientiousness, F (1, 195) = 6. 18, $p < .05$, the indicators of well-being; Positive Affect, F (1, 195) =5.88, $p < .05$, and Domain Satisfaction, F (1, 195) =4.98, $p < .05$, on aggregated Coping Resources, F (1, 195) =3.99, $p < .05$, and on two of the coping resource sub-scales, specifically Cognitive resources, F (1, 195) =7.94, $p < .05$, and Physical resources, F (1, 195) =4.90, $p < .05$.

In summary, prior to the intervention the experimental group was higher in Emotional Exhaustion, Neuroticism, Negative Affect, Total Psychological Distress, and Somatic Symptoms, Anxiety and Insomnia, and Depression. They were lower in Extroversion, Conscientiousness, Positive Affect, Domain Satisfaction, Total Coping Resources, Cognitive resources, and physical resources.

As discussed in chapter 10, chi square analyses revealed no significant demographic differences between the experimental and control group.

Table 11.1

Mean variable scores for the experimental and control group

Variables	Experimental (n = 129) Mean	*SD*	Control (n = 68) Mean	*SD*	*F* (df = 1, 195)	
Burnout						
Emotional Exhaustion	23.19	11.36	17.80	10.03	10.83	***
Depersonalization	4.78	4.99	4.13	3.79	0.86	
Personal Accomplishment	36.81	6.62	38.10	6.60	1.69	
Personality						
Neuroticism	22.65	8.09	18.88	6.49	11.00	***
Extroversion	28.63	5.84	31.26	5.71	9.22	**
Openness	30.57	6.65	31.82	5.77	1.72	
Agreeableness	33.90	5.61	33.96	5.32	0.01	
Conscientiousness	33.03	6.91	35.44	5.54	6.18	*
Well-being						
Life Satisfaction	21.79	6.69	23.49	6.84	2.84	
Positive Affect	33.26	7. 38	35.88	6.85	5.88	*
Negative Affect	21.26	7.93	17.71	5.88	10.56	***
Life Spheres	34.30	6.26	36.32	5.60	4.98	*
Psychological Distress (total)	26.95	13.69	19.58	11.29	14.49	***
Somatic Symptoms	8.41	4.77	5.99	4.53	11.92	***
Anxiety and Insomnia	7.87	4.59	5.14	4.45	16.04	***
Social Dysfunction	8.08	2.90	7.52	2.70	1.69	
Severe Depression	2.59	4.51	.93	2.34	8.09	**
Coping Resources (total)	186.31	23.89	193.17	20.98	3.99	*
Cognitive	29.31	5.27	31.41	4.39	7.94	**
Social	46.58	5.76	47.33	4.60	0.85	
Emotional	44.79	8.36	46.75	7.68	2.57	
Spiritual	30.65	5.90	30.95	5.58	0.12	
Physical	34.98	5.15	36.74	5.58	4.90	*
Dysfunctional Attitudes	104.97	30.34	97.75	26.00	2.78	

*p< .05, **p< .01, ***p< .001

11.3 Participant attrition

Chi square analyses revealed no difference in the proportion of experimental and control participants who dropped out of the research between Time 1 and Time 2, χ^2 (1, $N = 223$) <1, $p > .05$. In the control group, 16.9% dropped out and 83.1% stayed in the research, compared with 16.4% and 83.6% respectively for the experimental group. Between Time 2 and Time 3, there was also no significant difference in the proportion of participants who dropped out of the research, χ^2 (1, $N = 223$) = 2.60, $p > .05$. In the control group, 26% dropped out and 74% stayed in the research, compared with 39% and 61% respectively for the experimental group.

A MANOVA confirmed that there were also no significant pre-intervention differences (Time 1) identified between the 37 participants (24 experimental and 13 control) who dropped out at Time 2 and the 186 participants (122 experimental and 64 control) who stayed in the research on any of the dependent variables, Wilks' Lambda .857, F (26, 168) = 1.08, $p > .05$. The analysis was carried out using a between group factor (experimental and control groups) and an across group factor (drop-out versus non drop-out participants). There were also no significant interaction effects found on any of the dependent variables, Wilks' Lambda .852, F (26, 168) = 1.12, $p > .05$, indicating that there were no differences between participants who dropped out of the research at Time 2, participants who stayed in the research, and the experimental and control groups.

However, one significant demographic difference was identified between drop-out and non drop-out participants between Time 1 and Time 2. Men were found to be significantly more likely to drop out than women χ^2 (1, $N = 223$) = 4.76, $p < .05$. In fact, men were twice as likely to drop out as women with 29.4% of men dropping out compared with 14.3% of women dropping out.

There were also no pre-intervention differences identified between the 77 participants (57 experimental and 20 control) who dropped out between Time 2 and Time 3, and the 146 participants (89 experimental and 57 control) who stayed in the research, Wilks' Lambda .831, F (26, 168) = 1.31, $p > .05$. In addition, no significant interaction effects were found for any of the dependent variables, Wilks' Lambda .815 F (26, 168) = 1.46,

$p > .05$. This indicates that there were also no differences between the participants who dropped out of the research between Time 2 and Time 3, participants who stayed in the research, and the experimental and control groups.

However, three significant demographic differences were identified between drop-out and non drop-out participants between Time 2 and Time 3. Significant differences were identified in terms of marital status, ethnicity, and age. Specifically, single and divorced people were found to be significantly more likely to drop out than married people or those living with a partner, χ^2 (1, $N = 223$) = 7.40, $p < .05$. In addition, Maori were almost twice as likely to drop out as Pakeha, and participants who were in the "other" category for ethnicity comprised of Pacific Island peoples and Asian people were approximately in the middle of Maori and Pakeha. They were one and a half times more likely to drop out than Pakeha, but one and a half times less likely to drop out than Maori, χ^2 (2, $N = 223$) = 8.50, $p < .05$. Finally, in terms of age, the group most likely to drop out of the research was comprised of those aged 30-39. The next most likely group was comprised of those aged between 20 and 29, χ^2 (3, $N = 223$) = 12.25, $p < .05$.

11.4 Effects of the intervention

The procedure adopted to compare the experimental group with the control group at pre-training, post-training, and follow-up was a repeated measures analysis of variance (ANOVA). Tables 11.2 to 11.9 show the results of a series of separate repeated measures ANOVAs that were calculated for each of the dependent variables. The analyses were carried out using a between group factor (experimental and control) and an across time factor (Time 1, Time 2, and Time 3). Statistical main effects relate to either changes in outcome variables over time or between group differences. In terms of the intervention, the most desirable finding would be a significant interaction effect between the group and time. This would indicate that the experimental group was associated with relatively greater change over time than the control group (Bunce, 1997).

As indicated in Tables 11.2 to 11.9, there were no significant interaction effects between group and time on the dependent variables at either post-training or follow-up

indicating that the intervention made no significant difference on these variables. As indicated in Tables 11.3, 11.8, and 11.9, respectively, three significant main effects were found for time for Satisfaction With Life, F (1.86, 79.49) = 9.08, $p < .05$, Total Coping Resources, F (2, 352.10) = 4.37, $p < .05$, and Dysfunctional Attitudes, F (1, 12811.46) = 5.19, $p < .05$. These findings indicate that scores on these dimensions changed over time for both the experimental and control group. In addition, as shown in Tables 11.6 and 11.7 respectively, two significant main effects were found for group for Life Spheres, F (1, 300.17) = 3.99, $p < .05$, and Psychological Distress, F (1, 1725.19) = 5.65, $p < .05$. These findings indicate that scores on these two dimensions were significantly different between the experimental and control group.

Table 11.2

Means and Standard deviations from repeated measures Anovas for experimental versus control group

		Time 1		Time 2		Time 3				
Variable	**Group (*n*)**	**Mean**	***SD***	**Mean**	***SD***	**Mean**	***SD***	***F***	***df***	**Wilks' Lambda**
SWLS	E (85)	22.53	5.82	23.37	6.43	24.09	6.46	0.07		.999
	C (56)	22.87	6.82	23.80	6.67	24.23	6.48			
Pos Affect	E (87)	32.97	7.32	32.85	8.06	35.76	6.81	0.26		.996
	C (56)	35.14	7.05	35.41	7.80	35.76	6.80			
Neg Affect	E (87)	20.14	7.24	20.64	7.53	19.38	7.97	0.28		.996
	C (56)	17.97	6.67	17.95	6.92	17.32	5.96			
Life Spheres	E (88)	34.78	5.96	34.30	5.64	34.62	5.92	0.25		.996
	C (55)	36.19	5.50	36.27	6.03	36.39	5.63			
GHQ-28 (tot)	E (88)	25.19	12.37	23.22	12.50	22.84	12.08	2.23		.969
	C (56)	19.85	10.33	20.67	10.81	18.44	10.13			
CRI (tot)	E (88)	184.54	23.01	182.79	24.44	186.83	22.62	0.36		.995
	C (56)	191.05	19.85	190.86	23.46	193.08	21.84			
DAS	E (86)	109.78	30.55	107.63	3.07	105.72	32.40	0.20		.997
	C (56)	97.77	26.23	96.13	29.23	95.56	27.99			

Table 11.3

Results of repeated measures analysis of variance for experimental and control on Satisfaction With Life

Source of variation	*df*	Mean square	*F* ratio		Eta squared
Between subjects					
Intercept	1	223371.14	2087.84	***	.938
Group	1	9.39	0.09		.001
Error	139	106.99			
Within subjects					
Time	1.86	79.49	9.08	***	.061
Time x Group	1.86	0.84	0.96		.001
Error	257.87	8.75			

*p<.05, **p<.005, ***p<.0005

Note. Because Mauchly's test of sphericity resulted in not rejecting the null hypothesis regarding error covariance, the Huyhn-Feldt adjustment was used in calculating the degrees of freedom for within subjects effects.

Table 11.4

Results of repeated measures analysis of variance for experimental and control on Positive Affect

Source of variation	*df*	Mean square	*F* ratio		Eta squared
Between subjects					
Intercept	1	482898.85	3721.96	***	.963
Group	1	486.10	3.61		.025
Error	141	129.74			
Within subjects					
Time	1.94	32.38	1.50		.011
Time x Group	1.94	6.87	0.31		.002
Error	273.99	21.54			

*p<.05, **p<.005, ***p<.0005

Note. Because Mauchly's test of sphericity resulted in not rejecting the null hypothesis regarding error covariance, the Huyhn-Feldt adjustment was used in calculating the degrees of freedom for within subjects effects.

Table 11.5

Results of repeated measures analysis of variance for experimental and control on Negative Affect

Source of variation	*df*	Mean square	*F* ratio		Eta squared
Between subjects					
Intercept	1	140653.23	1198.82	***	.895
Group	1	543.90	4.46		.031
Error	141	121.83			
Within subjects					
Time	1.71	38.45	1.97		.014
Time x Group	1.71	4.74	0.24		.002
Error	240.91	19.52			

*p<.05, **p<.005, ***p<.0005

Note. Because Mauchly's test of sphericity resulted in not rejecting the null hypothesis regarding error covariance, the Huyhn-Feldt adjustment was used in calculating the degrees of freedom for within subjects effects.

Table 11.6

Results of repeated measures analysis of variance for experimental and control on Life Spheres

Source of variation	*df*	Mean square	*F* ratio		Eta squared
Between subjects					
Intercept	1	509690.14	6782.24	***	.980
Group	1	300.17	3.99	*	.028
Error	141	75.15			
Within subjects					
Time	2	1.93	0.15		.001
Time x Group	2	2.85	0.22		.002
Error	282	12.84			

*p<.05, **p<.005, ***p<.0005

Table 11.7

Results of repeated measures analysis of variance for experimental and control on Psychological Distress

Source of variation	*df*	Mean square	*F* ratio		Eta squared
Between subjects					
Intercept	1	193424.59	633.20	***	.817
Group	1	1725.19	5.65	*	.038
Error	142	305.47			
Within subjects					
Time	1.74	145.14	2.36		.018
Time x Group	1.74	78.76	1.38		.010
Error	247.45	57.26			

*p<.05, **p<.005, ***p<.0005

Note. Because Mauchly's test of sphericity resulted in not rejecting the null hypothesis regarding error covariance, the Huyhn-Feldt adjustment was used in calculating the degrees of freedom for within subjects effects.

Table 11.8

Results of repeated measures analysis of variance for experimental and control on Coping Resources

Source of variation	*df*	Mean square	*F* ratio		Eta squared
Between subjects					
Intercept	1	14544208.72	10442.99	***	.987
Group	1	4948.53	3.55		.024
Error	142	1392.72			
Within subjects					
Time	2	352.10	4.37	*	.030
Time x Group	2	33.49	0.42		.003
Error	284	80.64			

*p<.05, **p<.005, ***p<.0005

Table 11.9

Results of repeated measures analysis of variance for experimental and control on Dysfunctional Attitudes

Source of variation	*df*	Mean square	*F* ratio		Eta squared
Between subjects					
Intercept	1	4242479.91	1718.97	***	.925
Group	1	12811.46	5.19	*	.036
Error	140	2468.04			
Within subjects					
Time	1.89	358.09	2.88		.020
Time x Group	1.89	32.77	0.26	**	.002
Error	264.24	124.22			

*p<.05, **p<.005, ***p<.0005

Note. Because Mauchly's test of sphericity resulted in not rejecting the null hypothesis regarding error covariance, the Huyhn-Feldt adjustment was used in calculating the degrees of freedom for within subjects effects.

11.5 The role of neuroticism

Separate repeated measures ANCOVAs were calculated for each of the dependent variables using experimental and control as the between group factor, and Time 1, Time 2, and Time 3 as the across time factor, with the addition of the Time 1 Neuroticism scores as a covariate. Using Neuroticism as a covariate controls for any differences between the experimental and control group on the dependent variables that are due to the influences of Neuroticism. No significant interaction effects were found between group and time on any of the dependent variables indicating that controlling for Neuroticism did not make any significant difference to the outcome of the intervention. Specifically, controlling for Neuroticism did not significantly impact on Satisfaction with Life, Wilks' Lambda .998, F (2, 137) = 0.15, $p > .05$, Positive Affect, Wilks' Lambda .997, F (2, 139) = 0.21, $p > .05$, Negative Affect, Wilks' Lambda .995, F (2, 139) = 0.35, $p > .05$, Domain Satisfaction, Wilks' Lambda .994, F (2, 139) = 0.41, $p > .05$, Total Psychological Distress, Wilks' Lambda .977, F (2, 140) = 1.65, $p > .05$, Total Coping Resources, Wilks' Lambda .997, F (2, 140) = 0.21, $p > .05$ or Dysfunctional Attitudes, Wilks' Lambda .998, F (2, 138) = 0.13, $p > .05$. One significant main effect was found for time for Total Psychological Distress with Neuroticism as a covariate, Wilks' Lambda .938, F (2, 140) = 4.66, $p < .05$, indicating that total GHQ scores decreased significantly over time when Neuroticism was held constant for both the experimental and control group.

11.6 Exploring the experimental group in more detail

In order to explore the experimental group more thoroughly, further analyses were conducted using a measure comprised of splitting the experimental group into a group of participants who attempted to implement the skills they learnt in the intervention and a group who did not attempt do to so (tryers and non-tryers). As discussed in chapter 10, this measure was obtained by re-coding Question 4 from Section C in Questionnaire 3 (Appendix B).

Firstly, a multivariate analysis of variance (MANOVA) was conducted to investigate pre-intervention differences between the tryers (n = 40) and non-tryers (n = 41). No significant differences were detected on any of the dependent variables, Wilks' Lambda

.827, F (22, 58) = 0.55, $p > .05$. Chi square analyses were conducted to investigate demographic differences between the two groups. No significant differences were found.

Secondly, a further series of separate repeated measures ANOVAs was calculated for each of the dependent variables using tryers versus non-tryers as the between group factor and Time 1, Time 2, and Time 3 as the across time factor. The results of these repeated measures ANOVAs are displayed in Tables 11.10 to 11.17. As indicated in Table 11.10 and in Tables 11.13 and 11.17 respectively, significant interactions between group and time were obtained for Negative Affect, F (1.61, 117.27) = 4.54, $p < .05$, and Dysfunctional Attitudes, F (1.81, 1020.62) = 6.75, $p < .01$. Mauchly's test of sphericity was conducted for both significant interaction effects. In both cases sphericity could not be assumed and the Huynh-Feldt adjustment was used in calculating the degrees of freedom for the within subjects effects. As indicated in Tables 11.13 and 11.17, the interaction effects for group and time were significant for Negative Affect and Dysfunctional Attitudes, but were quite weak, ($eta^2 = .054$) and ($eta^2 = .080$) respectively.

As indicated in Table 11.11, a significant main effect was found for time for Life Satisfaction, F (1.81, 55.66) = 5.43, $p < .01$ (using the Huyhn-Feldt adjustment, because Mauchly's test of sphericity resulted in not rejecting the null hypothesis regarding error covariance). A significant main effect was also found for time for CRI total scores, F (2, 414.99) = 4.49, $p < .05$. This indicates that Life Satisfaction scores and Total Coping Resource scores increased over time for the tryers and non-tryers. In all cases, tests of within subjects contrasts identified whether the relationship was linear or quadratic. No quadratic equations were detected.

Plots of the mean scores over time for Negative Affect and Dysfunctional Attitudes appear in Figures 11.1 and 11.2 respectively. Post hoc analyses of the changes in means show that in both cases there were significant increases in mean scores between post-intervention (Time 2) and follow-up (Time 3) but not between pre-intervention (Time 1) and post-intervention (Time 2). This finding indicates that the tryers group significantly reduced their scores for Negative Affect and Dysfunctional Attitudes over time and in comparison with the non-tryers group.

11.7 Gender differences

In order to investigate gender differences, a final series of separate repeated measures ANOVAs was calculated for each of the dependent variables using two between group factors (male and female, and experimental and control) and the across time factor (Time 1, Time 2, and Time 3). No significant main or interaction effects were detected for any of the dependent variables indicating that men and women did not respond differently to the intervention. Specifically, no significant main or interaction effects were detected for Satisfaction with Life, Wilks' Lambda .991, F (2, 136) = 0.65, $p > .05$, Positive Affect, Wilks' Lambda .985, F (2, 138) = 1.04, $p > .05$, Negative Affect, Wilks' Lambda 1.000, F(2, 138) = .10, $p > .05$, Domain Satisfaction, Wilks' Lambda .994, F (2, 138) = 0.42, $p > .05$, Total Psychological Distress, Wilks' Lambda .992, F (2, 139) = 0.56, $p > .05$, Total Coping Resources, Wilks' Lambda 1.000, F (2, 139) = 0.23, $p > .05$, or Dysfunctional Attitudes, Wilks' Lambda .997, F (2, 137) = 1.64, $p > .05$.

Table 11.10

Means and Standard deviations from repeated measures Anovas for tryers and non-tryers

		Time 1		Time 2		Time 3				
Variable	**Group (*n*)**	**Mean**	***SD***	**Mean**	***SD***	**Mean**	***SD***	***F***	***df***	**Wilks' Lambda**
SWLS	T (40)	22.84	5.48	23.00	6.23	25.05	6.21	1.54	2,76	.961
	NT (39)	22.62	6.09	23.47	6.70	23.54	6.90			
Pos Affect	T(42)	34.29	7.93	34.05	8.40	36.00	8.32	0.18	2,78	.995
	NT (39)	31.71	6.96	31.46	8.03	32.51	7.34			
Neg Affect	T (42)	20.14	8.21	20.34	7.99	17.57	7.07	4.55 *	2,78	.896
	NT (39)	19.95	7.20	21.21	7.50	21.54	8.85			
Life Spheres	T (42)	35.26	6.56	35.02	5.63	36.23	5.54	1.69	2,78	.959
	NT (39)	34.60	5.75	33.64	5.99	33.05	6.40			
GHQ-28 (tot)	T (42)	23.92	11.25	23.38	12.82	20.58	11.54	1.02	2,78	.975
	NT (39)	26.51	13.75	23.92	12.88	24.97	12.25			
CRI (tot)	T(42)	188.00	24.11	186.69	24.67	192.18	23.92	1.13	2,78	.972
	NT (39)	181.52	23.21	178.06	24.99	181.62	21.91			
DAS	T (41)	105.64	33.60	103.45	35.01	96.20	30.77	5.61 **	2,77	.873
	NT (39)	112.84	28.00	110.38	26.56	115.03	33.15			

*$p < .05$, **$p < .01$, T = Tryers, NT = Non Tryers

Note: Because Mauchly's test of sphericity resulted in not rejecting the null hypothesis regarding error covariance, the Huyhn-Feldt adjustment was used in calculating the degrees of freedom for within subjects effects.

Table 11.11

Results of repeated measures analysis of variance for tryers and non-tryers on Satisfaction With Life

Source of variation	*df*	Mean square	*F* ratio		Eta squared
Between subjects					
Intercept	1	129964.58	1302.62	***	.944
Try group	1	10.65	0.11		.001
Error	77	99.77			
Within subjects					
Time	1.81	55.66	5.43	**	.066
Time x Try group	1.81	22.00	2.15		.027
Error	139.38	10.24			

*p<.05, **p<.005, ***p<.0005

Note. Because Mauchly's test of sphericity resulted in not rejecting the null hypothesis regarding error covariance, the Huyhn-Feldt adjustment was used in calculating the degrees of freedom for within subjects effects.

Table 11.12

Results of repeated measures analysis of variance for tryers and non-tryers on Positive Affect

Source of variation	*df*	Mean square	*F* ratio		Eta squared
Between subjects					
Intercept	1	269677.37	2039.03	***	.963
Try group	1	506.71	3.88		.046
Error	79	132.26			
Within subjects					
Time	1.92	54.32	1.97		.024
Time x Try group	1.92	5.75	0.22		.003
Error	151.96	27.64			

*p<.05, **p<.005, ***p<.0005

Note. Because Mauchly's test of sphericity resulted in not rejecting the null hypothesis regarding error covariance, the Huyhn-Feldt adjustment was used in calculating the degrees of freedom for within subjects effects.

Table 11.13

Results of repeated measures analysis of variance for tryers and non-tryers on Negative Affect

Source of variation	*df*	Mean square	*F* ratio		Eta squared
Between subjects					
Intercept	1	98272.45	709.76	***	.900
Try group	1	144.87	1.05		.013
Error	79	138.46			
Within subjects					
Time	1.61	37.59	1.46		.018
Time x Try group	1.61	117.27	4.54	*	.054
Error	127.54	25.84			

*p<.05, **p<.005, ***p<.0005

Note. Because Mauchly's test of sphericity resulted in not rejecting the null hypothesis regarding error covariance, the Huyhn-Feldt adjustment was used in calculating the degrees of freedom for within subjects effects.

Table 11.14

Results of repeated measures analysis of variance for tryers and non-tryers on Life Spheres

Source of variation	*df*	Mean square	*F* ratio		Eta squared
Between subjects					
Intercept	1	291041.93	3872.81	***	.980
Try group	1	182.69	2.43		.030
Error	79	75.15			
Within subjects					
Time	2	7.31	0.45		.006
Time x Try group	2	33.90	2.09		.026
Error	158	16.23			

*p<.05, **p<.005, ***p<.0005

Table 11.15

Results of repeated measures analysis of variance for tryers and non-tryers on Psychological Distress

Source of variation	*df*	Mean square	*F* ratio		Eta squared
Between subjects					
Intercept	1	138380.15	406.21	***	.837
Try group	1	380.76	1.12		.014
Error	79	340.67			
Within subjects					
Time	1.72	143.90	2.02		.025
Time x Try group	1.72	87.18	1.23		.015
Error	135.96	71.18			

*p<.05, **p<.005, ***p<.0005

Note. Because Mauchly's test of sphericity resulted in not rejecting the null hypothesis regarding error covariance, the Huyhn-Feldt adjustment was used in calculating the degrees of freedom for within subjects effects.

Table 11.16

Results of repeated measures analysis of variance for tryers and non-tryers on Coping Resources

Source of variation	*df*	Mean square	*F* ratio		Eta squared
Between subjects					
Intercept	1	8276532.44	5445.84	***	.986
Try group	1	4440.93	2.92		.036
Error	79	1519.79			
Within subjects					
Time	2	414.99	4.91	*	.054
Time x Try group	2	84.15	0.91		.011
Error	158	92.41			

*p<.05, **p<.005, ***p<.0005

Table 11.17

Results of repeated measures analysis of variance for tryers and non-tryers on Dysfunctional Attitudes

Source of variation	*df*	Mean square	*F* ratio		Eta squared
Between subjects					
Intercept	1	2759141.04	1029.31	***	.930
Try group	1	7241.28	2.70		.033
Error	78	2680.59			
Within subjects					
Time	1.81	298.66	1.98		.025
Time x Try group	1.81	1020.62	6.75	**	.080
Error	140.99	151.12			

*p<.05, **p<.005, ***p<.0005

Note. Because Mauchly's test of sphericity resulted in not rejecting the null hypothesis regarding error covariance, the Huyhn-Feldt adjustment was used in calculating the degrees of freedom for within subjects effects.

Figure 11.1

Significant interaction effect for tryers and non-tryers on Negative Affect

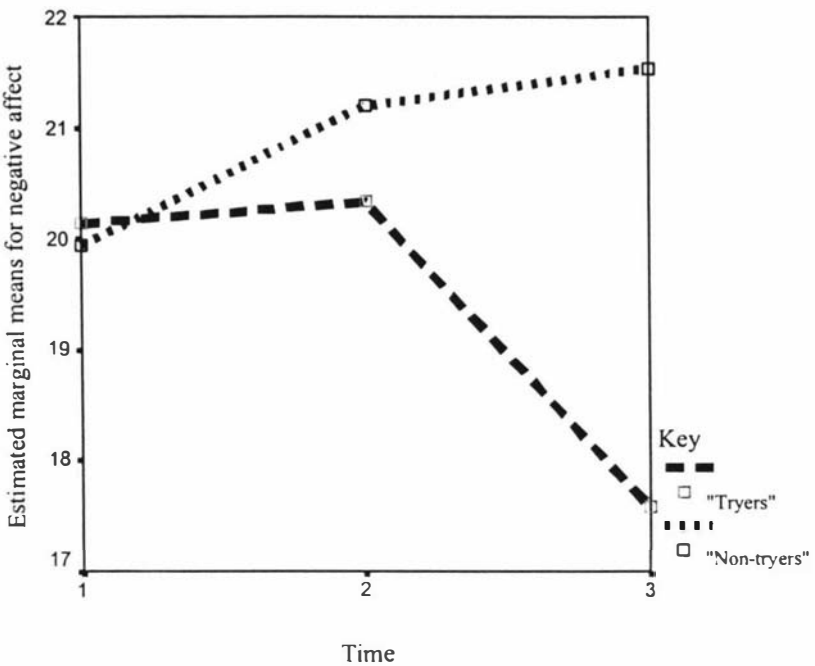
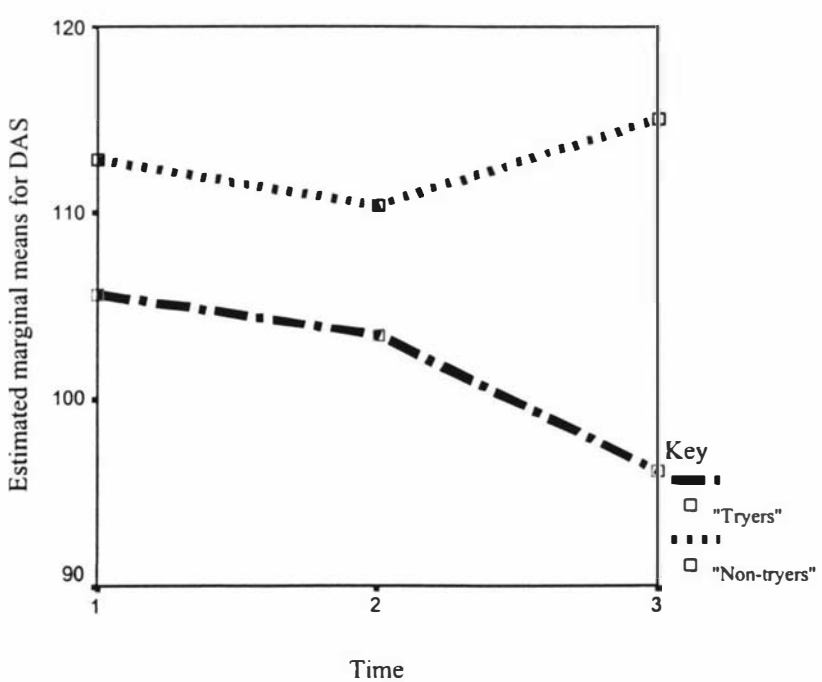


Figure 11.2

Significant interaction effect for tryers and non-tryers on Dysfunctional Attitudes



11.8 Chapter summary

This chapter began by investigating pre-intervention differences between the experimental and control group. No significant demographic pre-intervention differences were found. However, the experimental group differed significantly from the control group on 14 of the 24 outcome variables. Overall, prior to the intervention the experimental group was experiencing significantly more negative stress related effects than the control group. In particular, the experimental group was higher in Emotional Exhaustion, Neuroticism, Negative Affect, Total Psychological Distress, Somatic Symptoms, Anxiety and Insomnia, and Depression. They were lower in Extroversion, Conscientiousness, Positive Affect, Domain Satisfaction, Total Coping Resources, Cognitive Resources, and Physical Resources.

Next various analyses were conducted to investigate participant attrition. There were no differences in the proportion of participants who dropped out compared with those who stayed in the research from Time 1 to Time 2 and from Time 2 to Time 3. No significant pre-intervention differences and no interaction effects were identified between drop-outs and non drop-outs between Time 1 and Time 2, and between Time 2 and Time 3. However, several demographic differences were identified. In particular, men were found to be twice as likely to drop out of the research between Time 1 and Time 2. Between Time 2 and Time 3, significant differences were identified in terms of marital status, ethnicity, and age.

The effects of the intervention were explored using a series of repeated measures analyses of variance. No significant differences were detected between the experimental and control group over time as a result of the intervention. Controlling for neuroticism also did not result in any significant interaction effects. In order to explore the experimental group more thoroughly, the experimental group was split into two groups comprised of tryers and non-tryers. No significant pre-intervention differences were detected between both experimental groups. However, a further series of repeated measures analyses of variance revealed two significant interaction effects. The intervention significantly reduced negative affect and dysfunctional attitudes over time for the tryers compared with the non-tryers. Finally, in order to ascertain if males and females responded differently to the intervention, gender differences were

investigated using another series of repeated measures analyses of variance. No significant differences were identified.

CHAPTER 12: DISCUSSION OF PHASE II

12.1 Chapter overview

This chapter begins with a summary of the pre-intervention differences between the experimental and control group. Next the impact of participant attrition is explored as well as the role of neuroticism. The purpose of the "Thriving in the Stress Place" intervention was to make an enduring difference to the well-being of the community workers who attended. This objective was not achieved and a selection of possible reasons is provided to account for the lack of significant results. However, significant differences were obtained when the experimental group was separated into a group comprised of participants who attempted to put into practice the strategies learnt in the intervention and a group who made no attempts to do so. Analyses revealed no significant pre-intervention differences between these groups, but after the intervention the group who put the strategies into practice had lower levels of negative affect and dysfunctional thinking compared with the group who did not attempt to do so. This finding is particularly notable because both constructs are stable and difficult to change. The chapter concludes with an overview of the limitations of the current research and a selection of suggestions for future research in this field.

12.2 Discussion of results

12.2.1 Differences between the experimental and control group

One confounding factor in the current research is that the experimental and control groups were only equivalent in terms of the demographic variables. As noted in chapter 11 (Table 11.1), significant pre-intervention differences between the experimental and control group were identified for 14 out of the 24 variables. The experimental group was significantly higher in Emotional Exhaustion, Neuroticism, Negative Affect, Total Psychological Distress, and on three of the four Psychological Distress sub-scales including Somatic Symptoms, Anxiety and Insomnia, and Depression. In addition, the experimental group was significantly lower in Extroversion, Conscientiousness, Positive Affect, Domain Satisfaction, Total Coping Resources, Cognitive Resources, and Physical Resources.

The implications of the experimental group experiencing higher levels of emotional exhaustion are that they would have felt more overextended emotionally and generally more depleted of energy resources. There is widespread agreement that emotional exhaustion is the key dimension of the burnout experience (Evans & Fischer, 1993; Lee & Ashforth, 1986; Maslach, 1982, 1999; Shirom, 1989) and is the dimension that is most directly linked to occupational stress (Schaufeli & Enzmann, 1998). This sub-scale is also used as a measure of stress (Maslach, 1982, 1999) suggesting that the experimental group was more stressed than the control group prior to the intervention.

Prior to the intervention, the experimental group was also significantly higher on the personality variable of neuroticism compared with the control group. Neuroticism is strongly linked to stress and can indicate low well-being and general dissatisfaction with life (Costa & McCrae, 1987; Costa et al., 1981; Matthews et al., 1991). In terms of stress and well-being, this is the most influential of all the Big Five personality domains (Cooper, 2000; Matthews & Deary, 1998; Tokar et al., 1998). It is also pervasive and has been shown to be stable over the lifespan (Costa & McCrae, 1989). Individuals high in neuroticism tend to have a negative view of themselves, are more likely to experience negative emotions, and tend to cope more poorly with stress (Costa & McCrae, 1992a).

It is therefore not surprising that the experimental group was also higher in negative affect than the control group. Negative affect is a similar construct to neuroticism (Schaubroeck et al., 1992; Watson & Clark, 1984; Watson & Pennebaker, 1989) and high levels of negative affect are an indicator of low well-being. In addition, the experimental group exhibited higher levels of overall psychological distress and higher levels of somatic symptoms, anxiety and insomnia, and depression. These findings are also indicative of lower levels of well-being and a reduced ability to cope with stress.

The experimental group also had significantly lower levels of extroversion and conscientiousness. Extroversion is linked to cheerful, positive, and social behaviour (Costa & McCrae, 1992a). Conscientiousness is associated with high achievement in many spheres and is characterized by reliable, careful, thorough, and organized behaviour (Barrick & Mount, 1991; Digman & Takemoto-Chock, 1981; McCrae &

Costa, 1992a). In addition, the experimental group had significantly lower levels of positive affect and domain satisfaction, indicating that the community workers who attended the intervention were experiencing lowered well-being both in terms of the cognitive and affective aspects of well-being. Finally, the experimental group had lower aggregated coping resources and lower cognitive resources and physical resources. The implications of lower cognitive resources are that compared with the community workers in the control group, those in the experimental group may have had a lower sense of self-worth and been less optimistic about life in general. Lower levels of physical resources imply that the experimental participants were less likely to engage in health-promoting behaviours. The collective findings regarding coping resources suggest that the community workers in the experimental group may have had fewer resources to cope adequately with stress (Auerbach & Gramling, 1998; Sapolsky, 1994).

Overall the differences between the experimental and control group indicate that prior to the intervention the experimental group was suffering substantially more negative stress related effects than the control group. In summary, the experimental group was experiencing more burnout, less well-being, and had higher levels of neuroticism and fewer coping resources to assist them to manage their demands. These findings are consistent with information the experimental participants revealed to the researcher. Although the researcher did not ask for an indication of the participants' levels of stress or well-being, (with the exception of the questionnaires which were confidential and anonymous), many participants volunteered that they were going through traumatic times in their lives. For example, one participant was awaiting test results for cancer and another had filed criminal charges against a family member two days before attending the workshop. In addition, several participants were in the midst of losing their jobs because a community agency had been forced to shut down at short notice. Other participants reported difficulties at home, including several with marital problems, and others experiencing health problems, such as glandular fever.

This situation of having a non-equivalent experimental and control group is not ideal and will be discussed more fully later in this chapter. Some of the impact of non-equivalent groups was offset by the statistical technique used to detect differences between the groups over time as a result of the intervention. The technique used was

a series of repeated measures analyses of variance. This technique identifies statistical main effects that relate to either changes in the outcome variables over the three time frames or differences between the experimental and control group. For the intervention to have made a difference, significant interaction effects between group and time are required, indicating that the experimental group was associated with relatively greater change than the control group. Therefore, the interaction effects identify changes in the groups over time as a result of the intervention. However, it must be noted that although statistical techniques can reduce some of the impact of non-equivalent control groups, with groups that are initially so different, questions over the internal validity of the current research still remain.

12.2.2 Participant attrition

Several factors were investigated to obtain more information as to why the intervention did not significantly impact on well-being, coping resources, or dysfunctional attitudes. Firstly, participant attrition was inspected on the basis that differential attrition may have affected the results. Reynolds (1997) notes that attrition from any intervention study is unlikely to be random. However, in the current research there were no significant differences in the proportion of experimental and control participants who dropped out of the research between Time 1 and Time 2, and between Time 2 and Time 3. In addition, no significant pre-intervention differences were detected on any of the outcome variables between the participants who dropped out of the research at Time 2 or Time 3 and those who stayed in the research.

The only indication that the attrition was not random was four demographic differences. Men were found to be twice as likely as women to drop out of the research between Time 1 and Time 2. Between Time 2 and Time 3, three significant demographic differences were identified. Single and divorced people were significantly more likely to drop out than married people or those living with a partner. In addition, Maori participants were almost twice as likely to drop out as Pakeha participants. Participants in the "other" category for ethnicity, comprised of Pacific Island peoples and Asian people, were also one and a half times more likely to drop out than Pakeha, but one and a half times less likely to drop out than Maori.

Finally, participants aged between 30-39 were more likely to drop out of the research than any other age group.

It is reassuring to note that there were no pre-intervention differences on any of the outcome variables between the participants who dropped out of the research and those who stayed in the research. The four demographic differences identified between these groups are also unlikely to have made a substantial impact on the outcomes of the intervention. In particular, two of the groups most likely to drop out, the male participants and Maori participants, comprised a very small segment of the total sample consisting of just 15 percent and 10 percent respectively. However, it is unfortunate that information from these groups was lost.

As discussed, the results of phase one (chapter 7, Table 7.3) indicated that male community workers had more extreme personality scores than their female colleagues. In particular, their higher levels of neuroticism may have made them more susceptible to stress. Male community workers also had significantly lower emotional coping resources and significantly higher dysfunctional attitudes. These findings may explain why they were twice as likely to drop out of the research as female community workers. In terms of the community workers who remained in the research, there were no differences in the way men and women responded to the intervention.

The disproportionate attrition of Maori community workers and those from other ethnic groups is a loss to the current research, albeit an understandable one. Maori community workers and those from other ethnic groups are generally very well respected and well known in the community and often have substantial whanau or extended family commitments. As such, their assistance and expertise is frequently required outside of work hours. These demands combined with cultural expectations in terms of obligations to others, often mean that community workers from these ethnic groups have very little time, which may explain why a disproportionate number dropped out of the research.

It is also possible that Maori participants and participants from other ethnic groups did not find value in the research, and as a result chose not to complete the final measure.

Every effort was made to make the research appropriate and relevant to Maori and other ethnic groups. In particular, a Research Advisory Group was formed to provide input and monitor this aspect of the research (see chapter 10). It is reassuring that Maori participants and participants from other ethnic groups were more likely to drop out of the research between Time 2 (post-test) and Time 3 (follow-up) because this implies that those in the experimental group were satisfied enough to complete both days of the intervention, but that both experimental and control participants were less likely to prioritize completing the final measure.

The demographic finding that married participants and those living with a partner were more likely to stay in the research is consistent with literature which suggests that subjective well-being is higher for married people (Diener, 1984; Kammann, 1983). Perhaps the social and practical support associated with being married or living with a partner (Maxwell et al., 1990) gave these participants the advantage of extra resources and as a result they were more likely to stay in the research than single or divorced participants.

The final demographic finding for attrition was that participants aged between 30 and 39 were more likely than any other age group to drop out of the research between Time 2 and Time 3. This finding may be linked to the fact that the sample is comprised of 85 percent women and many had work and family commitments. For example, nearly 60 percent of the participants (both men and women) had children aged between five and 18 living with them. The time constraints associated with work and family are likely to be particularly heavy for the participants aged between 30 and 39 and this may have impacted on their ability or desire to complete the final measure.

12.2.3 The role of neuroticism

The current research investigated whether controlling for neuroticism made any difference to well-being, coping resources, and dysfunctional attitudes as a result of the intervention. The rationale for controlling for neuroticism is that the influence of this construct may be so strong that it has an effect on the impact of the intervention on outcome variables, such as well-being. McCrae (1990) suggests that the effects of

personality dimensions, such as neuroticism, may be so substantial that interventions that seek to manage stress by manipulating the environment may not be particularly effective in the long run. In the current research, neuroticism is used as a manifest indicator of negative affectivity consistent with Heinisch and Jex (1998) and Parkes (1990). The pervasive nature of neuroticism and negative affectivity is discussed more fully in chapter five. However, in summary, neuroticism and negative affectivity are related to both the appraisal of stress and the experience of distress. This means that individuals high in these constructs are likely to assess a given objective stressor as more negative, and to be more reactive to a given level of stress (Bolger, 1990; Bolger & Schilling, 1991; Bolger & Zuckerman, 1995; Bookwala & Schulz, 1998; Gunthert et al., 1999; Ormel & Wohlfarth, 1991; Suls et al., 1998).

As discussed in chapter five, there is some controversy over the degree to which negative affectivity influences self-report measures of occupational stress and symptoms of distress (Brief et al., 1998; Burke et al., 1993; Cooper, 2000). In a nutshell, negative affectivity may have a biasing effect on self-reports of stress and stress outcomes either by leading to spurious over-reporting of stress (Brief et al., 1998; Schaubroeck et al., 1992; Watson & Pennebaker, 1989) or because negative affectivity and stress reports may measure the same common factor (Watson & Pennebaker, 1989). As a result, some researchers (e.g. Brief et al., 1988; McCrae, 1990; Payne, 1988) have suggested that the effects of negative affectivity should be statistically controlled to reduce this potential bias. Other researchers (e.g. Spector et al., 2000) have argued strongly against partialling.

In the current research, controlling for neuroticism did not make any significant difference to the outcomes of the intervention. These results support Payne (2000) who argues against partialling out the effects of negative affectivity. Payne has also noted that in many cases the effects of partialling are so small that the entire issue may be of less concern than some (e.g. Spector et al., 2000) suggest. There is no doubt that negative affectivity is a complex construct that requires further investigation to clarify the nature of its role in the stress and well-being process (Heinisch & Jex, 1998). However, in the current research, the idea that a single personality characteristic, such as neuroticism or negative affectivity, determines responses is not well supported. Spector and O'Connell (1994) made a similar

observation. In terms of the issue of controlling for the effects of neuroticism, the findings in the current research concur with Cooper (2000) who states that "the growing use of statistical controls for negative affectivity has not been endorsed as an effective strategy for enhancing the interpretability of job stress research" (p. 77).

12.3 Investigating the outcomes of the intervention

12.3.1 The role of the participant

The analyses comparing the participants who attempted to implement the strategies they learnt in the workshop with those who did not attempt to do so revealed the most notable findings of phase two of the current research. In particular, the finding that the tryers group significantly reduced their levels of negative affect and dysfunctional attitudes over time in comparison with the non-tryers group has several implications. Firstly, enduring changes in negative affect and dysfunctional attitudes are notable because these constructs are thought to be relatively stable characteristics of an individual (Beck, 1976; Watson & Pennebaker, 1989). Therefore, it is an achievement for the intervention to have made an impact on such stable constructs. In addition, both constructs are thought to be either causal in the stress process or to interact to cause distress (Goh & Oei, 1999). The fact that the intervention made a difference to some of the community workers on constructs that are thought to be the partial cause of the problem, implies that for the participants who actively implement and practice the techniques from the intervention, these benefits should be enduring.

Secondly, the absence of significant pre-intervention differences between the two experimental groups on the demographic measures and outcome variables strengthens the research because it means that the non-tryers can function in effect as a second control group. In fact, they form an ideal control group because the groups are approximately equal in size, $n = 40$ and $n = 41$ for the tryers and non-tryers respectively, and were recruited in an identical manner and participated in an identical intervention. Beehr and O'Hara (1987) note that the use of more than one control group can add weight to conclusions from an intervention and can make it easier to generalize the research findings to other groups.

Finally, the main implication of the finding that the tryers significantly reduced their levels of negative affect and dysfunctional attitudes compared with the non-tryers is that the degree to which the participants actively implemented the strategies learnt in the workshop appears fundamental to whether the intervention makes an impact. This is consistent with research that suggests that long term improvement can only be expected for those participants who continue to actively practice stress management skills (Newman & Haaga, 1995). Bunker (1994) states that workshops alone will make no difference to a participant's well-being and the critical factor is whether the strategies learnt are incorporated into a person's life. Therefore, ultimately the utility of stress knowledge and stress management strategies taught in the intervention rests in the hands of the participants (Martin, 1997).

The critical difference in terms of the impact of the intervention appears to lie with the distinction between skills *acquisition* and *implementation*. Many of the participants may have acquired the skills taught in the intervention, but far fewer actually went to the next level of implementing the strategies. Meichenbaum (1985) noted this distinction when he identified the three phases of treatment that are required in stress inoculation training. As discussed in chapter 9, he distinguished between conceptualization, skills acquisition and rehearsal, and application and follow-through. Cognitive behaviour therapists and rational-emotive behaviour therapists also recognize this basic principle, hence the emphasis on homework in these therapies.

One aspect of the acquisition phase that is somewhat misleading is that there does not seem to be a correlation between how much the participants enjoy the intervention and whether they will actively implement the strategies learnt in the intervention (Tovey, 1997). For example, there is no doubt that the majority of the participants enjoyed the "Thriving in the Stress Place" workshop. This is evident from anecdotal feedback as well as written feedback. Appendix E contains summaries of the written feedback participants provided at the conclusion of each of the 13 workshops. All experimental participants were asked to fill in a short evaluation form regarding their impressions of the workshop. This was in addition to the questionnaire required for the research and was deliberately kept separate as a quality control measure. The

feedback summaries were compiled immediately after each workshop and although the facilitator did not make any changes to the format of the intervention in order to maintain consistency for the research, it was worthwhile to gain a sense of the participants' perceptions of the workshop. As can be seen in Appendix E, the evaluations and comments are uniformly positive. In addition, an analysis of some of the questions from Section C of Questionnaire 3 (Appendix B) reveals that 97.8 percent of the participants stated that they thought the workshop was *at least* moderately helpful in terms of managing their stress. In addition, 88.8 percent of the participants stated that they thought the workshop had made *at least* a moderate difference in enabling them to mange the stress in their lives. However, despite the overwhelmingly positive response to the workshop, only approximately half of the participants implemented the strategies in their own lives.

Martin (1997) notes that frequently organisations and participants alike want quick low cost training that provides simple, and preferably effortless, solutions to reduce stress and enhance well-being. Anecdotal evidence from the participants in the current intervention indicated that many were interested in simple strategies that could be utilized immediately. Although some strategies of this kind, such as quick relaxation exercises, were included in the "Thriving in the Stress Place" intervention, overall this intervention adopted a much more holistic and long-term approach and required active and continued involvement from the participants. For example, as stress is such an individual and subjective phenomenon, the participants were asked to identify their key values and thoroughly analyze their current situation as a precursor to identifying the most feasible solutions for reducing stress and enhancing well-being. In addition, identifying and modifying dysfunctional attitudes takes considerable effort from the participants. Although the researcher provided assistance and techniques to make this process easier, it was up to the participants to generate their own solutions and more importantly, to implement these solutions in their day-to-day lives.

As discussed in chapter nine, there is a sound theoretical rationale for all the modules included in the current intervention. In a nutshell the intervention adheres to the philosophy that quick fix interventions are unlikely to have any lasting benefits (Briner & Reynolds, 1997; Bunker, 1994) and that there is no point offering stock

solutions to what are complex and individual problems (Lazarus, 1984). However, the researcher may have overestimated how motivated the participants were to take such a comprehensive approach to stress management. Martin (1997) insightfully notes that the assumption can only be made that participants decide to attend a workshop to see what it might offer. He points out that this is substantially less than people making any commitment to implementing lifestyle changes, changes in themselves, or changes in their relationships. In the current research, this assumption was overlooked and the intervention was designed on the basis that the participants would actively examine their situation and make changes where appropriate.

In addition, the researcher may have overestimated the resources that the participants had available to devote to enhancing their well-being. The results revealed that the experimental participants were experiencing substantially more negative stress related effects than the control group and this may have impacted on the outcomes of the intervention. Perhaps people who are already experiencing symptoms of stress, burnout, and reduced well-being are less able or are less likely to want to analyze their situation and their thought processes, assess areas where they want to make changes, identify feasible changes, and then follow through with all the steps required to implement change. It may be that feeling exhausted simply leaves people less likely to want to engage in self-improvement (Petterson & Arnetz, 1998).

The aims of the intervention may also have been too ambitious. Changes in awareness and knowledge are realistic and achievable aims in a short intervention (Hart, 1995). However, as discussed, facilitating lasting behaviour change is a more difficult and complex process that firstly requires changes in attitudes and beliefs (Dolan, 1994; McHugh & Brennan, 1992). It may have been overly optimistic to expect that a two day intervention could significantly impact on all outcome variables, particularly when the community workers in the experimental group were already experiencing negative stress related effects.

An additional issue is that many of the exercises included in the current intervention were adapted from stress counseling and cognitive behavioural literature (e.g. Ellis & Dryden, 1997; Palmer & Dryden, 1996). In these exercises the focus is primarily on the individual and on investigating stress at the source. Although there were many

opportunities for dyad work and small group discussions, for some participants these techniques may not have transferred well to a small group setting.

One unexpected set of findings in the current research was that life satisfaction and aggregated coping resources increased over time for both the tryers and non-tryers and the experimental and control group. In addition, dysfunctional attitudes increased over time for the experimental and control group. The finding that some constructs increased over time regardless of the condition to which the participants were exposed is likely to be reflective of subject reactivity in general. For example, it could indicate a Hawthorne effect or be related to the community workers' expectations of participating in "stress" research. Beehr and O'Hara (1987) have noted that it is possible for placebo and expectancy effects to occur. Maslach (1987) has also highlighted the role of participant expectations and stated that a person's "mind-set" about participating in stress research can influence his or her responses. Perhaps some of the participants were inclined to "fake good" in a misguided attempt to benefit the research and assist the researcher.

Social desirability effects may also have played a part in the current research. Unfortunately, it is not possible to determine the extent of these effects. However, several participants in the experimental group told the researcher that if the responses in their post-test questionnaires differed widely from those in their pre-test questionnaire, that it was not that their stress had increased, but that they felt safer acknowledging their actual levels of distress after attending the workshop and meeting the researcher. The role of the stigma attached to experiencing occupational stress is rarely explored and yet this suggests that it may have played a role in the current research. Once some of the stigma about stress was removed and the myths surrounding stress explored in the intervention, this may have enabled the participants to realize that their levels of stress were not a reflection of personal weakness. In addition, many participants expressed relief that they were not alone in experiencing occupational stress. Some stated that the intervention allowed them to compare their levels of stress with those of the other participants in the intervention, and as a result they realized that their own levels were not as extreme as they had previously believed.

12.3.2 The role of the environment

Another area that may provide some answers as to why the intervention did not have the anticipated impact on well-being, coping resources, and dysfunctional attitudes between the experimental and control group, may be related to the difficulty faced by community workers attempting to implement the strategies when returning to the demands of unchanged workplaces (Ganster et al., 1982). Cooper et al. (2001) have described interventions like the one described in the current research as a form of "damage limitation" highlighting the fact that none of the sources of strain inherent in community work were addressed. Several researchers have found that individuals who try to use stress management techniques in an unsupportive environment are greatly disadvantaged (Dewe, 1994; Pelletier & Lutz, 1991).

Heaney and van Ryn (1990) suggest that stress management can in fact be counter-productive and that individuals who find that their new techniques are ineffective against unchanged social, organizational, and physical conditions may experience increased stress because the experience inadvertently increases their perceptions of lack of control. Murphy (1987) also notes that brief stress management programmes may increase frustration and anxiety by raising issues and expectations and failing to deliver. In addition, Murphy (1988) states that this means that any increases in well-being could be offset by the enhanced awareness gained by some participants as a result of the intervention, that a substantial portion of the stress they face comes from organizational sources that they have little control over. Reynolds (1997) states that the lack of success frequently noted with stress management interventions may result from a side effect of these types of interventions. She also believes that interventions cause increased expectations regarding the level of control available to individuals and as a result even if objective levels of control over the environment do increase, the impact of this is negated by the accompanying rise in expectations.

Dolan (1994) provided empirical evidence of unanticipated outcomes from a stress management intervention. He conducted an intervention in 30 hospitals (60 wards) randomly assigning participants to an experimental group that received stress management training, a semi-experimental group that received stress management information and feedback, and a control group. He found that the two groups that

received some sort of intervention reported the highest increases in job dissatisfaction. In addition, participants in the experimental group were more likely to quit in the year after the intervention. He hypothesized that these results might be due to a poor quality intervention, but he also suggested that the training had made the participants more aware of their limited chances of changing their work environments, which made them more dissatisfied and more likely to quit.

In the current research, the issue of returning to an unchanged occupational environment was raised in discussion in each workshop and the participants were encouraged to consider small changes that they could make to ease some of the most stressful aspects of their workday. For example, many participants agreed that they would commit to taking some time out most days for a lunch break. However, over the months of conducting the workshops it became increasingly obvious that the implicit focus on assisting the participants to tolerate stressful environments was less than ideal. However, the constraints of working with community workers from a variety of under-resourced organisations were such that changing their environments was not an option. The choice was to intervene at the level of the individual or not to intervene at all.

12.3.3 The role of the outcome variables

In general the stable nature of the outcome variables may have played a role in the lack of significant findings between the experimental and control group as a result of the intervention. For example, there is ample evidence to suggest that subjective well-being is moderately stable both across situations (Diener & Larsen, 1984) and across the life span (Costa & McCrae, 1988; Diener et al., 1999; Headey & Wearing, 1989; Maxwell et al., 1990). Whether this stability is due to biology (Tellegen et al., 1988), personality (Diener & Lucas, 1999; Schaubroeck et al., 1996), stable environmental conditions (Moran & Volkwein, 1992), or stable coping responses (Terry, 1994) is not yet known. In addition, dysfunctional attitudes appear to be stable cognitive schemata that are formed out of early life experiences. The limited research on coping resources means that it is not possible to ascertain the stability of this construct. One would assume that of all the outcome variables, coping resources would be the most

fluid and amenable to change, however, the results of the current research do not support this assumption.

The primary outcome measure in the current research was well-being, operationalized by a variety of measures. Andrews and Robinson (1991) note that there are two perspectives that can account for changes in well-being over time. The first perspective is the assumption that if conditions improve, well-being will increase and if conditions deteriorate, well-being will decline. This perspective focuses on change. The second perspective emphasizes stability and states that within limits people adapt to their circumstances using a variety of comparative methods. For example, they may compare themselves to others, to themselves at another time period, or to certain ideals, which can also adapt to changing conditions.

The design of the current intervention was based around the assumption that the first perspective would prevail. However, it may have been too ambitious to assume that well-being could be enhanced as a result of a two day workshop. The current research may lend support to the second perspective, emphasizing the capacity of people to adapt and the stability of well-being over time. Diener et al. (1999) note that situational factors can cause some variation in well-being, but over longer periods of time, stable factors, especially personality have greater influence. For example, Watson et al. (1988) note that the PANAS measure of positive affect and negative affect (used in the current research) is stable over a two month period, which is the interval between the post-test and follow-up in the current research. They suggest that ratings over longer time periods, such as a few weeks, are implicit aggregations. That is to say that as the time frame increases, the participants average their responses concerning positive and negative affect over more occasions resulting in a particularly stable construct. Diener and Larsen (1984) found similar findings.

One important factor in evaluating the effectiveness of any stress management intervention is that most interventions in work settings are offered to all workers and not just those who are experiencing high levels of stress. This is in contrast to clinical treatment settings where participants are more likely to be included in an intervention because they are suffering from high levels of anxiety or high blood pressure. When workers enter an intervention with "normal" levels of stress symptoms, it is more

difficult to show a significant decrease in signs and symptoms of stress than when the original levels are elevated, as is frequently the case in clinical treatment settings (Murphy, 1996).

In the current research, there were no significant differences between the experimental and control group for life satisfaction. The scores of both groups were between 21 and 25 placing them into the *slightly satisfied* category. As discussed in chapter 8, research frequently finds that participants in non-clinical Western samples score above the mid-point on most well-being measures (Andrews & Withey, 1976; Campbell et al., 1976). The implication for the current research is that it may have been too much to expect to make an impact substantial enough to move the experimental group from the *slightly satisfied* to *satisfied* category.

12.3.4 Selective reporting

It must be noted that although the lack of significant results between the experimental and control group was disappointing, this may actually be reflective of the efficacy of individual level stress management interventions in general. Matheny et al. (1986) suggest that the published stress and coping literature is biased towards studies that report significant results and large effect sizes. They claim that this has resulted in inflated estimates of the effectiveness of treatments. In support of their claim, they found that the mean effect size for the 13 dissertations reviewed in their meta-analysis was .17 and the mean effect size for the 40 published articles was .70. They also note that dissertation committees generally do not require positive results to sanction a student's research.

Matheny et al. (1986) state that additional evidence of selective reporting comes from comparing the treatment effect sizes reported in studies where the data allowed the computation of effect sizes for each treatment-outcome combination with those that did not. They make the assumption that when a study does not show enough data to allow effect sizes to be computed for all measured outcomes, the researcher is likely to be biased in reporting outcomes that supported the success of their treatments over unfavourable outcomes. Matheny and colleagues compared studies that had enough data to compute effect sizes for all treatment outcome combinations and found that

they had a mean effect size of .41, compared with studies that had suspected or known selective reporting that had a mean effect size of .73. The combination of these biases means that the stress and coping literature may provide a more optimistic view of the effectiveness of stress and coping interventions than is actually warranted.

Nicholson et al. (1988) reviewed 62 individual level stress management interventions and noted that almost without exception the authors of these published studies were convinced of the efficacy of their interventions, regardless of the supporting data (or lack of supporting data). They speculated that this was an indication that unfavourable papers are less likely to be published. Murphy (1988) discussed 30 studies that evaluated stress management in work settings. Interestingly, only two of the thirty studies were not published in journals and these were the only two that obtained no significant results. The first was a six session cognitive-behavioural intervention (Riley, Frederickson, & Winett, 1984) that focused on the development of problem solving skills to manage stress. The results showed that both the experimental (n = 28) and the control (n = 20) groups showed significant increases in productivity and decreases in absenteeism, indicating no differential change as a result of the training. The second study was not published at the time of the Murphy (1988) review, but has since been published (Murphy & Sorenson, 1988). This study compared a biofeedback group (n = 17) with a progressive muscle relaxation group (n = 21) and a control group (n = 80). No significant differences were found on the four indicators of absenteeism used as outcome variables.

In summary, as Murphy (1987) notes, there appears to be a negative relationship between the rigor of past research on occupational stress and the success of the treatments being evaluated. Briner and Reynolds (1999) and Cox (1993) have also commented on this phenomenon. Cox states that conclusions about the effectiveness of interventions are "based more on moral and strategic reasoning than on empirical data" (p. 74). For example, the study by Ganster et al. (1982) is held up as an example of a rigorous experimental design (Cooper et al., 2001). Ganster and colleagues evaluated a stress management training programme involving public agency employees randomly assigned to treatment (n = 60) and wait-list control (n = 39) groups. The intervention group received 16 hours of progressive relaxation and cognitive restructuring training over a period of eight weeks. Outcome variables were

assessed three times (pre-test, post-test, and four months after treatment). These included epinephrine and norephinephrine excretion at work, and measures of anxiety, depression, irritation, and somatic complaints. The results revealed that participants in the experimental group had significantly lower levels of epinephrine and depression at the follow-up that did not regress to pre-test levels at the four month follow-up. However, the effects of the treatment were not found when the control group received the intervention.

12.4 Limitations of the current research

12.4.1 Lack of a randomized control group

The primary methodological weakness in the current research is the lack of a randomized control group. Assigning participants at random to an experimental group or a control group is considered the most methodologically sound research option for interventions like the one described in the current research (Campbell & Stanley, 1963; Cooper et al., 2001; Rose, Jones, & Fletcher, 1998). However, as Kompier, Geurts, Grundemann, Vink, and Smulders (1998) point out, there are frequently practical difficulties involved in conducting stress management research in an organisational environment. In many cases sacrifices have to be made between methodological rigor and the constraints of applied research (Stone, 1978). As a result, the use of quasi-experimental designs is a frequent finding in applied stress management research where it is not always possible to randomly assign participants to experimental and control conditions (e.g. Bunce & West, 1996; Reynolds, 1997).

In the current research, a quasi-experimental design using a non-equivalent control group was used. In this case, participants in both groups were subject to the same eligibility requirements, but were not selected in the same way. The decision to adopt the quasi-experimental methodology was made primarily to ensure high participant numbers and as a result, good statistical power. The health promotive nature of the intervention meant that at best only small effects were anticipated, which made power a major consideration and as a result large samples for the experimental and control group were considered essential (Tabachnick & Fidell, 1996). The longitudinal nature

of the research meant that participant attrition was also a consideration, which placed even more emphasis on the need for large samples.

In the design stages of the current research, it was anticipated that the "Thriving in the Stress Place" workshop would meet a community need resulting in an overwhelming number of participants wanting to attend. At this point it was envisioned that random assignment to an intervention or wait-list control group would be a simple and expedient option. Unfortunately, this was not the case. An intensive marketing campaign was conducted to promote the workshops including sending out 3155 brochures to community organisations that met the research criteria, articles in five local newspapers and many community newsletters, promotional talks at various community meetings, and personal phone calls to 43 well respected and influential community figures to enlist their support in publicizing the workshops. However, despite these extensive efforts, attracting participants to the workshops was a struggle, especially in the initial stages of the research. As a result, and with the knowledge that high power would be essential to the final results, the quasi-experimental design using a non-equivalent control group was used. This meant that all participants wishing to attend a workshop formed the experimental group and the researcher solicited volunteers for the control group.

It is possible that changing the way the workshops were promoted may have made it easier to attract participants to the intervention. For example, printing testimonials from satisfied community workers on the brochure might have resulted in increased numbers in the experimental group. However, the marketing strategy for the workshop and the promotional materials, such as the brochure, remained the same for the duration of the research. This was considered essential so as not to introduce a potential confound into the research.

12.4.1.1 Possible reasons for the difficulty attracting participants to the experimental group

Anecdotal evidence from the community workers who participated in the experimental and control groups revealed several possible reasons for the difficulties experienced attracting participants into the workshops. The most frequently

suggested reason was lack of time. Many community workers stated that they knew they could benefit from a well-being intervention, and in fact had heard good reports about the workshop, but they were already so overworked that they considered it impossible to take two days out of their work schedule. In addition, many workers in small organisations stated that if they were absent, no other staff members were available to cover their work load.

Some community workers expressed the opinion that they thought of stress management as a personal luxury and did not feel that it was appropriate to prioritize their own self care when others in the wider community were in need of their service. Perhaps this may account for the finding that the experimental participants were significantly lower in conscientiousness than the control group. It may be that the participants who volunteered to become part of the control group, but who did not attend the intervention did so because as a result of their conscientious nature they were reluctant to take the two days out of their work schedule.

There is also the possibility that there is a degree of stigma associated with a "stress workshop" which may have made some community workers reluctant to attend. Community workers work with people who are vulnerable and some may have been unwilling to also appear that way to others. For some people there is still a perception that experiencing stress is a sign of personal weakness and therefore attending a well-being workshop implies inadequate coping. Many participants made jokes about this issue on the morning of the first day of the workshop. A further consideration is that many of the budgets for community organisations are decided by community boards and some participants expressed concerns that if others became aware that they had high levels of stress, their next round of funding could be in jeopardy.

12.5 Reliance on self-report measures

The second major limitation in the current research is the reliance on self-report measures. This issue is thoroughly covered in chapter eight as a limitation of the first phase of the research and it applies equally, and perhaps even more so, to the second phase.

12.6 Limitations of the sample

Once again the limitations of phase one discussed in chapter 8, such as the "healthy worker effect", apply equally to the second phase of the research. In addition, there are several possible limitations of the sample. Firstly, although every attempt was made to canvass as broad a range of community workers as possible in the greater Auckland region, this may not be a representative sample. The implications of a non-equivalent experimental and control group have already been discussed. However, in addition, there is evidence that those in greatest need may be the least likely to recognize and acknowledge stress problems. Therefore, interventions based on self-selection may be less effective than more comprehensive efforts (Bunker, 1994). Bunce and West (1996) state that much of what has been learned from worksite stress management interventions has been from interventions involving volunteers. The orientation of a participant may have clear implications for the successful outcome of an intervention.

12.7 Limitations of the questionnaire

The primary limitation with the questionnaire is likely to have been the length. The majority of community workers are very busy and the three questionnaires represented a combined time commitment of at least one and a half hours. This may have precluded some participants from participating in the research, resulted in disproportionate attrition of the busiest participants, or caused some to answer the questionnaire in a less than thorough manner.

12.8 Possible experimenter bias

A potentially complicating factor is that the researcher was responsible for determining the outcome variables, designing and delivering the intervention, recruiting the experimental and control groups, and collecting all the assessment data. There are possible advantages to having one individual responsible for all aspects of the research in that continuity is ensured and a rapport can be developed between the

researcher and the participants. However, it must be acknowledged that there is potential for experimenter bias and for unspecified experimenter effects that may have impacted on the results. For future research of this type the use of an independent facilitator could be considered.

12.9 Suggestions for future research

12.9.1 Suggestions pertaining to the intervention

The intervention may have been more effective if more time were allowed for consolidation of learning between modules. The intervention was originally designed to be conducted over eight weeks with two hours of training each week. However, initially very few community workers expressed interest in this option. With advice from experienced community workers, the current format of one day one week and one day the next week was implemented. Although this format may have been easier for the community workers in practical terms, a suggestion for future research is to experiment with shorter time segments over a longer time period. This would allow the participants to focus on learning one technique at a time and perhaps more importantly, provide time for the participants to practice and consolidate the skills learnt in each session in the intervening week. Practice at home is considered a critical element of various types of cognitive therapy (Beck, 1995; Ellis & Dryden, 1997) and is useful for enhancing transfer of training (Tovey, 1997).

In addition, the two day intervention may have contained too much information for the participants to adequately absorb. From a practical viewpoint, a comprehensive approach is likely to be the most effective in terms of changing behaviour (Carlson, Harigan, & Seeley, 1997). However, a suggestion for future research is to experiment with leaving more time for the participants to share information and discuss their personal and professional issues. In the current research some provision was made for this, however, several participants expressed the desire for more opportunities to talk with the other community workers. It is likely that this would be a useful option particularly in terms of harnessing the value of social support (Ellis et al., 1997).

A variation on the idea of providing the participants more time to talk to each other is to incorporate some of the newer techniques emerging in stress research. For example, Rybarczyk and Bellg (1997) advocate the use of life narratives to enhance coping. They state that by empowering individuals to tell their stories, they can become more empowered to cope with stress. Although research in this area is still in its infancy, Rybarczyk and Bellg reported success with the use of their interview technique to reduce stress and enhance coping. They used trained volunteers to conduct the interviews and found that life narrative interviews were as effective as relaxation techniques in alleviating stress, and that a 45 minute life narrative interview was more effective at reducing stress than a social support session of the same length of time. In addition, when the interviews focused on past experiences of successful coping, the participants appeared to more positively appraise their current coping abilities. Finally, there did not seem to be any age or gender limitations on the benefits of life narrative interviews.

A suggestion for future research is to incorporate a version of either Rybarczyk and Bellg's (1997) "Life Experience Interview" or their "Life Challenges Interview", which they note is especially useful to encourage coping skills for participants in difficult situations. In the current intervention, exercises of this sort would fit particularly well before the "Problem Solving Module" and would encourage great rapport if the same partners were used in both instances. Adapting the Life Challenges Interview and enhancing the focus on career and positive coping could also supplement the "Under the Microscope" exercise. The obvious limitation is that Rybarczyk and Bellg used trained volunteers to conduct the interviews. Future research could experiment with providing simple training and using the participants themselves as interviewers.

12.9.2 The time frame for the follow-up measure

One suggestion for future research is to extend the eight week time interval between the post-test measure and the follow-up measure. Currently the stress literature provides no guidelines as to what constitutes an optimum time to collect follow-up data (Burke & Richardsen, 2000; Ivancevich & Matteson, 1987). In most evaluations of stress management programmes, the follow up time is approximately three months

(Firth-Cozens, 1992). However, some researchers (e.g. Bunce & West, 1996; Reynolds & Briner, 1994) suggest that this is too short and that to fully explore the longer term implications of stress management, longer follow ups of approximately one year should be used. For example, Bunce and West conducted a stress management and innovation intervention and found that the innovation effects only emerged one year after their intervention. Improvements in well-being occurred earlier, but reverted to initial levels by the one year follow-up. Kline and Snow (1994) taught a worksite coping skills intervention to working mothers. They found that some effects, such as less use of avoidance coping and lower psychological symptomatology, became stronger over time but that other effects, including lower levels of work and family stress and work environment stress, did not emerge until the follow-up six months after the intervention. Kagan et al. (1995) also emphasize the importance of long term follow up. In their study they found that improvement was maintained and even enhanced over a 9 to 16 month follow-up period.

In the current research, it is possible that differences between the experimental and control group may have emerged had the participants had more time to practice and implement the techniques suggested in the intervention and to experience the benefits of some of these techniques. In particular, changes in behaviour and commitment to new ways of thinking do take time to consolidate (Kagan et al., 1995) so delayed effects are possible in research of this type. Therefore, future research could consider extending the time intervals between post-test and follow-up measures.

12.9.3 Maintaining post-training effects

The most compelling issue to emerge from the second phase of the current research is the need to facilitate and maintain post-training effects. Despite all of the limitations related to the current research, such as the difficulties of returning to an unchanged stressful environment and the stable nature of some of the outcome variables, the participants who implemented the strategies taught in the intervention experienced lowered negative affect and fewer dysfunctional attitudes compared with those who made no attempts to implement the strategies. This suggests that a primary concern for researchers in this area should be to develop ways of encouraging participants to incorporate and maintain the strategies in their lives.

Traditional stress management programmes have been plagued by post-training effects decaying over time (Murphy, 1987). In a perfect world, stress management should be recurring and cyclic (Rose et al., 1998), with regular follow-up sessions to enhance the benefits of the original training (Dolan, 1994). Financial and practical constraints mean that this rarely occurs. Future research could benefit from putting more concrete procedures in place to maintain post-training effects. As Bunker (1994) notes, the most successful programmes will be tailored around long-term efforts to assist individuals in analyzing, confronting, evaluating, and devising creative solutions to stressful aspects of both their work and non-work lives.

In the current research, several strategies were put in place with the purpose of maintaining the benefits of the intervention. For example, telephone trees were provided so the participants could form informal support groups and the participants made commitments to a specific behaviour change and contracted with other community workers to provide progress reports at specified time frames. In addition, the participants wrote themselves a letter after the coping module, which the researcher mailed approximately three weeks after the conclusion of the intervention. However, for future interventions it would be worth making more thorough and specific arrangements for after the intervention, such as "refresher" workshops and support groups. Martin (1997) notes that any participant who leaves a workshop with a personal change agenda would benefit from continuing support. In addition, other innovative options need to be developed to provide encouragement and incentive for the participants to actively implement and maintain the strategies.

Considering the time, effort, and resources invested in most stress management/well-being interventions, it is remarkable that so little is known about the most appropriate ways to maintain post-training effects. Particularly with vulnerable populations, such as community workers, who return to demanding occupational environments, this issue is likely to assume great importance. The relative time and expense of focusing on maintaining the effects of interventions is likely to be substantially less than what would be required if the post-training effects were allowed to decay over time and the entire process was required again.

12.9.4 Measures for inclusion in future research

As discussed in chapter 8, subjective reports dominate in stress and burnout research (Heinisch & Jex, 1998; Rudow, 1999) and a limitation of stress research in general has been the reliance on self-report measures. Future research could benefit from the inclusion of a combination of quantitative and qualitative methodologies (Dewe, 2000; Oakland & Ostell, 1996) and the use of multiple, more objective modes of measurement (Heinisch & Jex, 1988; Schaufeli et al., 1993). One suggestion, albeit an expensive one, is to use physiological indicators of stress, including biochemical and immunological data (Steffy & Jones, 1998; Walsh et al., 1997). Currently the most frequently monitored response systems are cardiovascular responses such as heart rate and blood pressure (Auerbach & Gramling, 1998).

In the current research, budgetary constraints prohibited the collection of physiological, biochemical, and immunological data on the community workers so it was not possible to ascertain whether the intervention made any impact at a physiological level. Collecting data of this type may have revealed interesting findings. Some researchers have found no significant results on self-report outcome measures as a result of an intervention, but found that differences were observed on physiological measures. For example, Arnetz (1996) compared three different stress reduction interventions using a population of skilled high-tech professionals. The specific type of intervention did not impact significantly on results. In addition, no effects were found on any of the self-report measures, including intellectual discretion, job control, or coping. However, compared with the control group, improvements were found in the stress related hormone prolactin and cardiovascular risk indicators. In addition, Ganster et al. (1982) found that their progressive relaxation and cognitive restructuring training only impacted on one of four self-report outcome measures (depression) but did result in lower levels of epinephrine.

Cooper et al. (2001) note that despite the common perception that physiological measures are better than self-report measures because they are more "objective" and are not influenced by an individual's perceptions, the reliability of many of these measures is still questionable (Jex & Beehr, 1991). In addition, the collection and assessment of this type of data is exceedingly complex and not without controversy

(Fried et al., 1984). The reality is that the measurement of constructs, such as stress and well-being, is less precise than it might appear. The primary problem is that there is only a moderate degree of agreement when stress or well-being is measured simultaneously using different measurement modes (van Heck, 1988). For example, Heinisch and Jex (1998) measured negative affect with self-report measures and coworker ratings, but found only a modest convergence with self-reports (r = .27). Walsh et al. (1997) found no relation between salivary cortisol levels and self-reported levels of stress.

This lack of concordance between self-report measures and various objective measures may be partly due to sources of error in obtaining the measures themselves, including participants misrepresenting their true feelings on self-report measures and extraneous sources of variance on physiological measures, such as the physical condition of the participant. In addition, inter-rater agreement is not always high on the behavioural measures. However, perhaps the lack of concordance is more to do with the complexity of the constructs. Auerbach and Gramling (1998) state that stress is a "complex multidimensional state and it is likely that each type of measure represents parallel but interacting response systems that may contribute independently as well as influence the other systems, depending on the individual...."(p. 7).

A suggestion for future research is to explore more innovative methods of collecting data. For example, Satyamurti (1981) studied occupational stress in social workers and used a comprehensive but atypical approach. She investigated the differing perspectives of the social workers, their clients, and their supervisors using a mixture of participant observation, interview, and documentary data. This methodology is in contrast to the majority of stress research, which focuses only on the experiences of the specific group being investigated. For the area of stress research to move forward there is a need for researchers to be willing to use more creative and flexible research methods. For example, one option is to focus more intensely on a smaller sample, perhaps using a diary methodology.

The current research could also have benefited from the inclusion of (quasi) objective measures, such as supervisor and coworker reports (Spector et al., 1988), the use of job analysis and performance evaluation data (Spector & Jex, 1991), and turnover and

absenteeism rates (Schaufeli et al., 1993). Anecdotal evidence in the form of feedback from coworkers of participants who participated in the "Thriving in the Stress Place" workshops suggested that for some participants marked behavioural and attitudinal changes occurred. Some of the community workers revealed that they attended a workshop because of positive feedback from their coworkers about the workshop or because of the changes they observed in a colleague after a workshop. In addition, several supervisors agreed to promote the intervention because of the changes they had observed in some of their own staff as a result of the intervention.

It would also have been useful to investigate the participants' perceptions of their behaviour change. Surprisingly, behavioural responses to stress have received the least empirical focus of all forms of strain (Jex & Beehr, 1991). However, an individual's behaviour is likely to have a substantial impact on his or her work performance and on well-being (Cooper et al., 2001). One suggestion for future research of this kind is to include measures similar to the measure of Health Behaviour Change by Peters and Carlson (1999). Although still in the quantitative domain, this eight-item measure could assess health improvements and behaviour changes that had occurred as a result of participating in an intervention.

In the current research it is possible that the participants experienced improvements in areas that were not measured. It may be that the range of outcome variables was not broad enough to catch the changes of the intervention (Bunce, 1997). Murphy (1996) discusses "collateral effects", that are effects on related behaviours. He states that collateral effects of stress management training could include improved interpersonal relationships, increased self-efficacy, initiation of exercise habits, and better nutrition. Murphy states that until the full range of possible effects of stress management interventions is investigated, their true value will be underestimated. Future research could benefit from taking a much wider look at the possible benefits of stress management and attempting to capture some of these with more flexible qualitative methodology.

In addition, it would be worthwhile investigating ways of measuring the participants' levels of self-efficacy for using the skills taught in the workshop. Research suggests that at any given level of skill development, the participants who are more confident

of their ability to use the skills taught in the intervention will be more persistent in trying to use the skills and therefore should ultimately be more successful (Newman & Haaga, 1995).

Finally, although the purpose of phase two of the current research was to enhance the well-being of individual community workers, future research could benefit from the inclusion of measures of orgnisational commitment or turnover intentions. These could be used as indicators of unanticipated intervention outcomes similar to those found by Dolan (1994).

12.9.5 Populations for future research

The results of the current research indicate that male community workers could be an interesting population for further research. Conclusions regarding the male community workers must be tentative given that only 34 males participated in the research, comprising just 15 percent of the total sample. However, the results of phase one indicated that compared with female community workers, male community workers had more extreme personality scores, lower levels of emotional coping resources, and higher levels of dysfunctional attitudes. In addition, the attrition analyses from phase two indicated that male community workers were twice as likely to drop out of the research as their female colleagues. Collectively these findings may indicate that male community workers are more vulnerable to negative stress related effects.

In addition to further investigations on the effect of gender, there may be value in investigating the community sector more widely. For example, participants from grass roots community organsiations could be compared with those from community corporates, rural community organisations with urban community organisations and so on.

12.9.6 Individual counseling

One type of stress management that looks promising for enhancing individual well-being involves individual counseling and psychotherapy. It appears that this approach

to stress management is effective in reducing symptoms of distress (Lambert & Bergin, 1994). For example, Firth-Cozens and Hardy (1992) reported on a sample of ninety white-collar employees who received psychotherapy. The participants were assessed in terms of perceptions of work problems, symptoms, and self-esteem. Significant improvements were found on all outcomes and participants reported that their work problems improved at the conclusion of therapy. Additional advantages to this type of approach include the fact that there does appear to be a need for such a service, it is generally acceptable to managers and staff, requires no organisational change, and is easy to cost and evaluate (Reynolds, 1997).

However, interventions of this type are expensive and the impacts in terms of work performance have not yet been substantiated. In addition, services of this nature are only useful to those who use them and there is no guarantee that the employees who are most in need will use the service. This type of intervention also does not generally address any unacceptable aspects of the work environment and may perpetuate the myth of "victim blaming". Finally, as discussed, increasing the well-being of an individual may not always be in the best interests of the organisation. For example, individuals who experience higher levels of well-being may be motivated to leave their organisation, may develop personal interests that take time away from their work, or may have higher expectations of their work situation (Reynolds, 1997).

12.9.7 General suggestions for future research

One area that may prove promising for future research in the stress area is to explore the link between an individual's values and the stress process. An exercise on values was included in the current intervention and anecdotal and written evidence provided in the summary sheets (Appendix E) suggested that this exercise was very useful. To date values have been largely ignored in stress management, however values are central to an individual's cognitive structure and provide the core elements of beliefs, attitudes, and behaviours (Homer & Kahle, 1988). As such, values are precursors to attitudes and behaviour (Deal & Kennedy, 1982) and directly impact on what an individual actually does (Levy, 1990). Changing attitudes and behaviour is notoriously difficult (Kagan et al., 1995), therefore investigating the processes that underlie behaviour may provide strategies for facilitating enduring behaviour change.

The primary suggestion for future research is to take the transactional approach to stress and coping beyond the conceptual level. The current research adhered to a transactional definition of stress and coping and incorporated transactional elements into the intervention, including focusing on the role of appraisal in stressful situations and the enhancement of coping resources. However, the research design was very traditional. It may be that to truly investigate the transactional approach to stress and coping requires a radical rethink of research methods and measures. Future research could benefit from broad multi-measure approaches and an explicit focus on the relationship between the person and the environment.

Capturing the dynamic nature of the transactional approach to stress and coping is a daunting prospect. However, it is possible that the greatest chances of success would occur with methodologies that are flexible and that allow an individual to reflect on their perception of their relationship to the environment. Although not a new idea, the use of specially adapted stress diaries might be an appropriate initial methodology, especially if combined with interviews to probe the transactional nature of the stress process.

12.10 Chapter summary

The purpose of the second phase of the current research was for the "Thriving in the Stress Place" intervention to significantly impact on the well-being, coping resources, and dysfunctional attitudes of the community workers in the experimental group. The anticipated differences between the experimental and control group were not found. Several possible areas are explored in relation to the lack of significant differences between the experimental and control group. For example, both participant attrition and the role of neuroticism are investigated. However, none of these factors appears to provide an explanation for the lack of significant differences. In addition, several possible reasons are proposed to account for the lack of findings. For example, the intervention required active and continued involvement from the participants. This may have been too much to expect, particularly as the experimental group exhibited significantly more negative stress related effects than the control group prior to the

intervention. Other factors may also have been influential, including difficulties returning to an unchanged occupational environment and the stability of the outcome variables used in the current research.

The most notable finding of the second phase of the current research was that the participants who actively incorporated the strategies learnt in the intervention into their lives exhibited significantly lower levels of negative affect and dysfunctional attitudes compared with the participants who did not attempt to do so. This finding is notable because these constructs are thought to be both stable and causal in the stress process. As such, the impact of the intervention should be enduring.

This chapter concludes with a discussion of the limitations of the current research and suggestions to guide the direction of future research. The primary limitation is the lack of a randomized control group. Some methodological rigour was sacrificed to accommodate the constraints of applied research and a quasi-experimental design was adopted. Various suggestions are provided for future research. In particular, the need for researchers to more actively pursue strategies to enhance and maintain post-training effects and a call for more innovation in design and measures in applied stress research.

CHAPTER 13: CONCLUSION

Many New Zealanders share a mindset that includes a nation of healthy and sporty people. However, at the turn of the 21st century, there is evidence that the collective health of New Zealanders is questionable. Internationally work related stress is increasing (Levi, 1994; Loo, 1996; Murphy, 1995b) and New Zealand office workers are not immune from this phenomenon. A survey of 7000 public and private sector New Zealand workers, found that forty-one percent said their stress had worsened in the past three years (McGregor, 1994, cited in Sullivan, 1995). Outside of the work arena there are many additional factors that cast doubt on the status of the health and well-being of New Zealanders. For example, there is evidence that children and young people are suffering. One in seven New Zealand children is now classified as obese, and youth suicide rates are consistently among the highest in the Western world (Statistics New Zealand, 2001).

A clear finding from phase one of the current research is that in order to ensure the health of future generations of New Zealanders, there is a need for more broad-based applied research investigating current stress and well-being levels. Although the focus of the current study is community workers, there is a general need for New Zealand normative data to establish clear base-line measures of the current situation in order to develop effective methods of health promotion.

The lack of New Zealand normative data and the lack of comparative research on community workers restricted many of the conclusions from the first stage of the current research. However, some intriguing findings emerged. Firstly, the finding that as a group the community workers were experiencing high levels of burnout in terms of reduced personal accomplishment. Many reasons are provided to interpret this finding cautiously, but reduced levels of personal accomplishment are still a concern because low levels of satisfaction working with people and doubts over one's professional competence are likely to contribute to increased turnover, which the community sector and communities in general can ill afford.

The second finding of note is that as a group the community workers displayed an unexpected personality profile and were significantly different to the normative sample on all five personality dimensions. In particular, they were high on openness to experience and low on conscientiousness.

The openness dimension is the most controversial of all the Big Five factors (DeNeve & Cooper, 1998). In general this dimension suggests an unconventional orientation and incorporates elements of intellectual curiosity, active imagination, and perception (McCrae & John, 1992). The implication is that as a group the community workers typically show independence of judgment and are willing to re-examine social, political, and religious values and unwilling to accept authority and traditional ways of doing things. In hindsight the high scores on this domain fit with the flat hierarchies, varied nature of work, and the need to suspend judgement of others that are inherent in community work. The personality profile paints a picture of an unconventional group of people who are drawn to working at grass roots community level because of a desire to make changes and an unwillingness to accept the status quo.

The low scores on the conscientiousness dimension are also counter-intuitive. One would assume that involvement in such a demanding professional domain would presuppose relatively high levels of conscientiousness. However, it may be that the ambitious, achievement focused style that characterizes high conscientiousness (Barrick & Mount, 1991; Digman & Takemoto-Chock, 1981) does not fit well with the flat hierarchies and limited opportunities for career advancement inherent in small grass roots community organisations.

Finally, the current research provided preliminary support for the three dimensional model of well-being. The factor analysis provided confirmatory evidence of the orthogonality of the three scales used in the current research. In addition, the correlational analyses revealed different patterns of relationships between each well-being aspect and specific variables, and the regression analyses demonstrated that different predictors were significant for each aspect of well-being. The implications of these findings are that the whole of well-being may be more complex than the sum of its parts. In practical terms, this implies that researchers

who are interested in impacting on well-being or investigating the construct need to be aware of the separate and distinct aspects of well-being. Drawing conclusions about well-being based on only measuring one aspect of the construct may inadvertently lead to inaccurate assumptions. All three aspects are needed to fully understand the complex construct of well-being.

The purpose of the second phase of the current research was for the "Thriving in the Stress Place" intervention to significantly increase the well-being and coping resources, and significantly decrease the dysfunctional attitudes of the community workers in the experimental group. The anticipated differences between the experimental and control group were not found, perhaps because the experimental group exhibited significantly more negative stress related effects than the control group prior to the intervention. However, a possibly more notable finding was that the participants who actively incorporated the strategies learnt in the intervention into their lives exhibited significantly lower levels of negative affect and dysfunctional attitudes than those who did not do so. This finding has implications for future stress management research.

Firstly, it appears that there is value in exploring the appraisal process and in particular the link between appraisal and beliefs. The findings from the current research suggest that focusing exclusively on coping strategies or on well-being may not be as effective as allowing participants to identify dysfunctional beliefs that may affect the way they cope and impact on their well-being. The parallels between cognitive therapy in general, and rational-emotive therapy in particular, and Lazarus's ideas about the importance of cognitions and the role of an individual's perceptions suggest that the transactional model of stress and coping (Lazarus, 1966; Lazarus & Folkman, 1984) is an appropriate and effective model to further explore the role of beliefs in the stress process.

The primary implication is that it is essential for researchers to pay more attention to the distinction between acquisition and implementation of stress management and well-being techniques. To date, much research, the current study included, has fallen into the trap of focusing intensely on designing and delivering the best possible intervention so that the participants could successfully acquire the various

techniques and strategies. However, this approach has overlooked the importance of the implementation phase. The findings from the current research suggest that it is possible to impact on well-being and dysfunctional attitudes, but the critical factor is whether the participants actually implement the strategies after the intervention.

This suggests that there is an urgent need for researchers to pay more attention to strategies that make it easier for people to incorporate stress management and well-being techniques into both their work and personal lives. Facilitating and maintaining transfer of training effects appears to be as crucial as the process of teaching the techniques to reduce stress and enhance well-being. It is also important for the participants to appreciate the distinction between "knowing" and "doing". Participants or organisations who anticipate magical outcomes in terms of enhanced well-being or reduced stress simply by attending a workshop will be disappointed unless individual and organisational strategies are developed to maintain and build on what is learnt in workshops.

The general efficacy of individual level stress management interventions is poor. There are many pitfalls involved in research implementing stress management and well-being interventions at this level. The least of which involves the participants returning to an unchanged stressful occupational environment. However, in situations such as the current research, practical and financial constraints prohibited other options. The choice was to intervene at an individual level or not to intervene at all. Therefore, it is time to look more creatively at what can be done to enhance the effectiveness of individual level interventions. The findings from the current research suggest that one answer has been there all the time, but that the importance of the implementation stage has been undervalued.

It is also time to look at broader and more flexible criteria for evaluating the outcomes of stress and well-being interventions. For example, it is possible that there were positive outcomes from the intervention, such as the "collateral effects" discussed by Murphy (1996), that were not measured in the current research. There may have been benefits from bringing community workers from different organisations together to share their experiences or the participants may have

become more cognisant of the need for self-care. In addition, it is likely that the intervention contributed towards legitimizing stress as an occupational health issue and improving awareness about the nature of stress and the potential implications of chronic stress. In this way the intervention may have been health promotive, even if it did not directly impact on well-being. Until a broader perspective is taken on the potential beneficial outcomes of stress management, the true value of interventions will be underestimated.

It may also be that reducing stress and enhancing well-being is a multi-step process and that interventions could benefit from proceeding in stages, perhaps separated by several months. For example, the stages could include an initial step of enhancing awareness of the value of stress management, a second stage of skills acquisition, and a final stage of assisting with skills implementation. The implication for researchers conducting interventions is that it may take time for the participants to reach each stage and that it is essential that they do so before they proceed to the next. For example, the first stage of increasing awareness of the value of stress management and providing information about the detrimental effects of stress is essential because there is evidence that many people are unaware of their levels of stress (Kagan et al., 1995; Maslach, 1982). This idea is in contrast to the "hit and run" approach to stress management interventions currently favoured by many stress researchers.

The final conclusion from the phase two of the current research is that the beginning of the 21st century marks a need for a more innovative and creative approach towards stress management. Traditional methods have contributed valuable information, but the way of the future lies with fully exploring models such as the transactional approach to stress and coping (Lazarus, 1966; Lazarus & Folkman, 1984). This implies a need for conventional approaches and measures to be superseded by methods and constructs that are more able to capture the nature of the relationship between the person and the environment. Cooper et al. (2001) note that the "transactional perspective requires a fundamental shift in how stress is conceptualized and researched" (p. 13). Lazarus (1991) states that although the importance of the transactional model of stress and coping is now widely recognized, most researchers pay only "lip service to the most advanced theories

about the stress process" (p. 2). Occupational stress is a pressing and economically relevant occupational and social health concern (Murphy, 1995a; Reynolds, 1997; Sauter, 1992; Swanson et al., 1997). Stress researchers now have an obligation to find creative new ways to explore this perspective.

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Thriving in the Stress Place

A Two Day (One + One) Workshop for Community Workers

Raeburn House, ph: 441 8989 Ruth Jillings, ph: 443 9799 ext 9863

Information Sheet

Long term exposure to stress can be very debilitating and have serious consequences for a person's quality of life. The key to successful stress management is to tackle the issue in three stages. The first stage involves a stress audit to identify the nature of the existing stressors and the levels of any stress symptoms that are experienced. Stage two involves implementing a stress management programme targeted to the issues that are identified in stage one and stage three involves an evaluation of the programme.

Recently *Dr. Hillary Bennett* from Massey University and *Linda Marsh* from Raeburn House completed stage one of this process when they conducted a Stress Audit of community workers from small social service community organisations on the North Shore. They found that there are a diverse range of issues facing community workers including difficulties meeting deadlines with constant interruptions, having too many demands on resources, problems with funding and difficulties involved with working in isolation. In addition, community workers reported that they very rarely took time out for themselves. The implications of this situation are serious. There are consequences for the individual including a potential range of physical and mental health problems, less satisfactory personal relationships and less effective performance at work. There are also worrying consequences for the community because of the essential role small social service organisations play in contributing to the mental health and well-being of the community.

My name is *Ruth Jillings* and I would like to invite you to participate in stages two and three of the stress management process. As part of my Doctoral work I have developed a workshop specifically for community workers to help them deal with some of the stressful issues inherent in this type of work. In designing the course I have taken into account the findings of the stress audit done by Hillary and Linda. However, one of the key things about stress is that we all find different things stressful, so I have made it a priority that there will be plenty of scope to address individual issues. I am contacting you because your organisation has been identified by the staff of Raeburn House as being representative of the small social service community organisations associated with Raeburn House and I would like to give you the opportunity to participate.

I would also like to evaluate the long term effectiveness of the workshop for the community. To do this I would need to ask anyone who participates in the course to fill out three questionnaires, each taking approximately thirty minutes to complete. One questionnaire would be required before the workshop begins, one at the end of the workshop and one several months later. Completion of this third questionnaire would constitute the end of the research. I will provide you with Freepost envelopes so that you can return the questionnaires to me anonymously and at no cost to yourself.

Please be advised that this is an invitation to participate in the workshop , you are not obliged to participate and if you do choose to, you have the right to withdraw at any time. However, once the data from your questionnaires has been processed you will no longer be able to withdraw your data from the research. You also have the right to decline to answer any particular question and to have any of your own questions answered.

Please turn over ...

This workshop has been granted ethical approval by the Massey University Human Ethics Committee so you can feel confident that your privacy will be respected. The information from the questionnaires will be treated with the utmost confidentiality. All the data will be stored in a locked room in the School of Psychology until the research is complete, after which it will be destroyed. In addition, all the information will be used in aggregate form only and will not be used in any way to identify specific individuals. To ensure your anonymity no names or identifying marks will be used. However, you may be interested in receiving feedback on your questionnaires. To facilitate this you can create your own password and include this same password on each of your questionnaires. Then at the conclusion of the research, you can contact me and give me your password and I can make arrangements to give you individual feedback.

The information gained from the research will be made available to all participating organisations in the form of a research report.

Should you wish to discuss any of these aspects of the workshop or if you have any further questions or concerns, please don't hesitate to contact any of us:

Ruth Jillings, Massey University	ph: 439799 ext 9863 e-mail: gj-jillco@xtra.co.nz
Dr. Hillary Bennett, Massey University	ph: 443 9799 ext 9864 e-mail: H.F.Bennett@massey.ac.nz
Linda Marsh or *Carol Ryan*, Raeburn House	ph: 441 8989 e-mail: raeburn.house@xtra.co.nz

Regards,

Ruth Jillings Massey University	Hillary Bennett Massey University	Linda Marsh Raeburn House	Carol Ryan Raeburn House

Thriving in the Stress Place

A Two Day (One + One) Workshop for Community Workers

Questionnaire I

Thriving in the Stress Place

A Two Day (One + One) Workshop for Community Workers

Questionnaire 1

Thank you for agreeing to complete this questionnaire. Your assistance with this will facilitate the evaluation of the workshop. Completing this questionnaire also means that you give your informed consent to participate in the research.

You will find that this questionnaire is not difficult and that all you have to do to answer the questions is to write in or circle a number. The whole thing should only take around half an hour to complete. However, you will see that although the content of the questions is simple, there are occasionally changes in the instructions. Please take note of the different scales and answer the questions according to the scales provided. These are not the sort of questions with right and wrong answers so please try and answer all of the questions if you can. Also, please only give one answer per question. If you have difficulty choosing between two responses, chose the one that is ***most*** like you ***most*** of the time.

Once again, thank you for taking the time to fill in and return this questionnaire.

It really is appreciated.

Ruth Jillings
Massey University

Hillary Bennett
Massey University

Linda Marsh
Raeburn House

Carol Ryan
Raeburn House

Please continue ... ☞

Section A
Demographic Information

Before starting,
please write a personal code word in this space: .....

1. **Are you:** ◯ Permanent staff ◯ Casual staff ◯ Contractor

2. **Do you work:** ◯ Full time ◯ Part time

3. **How long have you been at your present job?** .....

4. **How many hours are you paid to work?** .....

5. **Approximately how many hours do you work in an average week?** .....

6. **How long have you been employed in community work?** .....

7. **Are you:** ◯ Single ◯ Living with a partner/ married ◯ Divorced/widowed

8. **Are you:** ◯ Female ◯ Male

9. **Please indicate your age group:**
◯ Under 20 ◯ 40 – 49
◯ 20 – 29 ◯ 50 – 59
◯ 30 – 39 ◯ 60 plus

10. **Would you classify yourself as:**
◯ Pakeha/European ◯ Pacific Island Peoples
◯ Asian ◯ Maori
◯ Other .....

11. **Please indicate the highest level of education you have reached:**
◯ School Certificate ◯ University Degree
◯ University Entrance ◯ Postgraduate Qualification
◯ Technical College ◯ Other .....

12. **Please indicate the number of dependants in each category living with you:**
◯ No dependants ..... Under 5 years ..... Over 18 years
..... 5 - 18 years ..... Elderly relatives

13. **Have you experienced any significant life events over the past six months?**
◯ Yes ◯ No

14. **If yes, how much would you say this life event affected you?**
◯ A great deal ◯ Moderately ◯ Not much at all

Section B

Listed below there are 22 statements of job related feelings. Because people from different organisations will answer these questions, the term ***recipients*** has been used to refer to the people for whom you provide your service. When answering these questions please think of these people as recipients of the service you provide, even though you may use another term in your work.

Please read each statement carefully and decide if you ever feel this way ***about your job***. If you have never had this feeling, write a "0" (zero) ***after*** the statement. If you have had this feeling, indicate how often you feel it by writing the number (from 1 to 6) that best describes how frequently you feel that way. For example, consider the statement "I feel depressed at work". If you ***never*** feel depressed at work, you would write the number "0" under the heading "HOW OFTEN". If you ***rarely*** feel depressed at work (a few times a year or less), you would write the number "1". If your feelings of depression at work are fairly frequent (a few times a week, but not every day), you would write the number "5".

How Often

0	1	2	3	4	5	6
Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

	Statements	How Often
1.	I feel emotionally drained from my work	
2.	I feel used up at the end of the workday	
3.	I feel fatigued when I get up in the morning and have to face another day on the job	
4.	I can easily understand how my recipients feel about things	
5.	I feel I treat some recipients as if they were impersonal objects	
6.	Working with people all day is really a strain for me.	
7.	I deal very efficiently with the problems of my recipients	
8.	I feel burned out from my work	
9.	I feel I'm positively influencing other people's lives through my work	
10.	I've become more callous toward people since I took this job	
11.	I worry that this job is hardening me emotionally	
12.	I feel very energetic	
13.	I feel frustrated by my job	
14.	I feel I'm working too hard on my job	
15.	I don't really care what happens to some recipients	
16.	Working with people directly puts too much stress on me	

Please continue ... ☞

0	1	2	3	4	5	6
Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

	Statements	How Often
17.	I can easily create a relaxed atmosphere with my recipients	
18.	I feel exhilarated after working closely with my recipients	
19.	I have accomplished many worthwhile things in this job	
20.	I feel like I'm at the end of my tether	
21.	In my work, I deal with emotional problems very calmly	
22.	I feel recipients blame me for some of their problems	

The following questions are about your life in general. After you have read each statement, please put a circle around the number in the box that ***best*** applies to you.

	Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
23.	I am not a worrier	1	2	3	4	5
24.	I like to have a lot of people around me	1	2	3	4	5
25.	I don't like to waste my time day dreaming	1	2	3	4	5
26.	I try to be courteous to everyone I meet	1	2	3	4	5
27.	I keep my belongings clean and neat	1	2	3	4	5
28.	I often feel inferior to others	1	2	3	4	5
29.	I laugh easily	1	2	3	4	5
30.	Once I find the right way to do something, I stick to it	1	2	3	4	5
31.	I often get into arguments with my family and co-workers	1	2	3	4	5
32.	I'm pretty good about pacing myself so as to get things done on time	1	2	3	4	5
33.	When I'm under a great deal of stress, sometimes I feel like I am going to pieces	1	2	3	4	5
34.	I don't consider myself especially "light-hearted"	1	2	3	4	5
35.	I am intrigued by the patterns I find in art and nature	1	2	3	4	5
36.	Some people think I'm selfish and egotistical	1	2	3	4	5
37.	I am not a very methodical person	1	2	3	4	5
38.	I rarely feel lonely or blue	1	2	3	4	5
39.	I really enjoy talking to people	1	2	3	4	5
40.	I believe letting students hear controversial speakers can only confuse and mislead them	1	2	3	4	5
41.	I would rather co-operate with others than compete with them	1	2	3	4	5
42.	I try to perform all the tasks assigned to me conscientiously	1	2	3	4	5
43.	I often feel tense and jittery	1	2	3	4	5
44.	I like to be where the action is	1	2	3	4	5
45.	Poetry has little or no effect on me	1	2	3	4	5
46.	I tend to be cynical and sceptical of others' intentions	1	2	3	4	5

Please continue ... ☞

	Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
47.	I have a clear set of goals and work toward them in an orderly fashion	1	2	3	4	5
48.	Sometimes I feel completely worthless	1	2	3	4	5
49.	I usually prefer to do things alone	1	2	3	4	5
50.	I often try new and ethnic foods	1	2	3	4	5
51.	I believe that most people will take advantage of you if you let them	1	2	3	4	5
52.	I waste a lot of time before settling down to work	1	2	3	4	5
53.	I rarely feel fearful or anxious	1	2	3	4	5
54.	I often feel as if I am bursting with energy	1	2	3	4	5
55.	I seldom notice the moods or feelings that different environments produce	1	2	3	4	5
56.	Most people I know like me	1	2	3	4	5
57.	I work hard to accomplish my goals	1	2	3	4	5
58.	I often get angry at the way people treat me	1	2	3	4	5
59.	I am a cheerful, high-spirited person	1	2	3	4	5
60.	I believe we should look to our religious authorities for decisions on moral issues	1	2	3	4	5
61.	Some people think of me as cold and calculating	1	2	3	4	5
62.	When I make a commitment, I can always be counted on to follow through	1	2	3	4	5
63.	Too often, when things go wrong, I get discouraged and feel like giving up	1	2	3	4	5
64.	I am not a cheerful optimist	1	2	3	4	5
65.	Sometimes when I am reading poetry or looking at a work of art, I feel a chill or a wave of excitement	1	2	3	4	5
66.	I'm hard-headed and tough-minded in my attitudes	1	2	3	4	5
67.	Sometimes I'm not as dependable or reliable as I should be	1	2	3	4	5
68.	I am seldom sad or depressed	1	2	3	4	5
69.	My life is fast-paced	1	2	3	4	5
70.	I have little interest in speculating on the nature of the universe or the human condition	1	2	3	4	5
71.	I generally try to be thoughtful and considerate	1	2	3	4	5

	Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
72.	I am a productive person who always gets the job done	1	2	3	4	5
73.	I often feel helpless and want someone else to solve my problems	1	2	3	4	5
74.	I am a very active person	1	2	3	4	5
75.	I have a lot of intellectual curiosity	1	2	3	4	5
76.	If I don't like people, I let them know it	1	2	3	4	5
77.	I never seem to be able to get organised	1	2	3	4	5
78.	At times I have been so ashamed I just wanted to hide	1	2	3	4	5
79.	I would rather go my own way than be a leader of others	1	2	3	4	5
80.	I often enjoy playing with theories or abstract ideas	1	2	3	4	5
81.	If necessary, I am willing to manipulate people to get what I want	1	2	3	4	5
82.	I strive for excellence in everything I do	1	2	3	4	5

Please continue ... ☞

The following questions ask about any medical complaints and how your health has been in general, ***over the past few weeks***. Please answer ALL the questions below by putting a circle around the number in the box that ***best*** applies to you.

Remember that the questions ask about ***present*** and ***recent*** complaints, not those that you had in the past.

Have you recently ...?

	Statements	Better than usual	Same as usual	Less than usual	Much less than usual
83.	Been feeling perfectly well and in good health	1	2	3	4
		Not at all	**No more than usual**	**Rather more than usual**	**Much more than usual**
84.	Been feeling in need of a good tonic	1	2	3	4
85.	Been feeling run down and out of sorts	1	2	3	4
86.	Felt that you are ill	1	2	3	4
87.	Been getting any pains in your head	1	2	3	4
88.	Been getting a feeling of tightness or pressure in your head	1	2	3	4
89.	Been having hot or cold spells	1	2	3	4
90.	Lost much sleep over worry	1	2	3	4
91.	Had difficulty staying asleep once you were asleep	1	2	3	4
92.	Felt constantly under strain	1	2	3	4
93.	Been getting edgy and bad tempered	1	2	3	4
94.	Been getting scared or panicky for no good reason	1	2	3	4
95.	Found everything getting on top of you	1	2	3	4
96.	Been feeling nervous and strung-out all the time	1	2	3	4
		More so than usual	**Same as usual**	**Rather less than usual**	**Much more than usual**
97.	Been managing to keep yourself busy and occupied	1	2	3	4

	Statements	Quicker than usual	Same as usual	Longer than usual	Much longer than usual
98.	Been taking longer over the things you do	1	2	3	4
		More so than usual	**Same as usual**	**Less than usual**	**Much less than usual**
99.	Felt on the whole you were doing things well	1	2	3	4
100.	Been satisfied with the way you've carried out your task	1	2	3	4
101.	Felt that you were playing a useful part in things	1	2	3	4
102.	Felt capable of making decisions about things	1	2	3	4
103.	Been able to enjoy your normal day-to-day activities	1	2	3	4
		Not at all	**No more than usual**	**Rather more than usual**	**Much more than usual**
104.	Been thinking of yourself as a worthless person	1	2	3	4
105.	Felt that life is entirely hopeless	1	2	3	4
106.	Felt that life isn't worth living	1	2	3	4
		Definitely not	**I don't think so**	**Has crossed my mind**	**Definitely have**
107.	Thought of the possibility that you might do away with yourself	1	2	3	4
		Not at all	**No more than usual**	**Rather more than usual**	**Much more than usual**
108.	Found at times you couldn't do anything because your nerves were too bad	1	2	3	4
109.	Found yourself wishing you were dead and away from it all	1	2	3	4
		Definitely not	**I don't think so**	**Has crossed my mind**	**Definitely have**
110.	Found the idea of taking your own life kept coming into your mind	1	2	3	4

Please continue ... ☞

Below is a list of life spheres or areas which can influence the way you feel. Please circle the number in the box which corresponds ***most*** closely to how satisfied you are with each of these areas of your life.

How satisfied are you with ...?

	Life Spheres / Areas	Completely dissatisfied	Dissatisfied	Somewhat satisfied	Completely satisfied
111.	Your job (work content, work role, interpersonal relations possibilities, etc.)	1	2	3	4
112.	Relations with your family	1	2	3	4
113.	Your children (their health and well-being)	1	2	3	4
114.	Nutrition	1	2	3	4
115.	Rest and relaxation	1	2	3	4
116.	Your material well-being	1	2	3	4
117.	Communication / interaction with friends	1	2	3	4
118.	Your social status	1	2	3	4
119.	Life prospect, future expectations	1	2	3	4
120.	Intimate relations / sexual satisfaction	1	2	3	4
121.	Hobbies, creativity, self-expression	1	2	3	4
122.	Your health	1	2	3	4

For each of the statements below, please circle the number in the box that ***best*** describes you in the last six months.

	Statements	Never or Rarely	Sometimes	Often	Always or Almost Always
123.	I have plenty of energy	1	2	3	4
124.	I say what I need or want without making excuses or dropping hints	1	2	3	4
125.	I like myself	1	2	3	4
126.	I am comfortable with the number of friends I have	1	2	3	4
127.	I eat junk food	1	2	3	4
128.	I feel as worthwhile as anyone else	1	2	3	4
129.	I am happy	1	2	3	4
130.	I am comfortable talking to strangers	1	2	3	4
131.	I am part of a group other than my own family, that cares about me	1	2	3	4
132.	I accept the mysteries of life and death	1	2	3	4
133.	I see myself as lovable	1	2	3	4
134.	I actively look for the positive side of people and situations	1	2	3	4
135.	I exercise vigorously 3 - 4 times per week	1	2	3	4
136.	I accept compliments easily	1	2	3	4
137.	I show others when I care about them	1	2	3	4
138.	I believe that people are willing to have me talk about my feelings	1	2	3	4
139.	I can show it when I am sad	1	2	3	4
140.	I am aware of my good qualities	1	2	3	4
141.	I express my feelings to close friends	1	2	3	4
142.	I can make sense out of my world	1	2	3	4
143.	My weight is within a few kilos of what I think it should be	1	2	3	4
144.	I believe in a power greater than myself	1	2	3	4
145.	I actively pursue happiness	1	2	3	4
146.	I can tell other people when I am hurt	1	2	3	4
147.	I encourage others to talk about their feelings	1	2	3	4

Please continue ... ☞

	Statements	Never or Rarely	Sometimes	Often	Always or Almost Always
148.	I like my body	1	2	3	4
149.	I initiate contact with people	1	2	3	4
150.	I confide in my friends	1	2	3	4
151.	I can cry when sad	1	2	3	4
152.	I want to be of service to others	1	2	3	4
153.	I can say what I need or want without putting others down	1	2	3	4
154.	I accept problems that I cannot change	1	2	3	4
155.	I know what is important in life	1	2	3	4
156.	I admit when I'm afraid of something	1	2	3	4
157.	I enjoy being with people	1	2	3	4
158.	I am tired	1	2	3	4
159.	I express my feelings clearly and directly	1	2	3	4
160.	Certain traditions play an important part in my life	1	2	3	4
161.	I express my feelings of joy	1	2	3	4
162.	I can identify my emotions	1	2	3	4
163.	I attend church or religious meetings	1	2	3	4
164.	I do stretching exercises	1	2	3	4
165.	I eat well-balanced meals	1	2	3	4
166.	I pray or meditate	1	2	3	4
167.	I accept my feelings of anger	1	2	3	4
168.	I seek to grow spiritually	1	2	3	4
169.	I can express my feelings of anger	1	2	3	4
170.	My values and beliefs help me to meet daily challenges	1	2	3	4
171.	I put myself down	1	2	3	4
172.	I get along well with others	1	2	3	4
173.	I snack between meals	1	2	3	4
174.	I take time to reflect on my life	1	2	3	4
175.	Other people like me	1	2	3	4
176.	I laugh whole-heartedly	1	2	3	4
177.	I am optimistic about my future	1	2	3	4

	Statements	Never or Rarely	Sometimes	Often	Always or Almost Always
178.	I get enough sleep	1	2	3	4
179.	My emotional life is stable	1	2	3	4
180.	I feel that no one cares about me	1	2	3	4
181.	I am shy	1	2	3	4
182.	I am in good physical shape	1	2	3	4

Please continue ...

The following questions list different attitudes or beliefs which people sometimes hold. Please read each statement carefully and decide how much you agree or disagree with the statement.

For each of the attitudes, circle the number in the box which ***best*** describes how you think. Please choose only one answer for each attitude. There are no right or wrong answers to these statements. To decide whether a given attitude is typical of your way of looking at things, simply keep in mind what you are like ***most of the time***.

	Statements	Totally Agree	Agree Very Much	Agree Slightly	Neutral	Disagree Slightly	Disagree Very Much	Totally Disagree
183.	It is difficult to be happy unless one is good looking, intelligent, rich and creative	1	2	3	4	5	6	7
184.	Happiness is more a matter of my attitude towards myself than the way other people feel about me	1	2	3	4	5	6	7
185.	People will probably think less of me if I make a mistake	1	2	3	4	5	6	7
186.	If I do not do well all the time, people will not respect me	1	2	3	4	5	6	7
187.	Taking even a small risk is foolish because the loss is likely to be a disaster	1	2	3	4	5	6	7
188.	It is possible to gain another person's respect without being especially talented at anything	1	2	3	4	5	6	7
189.	I cannot be happy unless most people I know admire me	1	2	3	4	5	6	7
190.	If a person asks for help, it is a sign of weakness	1	2	3	4	5	6	7
191.	If I do not do as well as other people it means I am an inferior human being	1	2	3	4	5	6	7
192.	If I fail at my work, then I am a failure as a person	1	2	3	4	5	6	7
193.	If you cannot do something well, there is little point in doing it at all	1	2	3	4	5	6	7
194.	Making mistakes is fine because I can learn from them	1	2	3	4	5	6	7
195.	If someone disagrees with me, it probably indicates he/she doesn't like me	1	2	3	4	5	6	7

	Statements	Totally Agree	Agree Very Much	Agree Slightly	Neutral	Disagree Slightly	Disagree Very Much	Totally Disagree
196.	If I fail partly, it is as bad as being a complete failure	1	2	3	4	5	6	7
197.	If other people know what you are really like, they will think less of you	1	2	3	4	5	6	7
198.	I am nothing if a person I love doesn't love me	1	2	3	4	5	6	7
199.	One can get pleasure from an activity regardless of the end result	1	2	3	4	5	6	7
200.	People should have a reasonable likelihood of success before undertaking anything	1	2	3	4	5	6	7
201.	My value as a person depends greatly on what others think of me	1	2	3	4	5	6	7
202.	If I don't set the highest standards for myself, I am likely to end up a second rate person	1	2	3	4	5	6	7
203.	If I am to be a worthwhile person, I must be truly outstanding in at least one major respect	1	2	3	4	5	6	7
204.	People who have good ideas are more worthy than those who do not	1	2	3	4	5	6	7
205.	I should be upset if I made a mistake	1	2	3	4	5	6	7
206.	My own opinions of myself are more important than other's opinions of me	1	2	3	4	5	6	7
207.	To be a good, moral, worthwhile person, I must help everyone who needs it	1	2	3	4	5	6	7
208.	If I ask a question, it makes me look inferior	1	2	3	4	5	6	7
209.	It is awful to be disapproved of by people important to you	1	2	3	4	5	6	7
210.	If you don't have other people to lean on, you are bound to be sad	1	2	3	4	5	6	7
211.	I can reach important goals without slave-driving myself	1	2	3	4	5	6	7
212.	It is possible for a person to be told off and not get upset	1	2	3	4	5	6	7

Please continue ... ☞

	Statements	Totally Agree	Agree Very Much	Agree Slightly	Neutral	Disagree Slightly	Disagree Very Much	Totally Disagree
213.	I can't trust other people because they might be cruel to me	1	2	3	4	5	6	7
214.	If others dislike you, you cannot be happy	1	2	3	4	5	6	7
215.	It is best to give up your own interests in order to please other people	1	2	3	4	5	6	7
216.	My happiness depends more on other people than it does on me	1	2	3	4	5	6	7
217.	I don't need the approval of other people in order to be happy	1	2	3	4	5	6	7
218.	If a person avoids problems, the problems tend to go away	1	2	3	4	5	6	7
219.	I can be happy even when I miss out on many of the good things in life	1	2	3	4	5	6	7
220.	What other people think about me is very important	1	2	3	4	5	6	7
221.	Being isolated from others is bound to lead to unhappiness	1	2	3	4	5	6	7
222.	I can find happiness without being loved by another person	1	2	3	4	5	6	7

Please read each of the five statements below and decide how much you agree or disagree with the statement. Circle the number which corresponds to your agreement with each statement. Please be open and honest in your responding.

Do you agree that ...?

	Statements	Strongly disagree	Disagree	Slightly disagree	Neutral	Slightly agree	Agree	Strongly agree
223.	In most ways my life is close to ideal	1	2	3	4	5	6	7
224.	The conditions of my life are excellent	1	2	3	4	5	6	7
225.	I am satisfied with my life	1	2	3	4	5	6	7
226.	So far I have achieved the important things I want in life	1	2	3	4	5	6	7
227.	If I could live my life over again, I would change almost nothing	1	2	3	4	5	6	7

Please continue ...

The table below lists a number of words that describe different feelings and emotions. Please read each word and circle the number in the box that ***best*** describes to what extent you have felt this way during the past few weeks.

Have you felt ...?

	Statements	Slightly or not at all	A little	Moderately	Quite a bit	Extremely
228.	Interested	1	2	3	4	5
229.	Distressed	1	2	3	4	5
230.	Excited	1	2	3	4	5
231.	Upset	1	2	3	4	5
232.	Strong	1	2	3	4	5
233.	Guilty	1	2	3	4	5
234.	Scared	1	2	3	4	5
235.	Hostile	1	2	3	4	5
236.	Enthusiastic	1	2	3	4	5
237.	Proud	1	2	3	4	5
238.	Irritable	1	2	3	4	5
239.	Alert	1	2	3	4	5
240.	Ashamed	1	2	3	4	5
241.	Inspired	1	2	3	4	5
242.	Nervous	1	2	3	4	5
243.	Determined	1	2	3	4	5
244.	Attentive	1	2	3	4	5
245.	Jittery	1	2	3	4	5
246.	Active	1	2	3	4	5
247.	Afraid	1	2	3	4	5

Thriving in the Stress Place

A Two Day (One + One) Workshop for Community Workers

Questionnaire 2

Thriving in the Stress Place

A Two Day (One + One) Workshop for Community Workers

Questionnaire 2

Thank you for agreeing to complete this questionnaire. Your assistance with this will facilitate the evaluation of the workshop. Completing this questionnaire also means that you give your informed consent to participate in the research.

You will find that this questionnaire is not difficult and that all you have to do to answer the questions is to write in or circle a number. The whole thing should only take around half an hour to complete. However, you will see that although the content of the questions is simple, there are occasionally changes in the instructions. Please take note of the different scales and answer the questions according to the scales provided. These are not the sort of questions with right and wrong answers so please try and answer all of the questions if you can. Also, please only give one answer per question. If you have difficulty choosing between two responses, chose the one that is ***most*** like you ***most*** of the time.

Once again, thank you for taking the time to fill in and return this questionnaire.

It really is appreciated.

Ruth Jillings
Massey University

Hillary Bennett
Massey University

Linda Marsh
Raeburn House

Carol Ryan
Raeburn House

Please continue ... ☞

Section A
Demographic Information

Before starting,
please write a personal code word in this space: .....

1. **Are you:** ◯ Permanent staff ◯ Casual staff ◯ Contractor

2. **Do you work:** ◯ Full time ◯ Part time

3. **How long have you been at your present job?** .....

4. **How many hours are you paid to work?** .....

5. **Approximately how many hours do you work in an average week?** .....

6. **How long have you been employed in community work?** .....

7. **Are you:** ◯ Single ◯ Living with a partner/ married ◯ Divorced/widowed

8. **Are you:** ◯ Female ◯ Male

9. **Please indicate your age group:**
◯ Under 20 ◯ 40 – 49
◯ 20 – 29 ◯ 50 – 59
◯ 30 – 39 ◯ 60 plus

10. **Would you classify yourself as:**
◯ Pakeha/European ◯ Pacific Island Peoples
◯ Asian ◯ Maori
◯ Other .....

11. **Please indicate the highest level of education you have reached:**
◯ School Certificate ◯ University Degree
◯ University Entrance ◯ Postgraduate Qualification
◯ Technical College ◯ Other .....

12. **Please indicate the number of dependants in each category living with you:**
◯ No dependants ..... Under 5 years ..... Over 18 years
..... 5 - 18 years ..... Elderly relatives

13. **Have you experienced any significant life events over the past six months?**
◯ Yes ◯ No

14. **If yes, how much would you say this life event affected you?**
◯ A great deal ◯ Moderately ◯ Not much at all

Section B

Listed below there are 22 statements of job related feelings. Because people from different organisations will answer these questions, the term ***recipients*** has been used to refer to the people for whom you provide your service. When answering these questions please think of these people as recipients of the service you provide, even though you may use another term in your work.

Please read each statement carefully and decide if you ever feel this way ***about your job***. If you have never had this feeling, write a "0" (zero) ***after*** the statement. If you have had this feeling, indicate how often you feel it by writing the number (from 1 to 6) that best describes how frequently you feel that way. For example, consider the statement "I feel depressed at work". If you ***never*** feel depressed at work, you would write the number "0" under the heading "HOW OFTEN". If you ***rarely*** feel depressed at work (a few times a year or less), you would write the number "1". If your feelings of depression at work are fairly frequent (a few times a week, but not every day), you would write the number "5".

How Often

0	1	2	3	4	5	6
Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

	Statements	How Often
1.	I feel emotionally drained from my work	
2.	I feel used up at the end of the workday	
3.	I feel fatigued when I get up in the morning and have to face another day on the job	
4.	I can easily understand how my recipients feel about things	
5.	I feel I treat some recipients as if they were impersonal objects	
6.	Working with people all day is really a strain for me.	
7.	I deal very efficiently with the problems of my recipients	
8.	I feel burned out from my work	
9.	I feel I'm positively influencing other people's lives through my work	
10.	I've become more callous toward people since I took this job	
11.	I worry that this job is hardening me emotionally	
12.	I feel very energetic	
13.	I feel frustrated by my job	
14.	I feel I'm working too hard on my job	
15.	I don't really care what happens to some recipients	
16.	Working with people directly puts too much stress on me	

Please continue ... ☞

0	1	2	3	4	5	6
Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

	Statements	How Often
17.	I can easily create a relaxed atmosphere with my recipients	
18.	I feel exhilarated after working closely with my recipients	
19.	I have accomplished many worthwhile things in this job	
20.	I feel like I'm at the end of my tether	
21.	In my work, I deal with emotional problems very calmly	
22.	I feel recipients blame me for some of their problems	

The following questions ask about any medical complaints and how your health has been in general, ***over the past few weeks***. Please answer ALL the questions below by putting a circle around the number in the box that ***best*** applies to you.

Remember that the questions ask about ***present*** and ***recent*** complaints, not those that you had in the past.

Have you recently ...?

	Statements	Better than usual	Same as usual	Less than usual	Much less than usual
23.	Been feeling perfectly well and in good health	1	2	3	4
		Not at all	No more than usual	Rather more than usual	Much more than usual
24.	Been feeling in need of a good tonic	1	2	3	4
25.	Been feeling run down and out of sorts	1	2	3	4
26.	Felt that you are ill	1	2	3	4
27.	Been getting any pains in your head	1	2	3	4
28.	Been getting a feeling of tightness or pressure in your head	1	2	3	4
29.	Been having hot or cold spells	1	2	3	4
30.	Lost much sleep over worry	1	2	3	4
31.	Had difficulty staying asleep once you were asleep	1	2	3	4
32.	Felt constantly under strain	1	2	3	4
33.	Been getting edgy and bad tempered	1	2	3	4
34.	Been getting scared or panicky for no good reason	1	2	3	4
35.	Found everything getting on top of you	1	2	3	4
36.	Been feeling nervous and strung-out all the time	1	2	3	4
		More so than usual	Same as usual	Rather less than usual	Much more than usual
37.	Been managing to keep yourself busy and occupied	1	2	3	4

Please continue ... ☞

	Statements	Quicker than usual	Same as usual	Longer than usual	Much longer than usual
38.	Been taking longer over the things you do	1	2	3	4
		More so than usual	Same as usual	Less than usual	Much less than usual
39.	Felt on the whole you were doing things well	1	2	3	4
40.	Been satisfied with the way you've carried out your task	1	2	3	4
41.	Felt that you were playing a useful part in things	1	2	3	4
42.	Felt capable of making decisions about things	1	2	3	4
43.	Been able to enjoy your normal day-to-day activities	1	2	3	4
		Not at all	No more than usual	Rather more than usual	Much more than usual
44.	Been thinking of yourself as a worthless person	1	2	3	4
45.	Felt that life is entirely hopeless	1	2	3	4
46.	Felt that life isn't worth living	1	2	3	4
		Definitely not	I don't think so	Has crossed my mind	Definitely have
47.	Thought of the possibility that you might do away with yourself	1	2	3	4
		Not at all	No more than usual	Rather more than usual	Much more than usual
48.	Found at times you couldn't do anything because your nerves were too bad	1	2	3	4
49.	Found yourself wishing you were dead and away from it all	1	2	3	4
		Definitely not	I don't think so	Has crossed my mind	Definitely have
50.	Found the idea of taking your own life kept coming into your mind	1	2	3	4

Below is a list of life spheres or areas which can influence the way you feel. Please circle the number in the box which corresponds ***most*** closely to how satisfied you are with each of these areas of your life.

How satisfied are you with ...?

	Life Spheres / Areas	Completely dissatisfied	Dissatisfied	Somewhat satisfied	Completely satisfied
51.	Your job (work content, work role, interpersonal relations possibilities, etc.)	1	2	3	4
52.	Relations with your family	1	2	3	4
53.	Your children (their health and well-being)	1	2	3	4
54.	Nutrition	1	2	3	4
55.	Rest and relaxation	1	2	3	4
56.	Your material well-being	1	2	3	4
57.	Communication / interaction with friends	1	2	3	4
58.	Your social status	1	2	3	4
59.	Life prospect, future expectations	1	2	3	4
60.	Intimate relations / sexual satisfaction	1	2	3	4
61.	Hobbies, creativity, self-expression	1	2	3	4
62.	Your health	1	2	3	4

Please continue ... ☞

For each of the statements below, please circle the number in the box that ***best*** describes you in the last six months.

	Statements	Never or Rarely	Sometimes	Often	Always or Almost Always
63.	I have plenty of energy	1	2	3	4
64.	I say what I need or want without making excuses or dropping hints	1	2	3	4
65.	I like myself	1	2	3	4
66.	I am comfortable with the number of friends I have	1	2	3	4
67.	I eat junk food	1	2	3	4
68.	I feel as worthwhile as anyone else	1	2	3	4
69.	I am happy	1	2	3	4
70.	I am comfortable talking to strangers	1	2	3	4
71.	I am part of a group other than my own family, that cares about me	1	2	3	4
72.	I accept the mysteries of life and death	1	2	3	4
73.	I see myself as lovable	1	2	3	4
74.	I actively look for the positive side of people and situations	1	2	3	4
75.	I exercise vigorously 3 - 4 times per week	1	2	3	4
76.	I accept compliments easily	1	2	3	4
77.	I show others when I care about them	1	2	3	4
78.	I believe that people are willing to have me talk about my feelings	1	2	3	4
79.	I can show it when I am sad	1	2	3	4
80.	I am aware of my good qualities	1	2	3	4
81.	I express my feelings to close friends	1	2	3	4
82.	I can make sense out of my world	1	2	3	4
83.	My weight is within a few kilos of what I think it should be	1	2	3	4
84.	I believe in a power greater than myself	1	2	3	4
85.	I actively pursue happiness	1	2	3	4
86.	I can tell other people when I am hurt	1	2	3	4
87.	I encourage others to talk about their feelings	1	2	3	4

	Statements	Never or Rarely	Sometimes	Often	Always or Almost Always
88.	I like my body	1	2	3	4
89.	I initiate contact with people	1	2	3	4
90.	I confide in my friends	1	2	3	4
91.	I can cry when sad	1	2	3	4
92.	I want to be of service to others	1	2	3	4
93.	I can say what I need or want without putting others down	1	2	3	4
94.	I accept problems that I cannot change	1	2	3	4
95.	I know what is important in life	1	2	3	4
96.	I admit when I'm afraid of something	1	2	3	4
97.	I enjoy being with people	1	2	3	4
98.	I am tired	1	2	3	4
99.	I express my feelings clearly and directly	1	2	3	4
100.	Certain traditions play an important part in my life	1	2	3	4
101.	I express my feelings of joy	1	2	3	4
102.	I can identify my emotions	1	2	3	4
103.	I attend church or religious meetings	1	2	3	4
104.	I do stretching exercises	1	2	3	4
105.	I eat well-balanced meals	1	2	3	4
106.	I pray or meditate	1	2	3	4
107.	I accept my feelings of anger	1	2	3	4
108.	I seek to grow spiritually	1	2	3	4
109.	I can express my feelings of anger	1	2	3	4
110.	My values and beliefs help me to meet daily challenges	1	2	3	4
111.	I put myself down	1	2	3	4
112.	I get along well with others	1	2	3	4
113.	I snack between meals	1	2	3	4
114.	I take time to reflect on my life	1	2	3	4
115.	Other people like me	1	2	3	4
116.	I laugh whole-heartedly	1	2	3	4
117.	I am optimistic about my future	1	2	3	4

Please continue ... 

	Statements	Never or Rarely	Sometimes	Often	Always or Almost Always
118.	I get enough sleep	1	2	3	4
119.	My emotional life is stable	1	2	3	4
120.	I feel that no one cares about me	1	2	3	4
121.	I am shy	1	2	3	4
122.	I am in good physical shape	1	2	3	4

The following questions list different attitudes or beliefs which people sometimes hold. Please read each statement carefully and decide how much you agree or disagree with the statement.

For each of the attitudes, circle the number in the box which ***best*** describes how you think. Please choose only one answer for each attitude. There are no right or wrong answers to these statements. To decide whether a given attitude is typical of your way of looking at things, simply keep in mind what you are like ***most of the time***.

	Statements	Totally Agree	Agree Very Much	Agree Slightly	Neutral	Disagree Slightly	Disagree Very Much	Totally Disagree
123.	It is difficult to be happy unless one is good looking, intelligent, rich and creative	1	2	3	4	5	6	7
124.	Happiness is more a matter of my attitude towards myself than the way other people feel about me	1	2	3	4	5	6	7
125.	People will probably think less of me if I make a mistake	1	2	3	4	5	6	7
126.	If I do not do well all the time, people will not respect me	1	2	3	4	5	6	7
127.	Taking even a small risk is foolish because the loss is likely to be a disaster	1	2	3	4	5	6	7
128.	It is possible to gain another person's respect without being especially talented at anything.	1	2	3	4	5	6	7
129.	I cannot be happy unless most people I know admire me	1	2	3	4	5	6	7
130.	If a person asks for help, it is a sign of weakness	1	2	3	4	5	6	7
131.	If I do not do as well as other people it means I am an inferior human being	1	2	3	4	5	6	7
132.	If I fail at my work, then I am a failure as a person	1	2	3	4	5	6	7
133.	If you cannot do something well, there is little point in doing it at all	1	2	3	4	5	6	7
134.	Making mistakes is fine because I can learn from them	1	2	3	4	5	6	7
135.	If someone disagrees with me, it probably indicates he/she doesn't like me	1	2	3	4	5	6	7

Please continue ... 

	Statements	Totally Agree	Agree Very Much	Agree Slightly	Neutral	Disagree Slightly	Disagree Very Much	Totally Disagree
136.	If I fail partly, it is as bad as being a complete failure	1	2	3	4	5	6	7
137.	If other people know what you are really like, they will think less of you	1	2	3	4	5	6	7
138.	I am nothing if a person I love doesn't love me	1	2	3	4	5	6	7
139.	One can get pleasure from an activity regardless of the end result	1	2	3	4	5	6	7
140.	People should have a reasonable likelihood of success before undertaking anything	1	2	3	4	5	6	7
141.	My value as a person depends greatly on what others think of me	1	2	3	4	5	6	7
142.	If I don't set the highest standards for myself, I am likely to end up a second rate person	1	2	3	4	5	6	7
143.	If I am to be a worthwhile person, I must be truly outstanding in at least one major respect	1	2	3	4	5	6	7
144.	People who have good ideas are more worthy than those who do not	1	2	3	4	5	6	7
145.	I should be upset if I made a mistake	1	2	3	4	5	6	7
146.	My own opinions of myself are more important than other's opinions of me	1	2	3	4	5	6	7
147.	To be a good, moral, worthwhile person, I must help everyone who needs it	1	2	3	4	5	6	7
148.	If I ask a question, it makes me look inferior	1	2	3	4	5	6	7
149.	It is awful to be disapproved of by people important to you	1	2	3	4	5	6	7
150.	If you don't have other people to lean on, you are bound to be sad	1	2	3	4	5	6	7
151.	I can reach important goals without slave-driving myself	1	2	3	4	5	6	7
152.	It is possible for a person to be told off and not get upset	1	2	3	4	5	6	7

	Statements	Totally Agree	Agree Very Much	Agree Slightly	Neutral	Disagree Slightly	Disagree Very Much	Totally Disagree
153.	I can't trust other people because they might be cruel to me	1	2	3	4	5	6	7
154.	If others dislike you, you cannot be happy	1	2	3	4	5	6	7
155.	It is best to give up your own interests in order to please other people	1	2	3	4	5	6	7
156.	My happiness depends more on other people than it does on me	1	2	3	4	5	6	7
157.	I don't need the approval of other people in order to be happy	1	2	3	4	5	6	7
158.	If a person avoids problems, the problems tend to go away	1	2	3	4	5	6	7
159.	I can be happy even when I miss out on many of the good things in life	1	2	3	4	5	6	7
160.	What other people think about me is very important	1	2	3	4	5	6	7
161.	Being isolated from others is bound to lead to unhappiness	1	2	3	4	5	6	7
162.	I can find happiness without being loved by another person	1	2	3	4	5	6	7

Please continue ... ☞

Please read each of the five statements below and decide how much you agree or disagree with the statement. Circle the number which corresponds to your agreement with each statement. Please be open and honest in your responding.

Do you agree that ...?

	Statements	Strongly disagree	Disagree	Slightly disagree	Neutral	Slightly agree	Agree	Strongly agree
163.	In most ways my life is close to ideal	1	2	3	4	5	6	7
164.	The conditions of my life are excellent	1	2	3	4	5	6	7
165.	I am satisfied with my life	1	2	3	4	5	6	7
166.	So far I have achieved the important things I want in life	1	2	3	4	5	6	7
167.	If I could live my life over again, I would change almost nothing	1	2	3	4	5	6	7

The table below lists a number of words that describe different feelings and emotions. Please read each word and circle the number in the box that ***best*** describes to what extent you have felt this way during the past few weeks.

Have you felt ...?

	Statements	Slightly or not at all	A little	Moderately	Quite a bit	Extremely
168.	Interested	1	2	3	4	5
169.	Distressed	1	2	3	4	5
170.	Excited	1	2	3	4	5
171.	Upset	1	2	3	4	5
172.	Strong	1	2	3	4	5
173.	Guilty	1	2	3	4	5
174.	Scared	1	2	3	4	5
175.	Hostile	1	2	3	4	5
176.	Enthusiastic	1	2	3	4	5
177.	Proud	1	2	3	4	5
178.	Irritable	1	2	3	4	5
179.	Alert	1	2	3	4	5
180.	Ashamed	1	2	3	4	5
181.	Inspired	1	2	3	4	5
182.	Nervous	1	2	3	4	5
183.	Determined	1	2	3	4	5
184.	Attentive	1	2	3	4	5
185.	Jittery	1	2	3	4	5
186.	Active	1	2	3	4	5
187.	Afraid	1	2	3	4	5

Please continue ... ☞

Section C

1. **How helpful did you find this workshop?**

- ◯ Extremely Helpful
- ◯ Very Helpful
- ◯ Moderately Helpful
- ◯ Not Sure
- ◯ Moderately Unhelpful
- ◯ Very Unhelpful
- ◯ Extremely Unhelpful

2. **To what extent do you think this workshop will enable you to be more effective at managing the stress in your life?**

- ◯ Very slightly or not at all
- ◯ A little
- ◯ Moderately
- ◯ Quite a bit
- ◯ Extremely

3. **What were the most helpful things that you learnt in this workshop?**

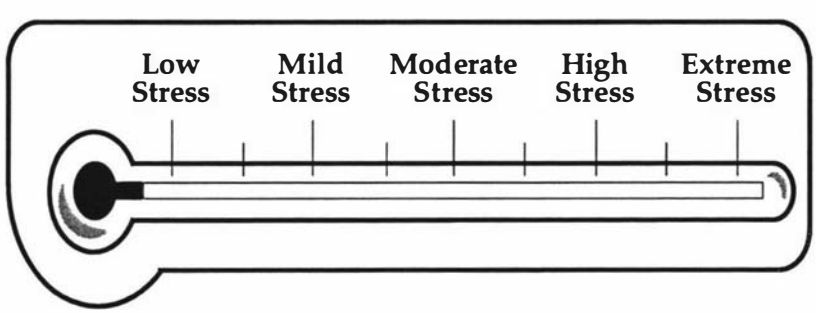
.....

.....

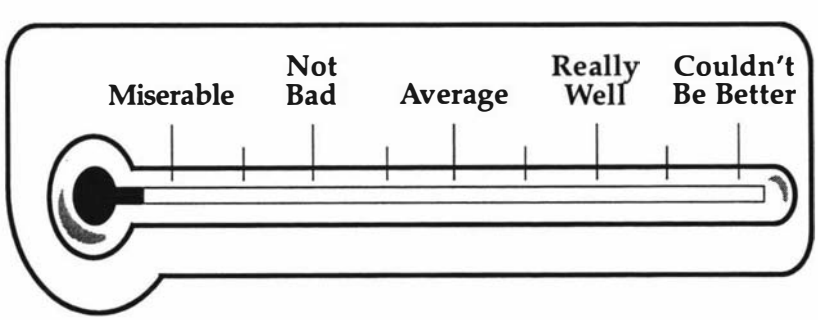
.....

.....

4. **All things considered over the past week, how would you rate your stress levels?**



5. **All things considered over the past week, how have you been feeling overall?**



Section D

Do you have any suggestions for improving this workshop?

Thriving in the Stress Place

A Two Day (One + One) Workshop for Community Workers

Questionnaire 3

Thriving in the Stress Place

A Two Day (One + One) Workshop for Community Workers

Questionnaire 3

Thank you for agreeing to complete this questionnaire. Your assistance with this will facilitate the evaluation of the workshop. Completing this questionnaire also means that you give your informed consent to participate in the research.

You will find that this questionnaire is not difficult and that all you have to do to answer the questions is to write in or circle a number. The whole thing should only take around half an hour to complete. However, you will see that although the content of the questions is simple, there are occasionally changes in the instructions. Please take note of the different scales and answer the questions according to the scales provided. These are not the sort of questions with right and wrong answers so please try and answer all of the questions if you can. Also, please only give one answer per question. If you have difficulty choosing between two responses, chose the one that is ***most*** like you ***most*** of the time.

Once again, thank you for taking the time to fill in and return this questionnaire.

It really is appreciated.

Ruth Jillings
Massey University

Hillary Bennett
Massey University

Linda Marsh
Raeburn House

Carol Ryan
Raeburn House

Please continue ... ☞

Section A
Demographic Information

Before starting,
please write a personal code word in this space: .....

1. **Are you:** ◯ Permanent staff ◯ Casual staff ◯ Contractor

2. **Do you work:** ◯ Full time ◯ Part time

3. **How long have you been at your present job?** .....

4. **How many hours are you paid to work?** .....

5. **Approximately how many hours do you work in an average week?** .....

6. **How long have you been employed in community work?** .....

7. **Are you:** ◯ Single ◯ Living with a partner/ married ◯ Divorced/widowed

8. **Are you:** ◯ Female ◯ Male

9. **Please indicate your age group:**
◯ Under 20 ◯ 40 – 49
◯ 20 – 29 ◯ 50 – 59
◯ 30 – 39 ◯ 60 plus

10. **Would you classify yourself as:**
◯ Pakeha/European ◯ Pacific Island Peoples
◯ Asian ◯ Maori
◯ Other .....

11. **Please indicate the highest level of education you have reached:**
◯ School Certificate ◯ University Degree
◯ University Entrance ◯ Postgraduate Qualification
◯ Technical College ◯ Other .....

12. **Please indicate the number of dependants in each category living with you:**
◯ No dependants ..... Under 5 years ..... Over 18 years
..... 5 - 18 years ..... Elderly relatives

13. **Have you experienced any significant life events over the past six months?**
◯ Yes ◯ No

14. **If yes, how much would you say this life event affected you?**
◯ A great deal ◯ Moderately ◯ Not much at all

Section B

Listed below there are 22 statements of job related feelings. Because people from different organisations will answer these questions, the term ***recipients*** has been used to refer to the people for whom you provide your service. When answering these questions please think of these people as recipients of the service you provide, even though you may use another term in your work.

Please read each statement carefully and decide if you ever feel this way ***about your job***. If you have never had this feeling, write a "0" (zero) ***after*** the statement. If you have had this feeling, indicate how often you feel it by writing the number (from 1 to 6) that best describes how frequently you feel that way. For example, consider the statement "I feel depressed at work". If you ***never*** feel depressed at work, you would write the number "0" under the heading "HOW OFTEN". If you ***rarely*** feel depressed at work (a few times a year or less), you would write the number "1". If your feelings of depression at work are fairly frequent (a few times a week, but not every day), you would write the number "5".

How Often

0	1	2	3	4	5	6
Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

	Statements	How Often
1.	I feel emotionally drained from my work	
2.	I feel used up at the end of the workday	
3.	I feel fatigued when I get up in the morning and have to face another day on the job	
4.	I can easily understand how my recipients feel about things	
5.	I feel I treat some recipients as if they were impersonal objects	
6.	Working with people all day is really a strain for me.	
7.	I deal very efficiently with the problems of my recipients	
8.	I feel burned out from my work	
9.	I feel I'm positively influencing other people's lives through my work	
10.	I've become more callous toward people since I took this job	
11.	I worry that this job is hardening me emotionally	
12.	I feel very energetic	
13.	I feel frustrated by my job	
14.	I feel I'm working too hard on my job	
15.	I don't really care what happens to some recipients	
16.	Working with people directly puts too much stress on me	

Please continue ... ☞

0	1	2	3	4	5	6
Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

	Statements	How Often
17.	I can easily create a relaxed atmosphere with my recipients	
18.	I feel exhilarated after working closely with my recipients	
19.	I have accomplished many worthwhile things in this job	
20.	I feel like I'm at the end of my tether	
21.	In my work, I deal with emotional problems very calmly	
22.	I feel recipients blame me for some of their problems	

The following questions ask about any medical complaints and how your health has been in general, ***over the past few weeks***. Please answer ALL the questions below by putting a circle around the number in the box that ***best*** applies to you.

Remember that the questions ask about ***present*** and ***recent*** complaints, not those that you had in the past.

Have you recently ...?

	Statements	Better than usual	Same as usual	Less than usual	Much less than usual
23.	Been feeling perfectly well and in good health	1	2	3	4
		Not at all	**No more than usual**	**Rather more than usual**	**Much more than usual**
24.	Been feeling in need of a good tonic	1	2	3	4
25.	Been feeling run down and out of sorts	1	2	3	4
26.	Felt that you are ill	1	2	3	4
27.	Been getting any pains in your head	1	2	3	4
28.	Been getting a feeling of tightness or pressure in your head	1	2	3	4
29.	Been having hot or cold spells	1	2	3	4
30.	Lost much sleep over worry	1	2	3	4
31.	Had difficulty staying asleep once you were asleep	1	2	3	4
32.	Felt constantly under strain	1	2	3	4
33.	Been getting edgy and bad tempered	1	2	3	4
34.	Been getting scared or panicky for no good reason	1	2	3	4
35.	Found everything getting on top of you	1	2	3	4
36.	Been feeling nervous and strung-out all the time	1	2	3	4
		More so than usual	**Same as usual**	**Rather less than usual**	**Much more than usual**
37.	Been managing to keep yourself busy and occupied	1	2	3	4

Please continue ... ☞

	Statements	Quicker than usual	Same as usual	Longer than usual	Much longer than usual
38.	Been taking longer over the things you do	1	2	3	4
		More so than usual	Same as usual	Less than usual	Much less than usual
39.	Felt on the whole you were doing things well	1	2	3	4
40.	Been satisfied with the way you've carried out your task	1	2	3	4
41.	Felt that you were playing a useful part in things	1	2	3	4
42.	Felt capable of making decisions about things	1	2	3	4
43.	Been able to enjoy your normal day-to-day activities	1	2	3	4
		Not at all	No more than usual	Rather more than usual	Much more than usual
44.	Been thinking of yourself as a worthless person	1	2	3	4
45.	Felt that life is entirely hopeless	1	2	3	4
46.	Felt that life isn't worth living	1	2	3	4
		Definitely not	I don't think so	Has crossed my mind	Definitely have
47.	Thought of the possibility that you might do away with yourself	1	2	3	4
		Not at all	No more than usual	Rather more than usual	Much more than usual
48.	Found at times you couldn't do anything because your nerves were too bad	1	2	3	4
49.	Found yourself wishing you were dead and away from it all	1	2	3	4
		Definitely not	I don't think so	Has crossed my mind	Definitely have
50.	Found the idea of taking your own life kept coming into your mind	1	2	3	4

Below is a list of life spheres or areas which can influence the way you feel. Please circle the number in the box which corresponds ***most*** closely to how satisfied you are with each of these areas of your life.

How satisfied are you with ...?

	Life Spheres / Areas	Completely dissatisfied	Dissatisfied	Somewhat satisfied	Completely satisfied
51.	Your job (work content, work role, interpersonal relations possibilities, etc.)	1	2	3	4
52.	Relations with your family	1	2	3	4
53.	Your children (their health and well-being)	1	2	3	4
54.	Nutrition	1	2	3	4
55.	Rest and relaxation	1	2	3	4
56.	Your material well-being	1	2	3	4
57.	Communication / interaction with friends	1	2	3	4
58.	Your social status	1	2	3	4
59.	Life prospect, future expectations	1	2	3	4
60.	Intimate relations / sexual satisfaction	1	2	3	4
61.	Hobbies, creativity, self-expression	1	2	3	4
62.	Your health	1	2	3	4

For each of the statements below, please circle the number in the box that ***best*** describes you in the last six months.

	Statements	Never or Rarely	Sometimes	Often	Always or Almost Always
63.	I have plenty of energy	1	2	3	4
64.	I say what I need or want without making excuses or dropping hints	1	2	3	4
65.	I like myself	1	2	3	4
66.	I am comfortable with the number of friends I have	1	2	3	4
67.	I eat junk food	1	2	3	4
68.	I feel as worthwhile as anyone else	1	2	3	4
69.	I am happy	1	2	3	4
70.	I am comfortable talking to strangers	1	2	3	4
71.	I am part of a group other than my own family, that cares about me	1	2	3	4
72.	I accept the mysteries of life and death	1	2	3	4
73.	I see myself as lovable	1	2	3	4
74.	I actively look for the positive side of people and situations	1	2	3	4
75.	I exercise vigorously 3 - 4 times per week	1	2	3	4
76.	I accept compliments easily	1	2	3	4
77.	I show others when I care about them	1	2	3	4
78.	I believe that people are willing to have me talk about my feelings	1	2	3	4
79.	I can show it when I am sad	1	2	3	4
80.	I am aware of my good qualities	1	2	3	4
81.	I express my feelings to close friends	1	2	3	4
82.	I can make sense out of my world	1	2	3	4
83.	My weight is within a few kilos of what I think it should be	1	2	3	4
84.	I believe in a power greater than myself	1	2	3	4
85.	I actively pursue happiness	1	2	3	4
86.	I can tell other people when I am hurt	1	2	3	4
87.	I encourage others to talk about their feelings	1	2	3	4

	Statements	Never or Rarely	Sometimes	Often	Always or Almost Always
88.	I like my body	1	2	3	4
89.	I initiate contact with people	1	2	3	4
90.	I confide in my friends	1	2	3	4
91.	I can cry when sad	1	2	3	4
92.	I want to be of service to others	1	2	3	4
93.	I can say what I need or want without putting others down	1	2	3	4
94.	I accept problems that I cannot change	1	2	3	4
95.	I know what is important in life	1	2	3	4
96.	I admit when I'm afraid of something	1	2	3	4
97.	I enjoy being with people	1	2	3	4
98.	I am tired	1	2	3	4
99.	I express my feelings clearly and directly	1	2	3	4
100.	Certain traditions play an important part in my life	1	2	3	4
101.	I express my feelings of joy	1	2	3	4
102.	I can identify my emotions	1	2	3	4
103.	I attend church or religious meetings	1	2	3	4
104.	I do stretching exercises	1	2	3	4
105.	I eat well-balanced meals	1	2	3	4
106.	I pray or meditate	1	2	3	4
107.	I accept my feelings of anger	1	2	3	4
108.	I seek to grow spiritually	1	2	3	4
109.	I can express my feelings of anger	1	2	3	4
110.	My values and beliefs help me to meet daily challenges	1	2	3	4
111.	I put myself down	1	2	3	4
112.	I get along well with others	1	2	3	4
113.	I snack between meals	1	2	3	4
114.	I take time to reflect on my life	1	2	3	4
115.	Other people like me	1	2	3	4
116.	I laugh whole-heartedly	1	2	3	4
117.	I am optimistic about my future	1	2	3	4

Please continue ... ☞

	Statements	Never or Rarely	Sometimes	Often	Always or Almost Always
118.	I get enough sleep	1	2	3	4
119.	My emotional life is stable	1	2	3	4
120.	I feel that no one cares about me	1	2	3	4
121.	I am shy	1	2	3	4
122.	I am in good physical shape	1	2	3	4

The following questions list different attitudes or beliefs which people sometimes hold. Please read each statement carefully and decide how much you agree or disagree with the statement.

For each of the attitudes, circle the number in the box which ***best*** describes how you think. Please choose only one answer for each attitude. There are no right or wrong answers to these statements. To decide whether a given attitude is typical of your way of looking at things, simply keep in mind what you are like ***most of the time***.

	Statements	Totally Agree	Agree Very Much	Agree Slightly	Neutral	Disagree Slightly	Disagree Very Much	Totally Disagree
123.	It is difficult to be happy unless one is good looking, intelligent, rich and creative	1	2	3	4	5	6	7
124.	Happiness is more a matter of my attitude towards myself than the way other people feel about me	1	2	3	4	5	6	7
125.	People will probably think less of me if I make a mistake	1	2	3	4	5	6	7
126.	If I do not do well all the time, people will not respect me	1	2	3	4	5	6	7
127.	Taking even a small risk is foolish because the loss is likely to be a disaster	1	2	3	4	5	6	7
128.	It is possible to gain another person's respect without being especially talented at anything	1	2	3	4	5	6	7
129.	I cannot be happy unless most people I know admire me	1	2	3	4	5	6	7
130.	If a person asks for help, it is a sign of weakness	1	2	3	4	5	6	7
131.	If I do not do as well as other people it means I am an inferior human being	1	2	3	4	5	6	7
132.	If I fail at my work, then I am a failure as a person	1	2	3	4	5	6	7
133.	If you cannot do something well, there is little point in doing it at all	1	2	3	4	5	6	7
134.	Making mistakes is fine because I can learn from them	1	2	3	4	5	6	7
135.	If someone disagrees with me, it probably indicates he/she doesn't like me	1	2	3	4	5	6	7

Please continue ... 

	Statements	Totally Agree	Agree Very Much	Agree Slightly	Neutral	Disagree Slightly	Disagree Very Much	Totally Disagree
136.	If I fail partly, it is as bad as being a complete failure	1	2	3	4	5	6	7
137.	If other people know what you are really like, they will think less of you	1	2	3	4	5	6	7
138.	I am nothing if a person I love doesn't love me	1	2	3	4	5	6	7
139.	One can get pleasure from an activity regardless of the end result	1	2	3	4	5	6	7
140.	People should have a reasonable likelihood of success before undertaking anything	1	2	3	4	5	6	7
141.	My value as a person depends greatly on what others think of me	1	2	3	4	5	6	7
142.	If I don't set the highest standards for myself, I am likely to end up a second rate person	1	2	3	4	5	6	7
143.	If I am to be a worthwhile person, I must be truly outstanding in at least one major respect	1	2	3	4	5	6	7
144.	People who have good ideas are more worthy than those who do not	1	2	3	4	5	6	7
145.	I should be upset if I made a mistake	1	2	3	4	5	6	7
146.	My own opinions of myself are more important than other's opinions of me	1	2	3	4	5	6	7
147.	To be a good, moral, worthwhile person, I must help everyone who needs it	1	2	3	4	5	6	7
148.	If I ask a question, it makes me look inferior	1	2	3	4	5	6	7
149.	It is awful to be disapproved of by people important to you	1	2	3	4	5	6	7
150.	If you don't have other people to lean on, you are bound to be sad	1	2	3	4	5	6	7
151.	I can reach important goals without slave-driving myself	1	2	3	4	5	6	7
152.	It is possible for a person to be told off and not get upset	1	2	3	4	5	6	7

	Statements	Totally Agree	Agree Very Much	Agree Slightly	Neutral	Disagree Slightly	Disagree Very Much	Totally Disagree
153.	I can't trust other people because they might be cruel to me	1	2	3	4	5	6	7
154.	If others dislike you, you cannot be happy	1	2	3	4	5	6	7
155.	It is best to give up your own interests in order to please other people	1	2	3	4	5	6	7
156.	My happiness depends more on other people than it does on me	1	2	3	4	5	6	7
157.	I don't need the approval of other people in order to be happy	1	2	3	4	5	6	7
158.	If a person avoids problems, the problems tend to go away	1	2	3	4	5	6	7
159.	I can be happy even when I miss out on many of the good things in life	1	2	3	4	5	6	7
160.	What other people think about me is very important	1	2	3	4	5	6	7
161.	Being isolated from others is bound to lead to unhappiness	1	2	3	4	5	6	7
162.	I can find happiness without being loved by another person	1	2	3	4	5	6	7

Please continue ... ☞

Please read each of the five statements below and decide how much you agree or disagree with the statement. Circle the number which corresponds to your agreement with each statement. Please be open and honest in your responding.

Do you agree that ...?

	Statements	Strongly disagree	Disagree	Slightly disagree	Neutral	Slightly agree	Agree	Strongly agree
163.	In most ways my life is close to ideal	1	2	3	4	5	6	7
164.	The conditions of my life are excellent	1	2	3	4	5	6	7
165.	I am satisfied with my life	1	2	3	4	5	6	7
166.	So far I have achieved the important things I want in life	1	2	3	4	5	6	7
167.	If I could live my life over again, I would change almost nothing	1	2	3	4	5	6	7

The table below lists a number of words that describe different feelings and emotions. Please read each word and circle the number in the box that ***best*** describes to what extent you have felt this way during the past few weeks.

Have you felt ...?

	Statements	Slightly or not at all	A little	Moderately	Quite a bit	Extremely
168.	Interested	1	2	3	4	5
169.	Distressed	1	2	3	4	5
170.	Excited	1	2	3	4	5
171.	Upset	1	2	3	4	5
172.	Strong	1	2	3	4	5
173.	Guilty	1	2	3	4	5
174.	Scared	1	2	3	4	5
175.	Hostile	1	2	3	4	5
176.	Enthusiastic	1	2	3	4	5
177.	Proud	1	2	3	4	5
178.	Irritable	1	2	3	4	5
179.	Alert	1	2	3	4	5
180.	Ashamed	1	2	3	4	5
181.	Inspired	1	2	3	4	5
182.	Nervous	1	2	3	4	5
183.	Determined	1	2	3	4	5
184.	Attentive	1	2	3	4	5
185.	Jittery	1	2	3	4	5
186.	Active	1	2	3	4	5
187.	Afraid	1	2	3	4	5

Please continue ... ☞

Section C

1. **Now that you have had a chance to reflect, how helpful did you find this workshop?**

- ◯ Extremely Helpful
- ◯ Very Helpful
- ◯ Moderately Helpful
- ◯ Moderately Unhelpful
- ◯ Very Unhelpful
- ◯ Extremely Unhelpful

2. **To what extent do you think this workshop has enabled you to be more effective at managing the stress in your life?**

- ◯ Made a dramatic difference
- ◯ Made a substantial difference
- ◯ Made quite a bit of difference
- ◯ Made a moderate difference
- ◯ Made a slight difference
- ◯ Made no difference at all

3. **In hindsight, what were the most helpful things that you learnt in this workshop?**

.....

.....

.....

.....

4. **Over the past six weeks how much would you say you have implemented the techniques, skills and ideas that you learnt in the workshop?**

- ◯ Very frequently
- ◯ Frequently
- ◯ Quite often
- ◯ Sometimes
- ◯ Rarely
- ◯ Never

5. **If you have not implemented any of the strategies you learnt in the workshop, or have implemented fewer than you would have liked, could you indicate the main reasons for this.**

.....

.....

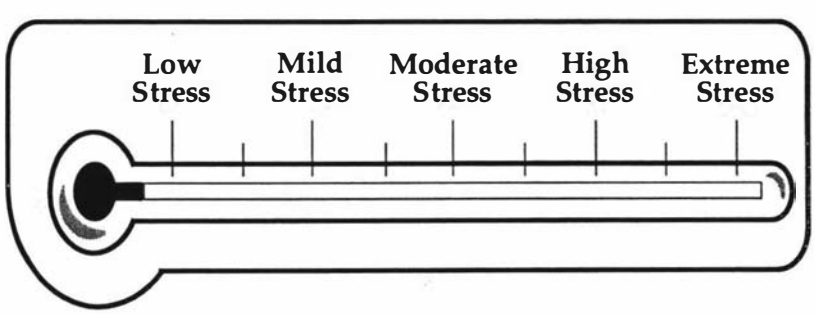
.....

.....

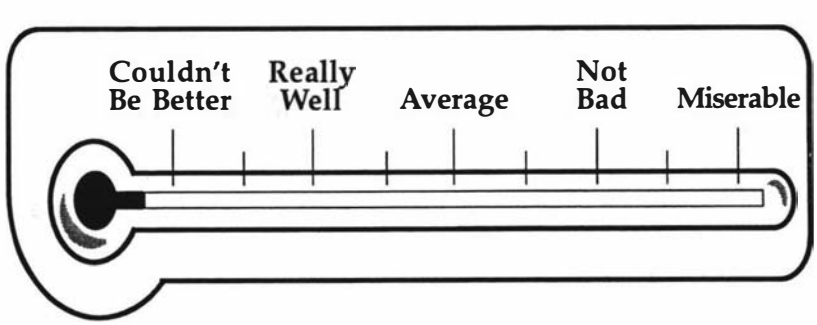
6. **Please indicate the extent to which you agree or disagree with the following statements.**

Statements	Strongly agree	Agree very much	Agree slightly	Disagree slightly	Disagree very much	Strongly disagree
After the workshop I found I didn't have any time to think about stress management.	1	2	3	4	5	6
Once I got back to "real life" I no longer thought any of the strategies I developed in the workshop would be useful.	1	2	3	4	5	6
After the workshop I was much more motivated to incorporate strategies into my life to reduce stress.	1	2	3	4	5	6
Once the workshop was over I found I couldn't remember any of the stress management strategies.	1	2	3	4	5	6
After the workshop I found I could create more time for the things that I value.	1	2	3	4	5	6
I wanted to put some of the strategies from the workshop into place, but I just never seemed to get around to it.	1	2	3	4	5	6
Once I got back to my day-to-day life, stress management just seemed too hard.	1	2	3	4	5	6
What I learnt in the workshop has made a big difference to the way I manage my stress.	1	2	3	4	5	6
After the workshop I found that I knew what to do to manage my stress, but I just couldn't seem to get motivated to make any changes.	1	2	3	4	5	6

7. **All things considered over the past six weeks, how would you rate your stress levels?**



8. **All things considered over the past six weeks, how have you been feeling overall?**



Thriving in the Stress Place

A Two Day (One + One) Workshop for Community Workers

Raeburn House, ph: 441 8989 **Ruth Jillings, ph: 443 9799 ext 9863**

Participation Consent Form

You are invited to participate in a workshop that has been designed specifically for community workers. The whole purpose of the workshop is to enhance your well-being and improve your quality of life. The workshop has also been granted ethical approval by the Massey University Human Ethics Committee, so you can be assured that it is important to us that your rights are respected.

The nature of this workshop means that at times there will be group discussion about topics related to stress in your life. It is possible that you may consider some of these issues personal. You will never be required to share any information with the group if you do not choose to do so. However, if you do choose to participate in group discussion, please be advised that as a facilitator, I rely on the goodwill of the other group members to ensure that what is said within the group remains within the group. On the first session of the workshop we will be establishing group guide lines and I will ensure that confidentiality is one of these. I can offer you complete confidentiality and anonymity for the information you supply in the questionnaires you complete, but it is not possible for me to offer this same guarantee for what is said within the group.

The workshop has been carefully designed but it is possible that exploring the stress in your life may raise issues that cannot adequately be dealt with within the confines of the workshop. To ensure that you have an alternative option should this happen to you, we have arranged that any workshop participant experiencing difficulty can contact Raeburn House, ph: 441 8989 and be referred to an appropriate source of assistance.

Should you wish to discuss any of these aspects of the workshop or if you have any further questions or concerns, please don't hesitate to contact any of us:

Ruth Jillings, Massey University	ph: 439799 ext 9863 e-mail: gj-jillco@xtra.co.nz
Dr. Hillary Bennett, Massey University	ph: 443 9799 ext 9864 e-mail: H.F.Bennett@massey.ac.nz
Linda Marsh or *Carol Ryan*, Raeburn House	ph: 441 8989 e-mail: raeburn.house@xtra.co.nz

Please complete the section below and return it to the facilitator at the beginning of the workshop.

I, ... **, give my informed consent to**

Name

participate in the *Thriving in the Stress Place Workshop*.

....

Signature *Date*

Thriving in the Stress Place

A Two Day (One + One) Workshop for Community Workers

Participant's Workbook

Thriving in the Stress Place

A Two Day (One + One) Workshop for Community Workers

is a partnership venture between Raeburn House and Massey University (Albany), and is supported by ...

- Waitemata Health
- North Shore City Council

This workshop has been designed by Ruth Jillings as part of her PhD in collaboration with Dr Hillary Bennett (Massey University, Albany), Linda Marsh and Carol Ryan (Raeburn House).

Raeburn House
North Shore Community Health Network Inc

MASSEY
UNIVERSITY

Welcome

Welcome to *Thriving in the Stress Place*, a two day (one + one) workshop designed for community workers.

Mark Twain said, "Every one talks about it, but no-one does anything about it". He was talking about the weather, but his comments apply equally to stress management. This is your chance not just to talk about the stress in your life, but to do something about it. Stress in the workplace is debilitating and it is on the increase so it is great that you have chosen to take time out of your busy schedule to attend this workshop.

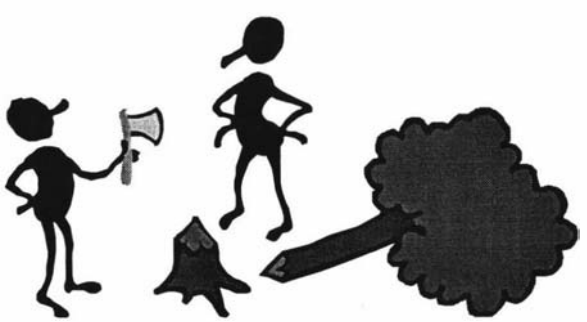
This is a two day workshop that is held one day per week from 9:30am until 4:30pm for two consecutive weeks. It is important that you attend all of both days. If for any reason you can't manage this, please contact me, Ruth Jillings, ph: 443-9799 ext 9863.

This workshop is interactive and participatory and we hope that you will enjoy it. It is our aim that by the end of it you will have learnt strategies that will make it easier for you to cope with the stress in your life. You may find that this is nothing like any stress management workshop you have done before.

First of all, it has been specifically designed for small groups of community workers. Secondly, the focus of this programme is on you. We recognise that different things are stressful for different people and for this reason we will be asking you to focus on issues which are relevant to your life. We believe that each of us is the most qualified person to design our own stress management programme.

The answer to beating stress is not simply to work longer and harder to get everything done. For most of us we can't work any harder and there just aren't any more hours in the day. Have you ever found yourself facing the woodsman's dilemma?

There was once a woodsman who had a new axe. The first day he was able to chop down 20 trees. As each day passed, he worked longer and harder but he chopped down fewer trees. A friend walked by and suggested, "Why don't you sharpen your axe?" The woodsman said, "I'm too busy. I've got to chop down more trees!"



This workshop is an opportunity to take the time to collect your thoughts and sharpen your axe. It will enable you to gain awareness of the stressful areas of your life and guide you to generate new and creative solutions for these.

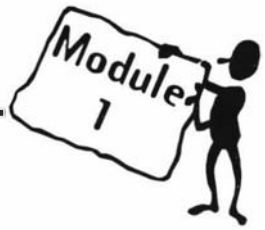
We are looking forward to beginning this workshop with you and want you to get the most out of it that you can. If you have any questions or concerns, please don't hesitate to raise them with Ruth. We think that the best indicator of the success of any stress management plan is how a person feels about their life in general.

Our aim is that you feel better about yourself, your life and your job!

> *"If I am not for myself,*
> *who will be for me?*
> *If I am not for myself,*
> *what am I?*
> *If not now,*
> *when?"*
>
> Hillel,
> Wisdom of Our Fathers

Contents

Please note that there is no gender bias intended in this workbook. The pronouns "he" and "she" are used at random.



Introduction

Goals

1. To meet the other workshop members.
2. To generate and agree to some group guidelines.
3. To establish what your expectations are of this course.

Group Guidelines

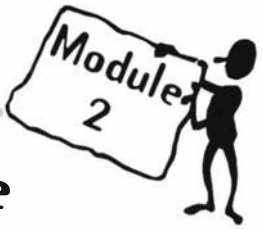
When working in groups it is often a good idea to have everyone agree to a few basic guidelines to ensure that the group runs smoothly. As a group you will be asked to agree to some ground rules and to list them below.

My Expectations of this Course

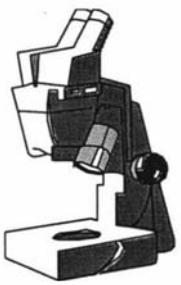
Why am I here?

What do I want to achieve?

Other expectations?



Under the Microscope



Goals

1. To examine the values that are most important to you.
2. To experience how your time is spent in terms of these values.

Rationale for the Under the Microscope Exercise

> *"The unexamined life is not worth living."*
>
> Plato

These days it is often the case that our lives are often so busy that it is easy to lose sight of what is important to us. For example, we can lose sight of what originally attracted us to our jobs or the things that we value in our personal lives. The questions in this exercise are designed to help you take stock of your life and put it "under a microscope". This will give you the opportunity to assess if you are happy with what you see or if there are areas that are out of balance and where you want to make changes.

What do you value?
The facilitator will give you a set of cards. On these cards are descriptions of values that many people consider important. Please go through the set of cards and extract the five cards describing the values that you feel are most important in your life.

The top five things I value:

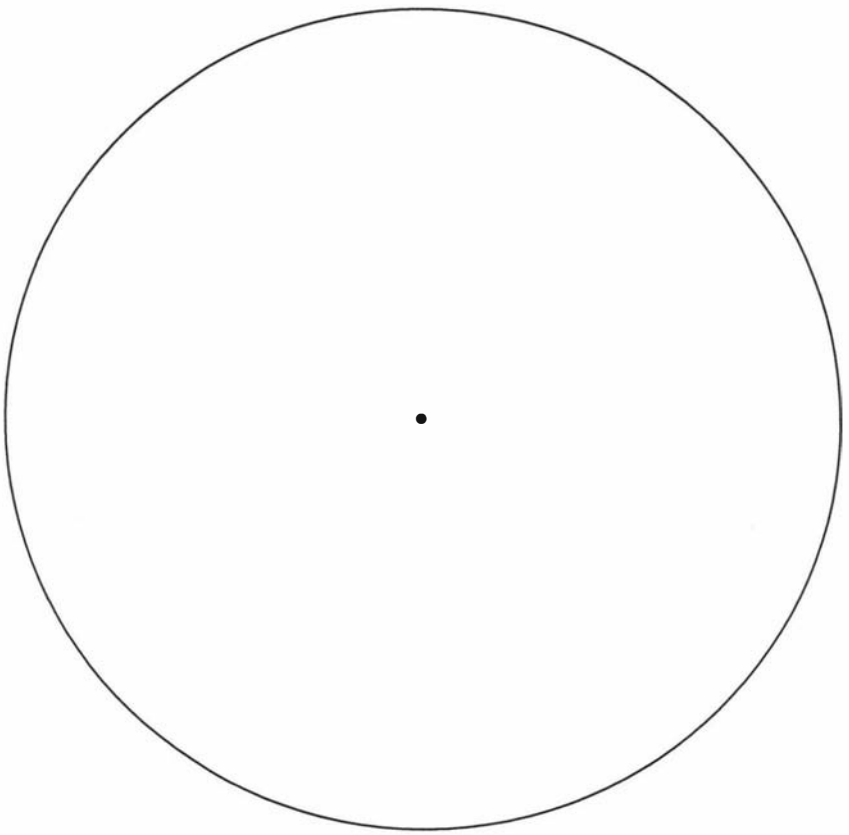
1. ..... 4. .....
2. ..... 5. .....
3. .....

Now think about and list the various main areas that make up your life. For example, work, family, relationship with significant other, leisure activities, social activities, exercise, friends, domestic work, time alone, etc.

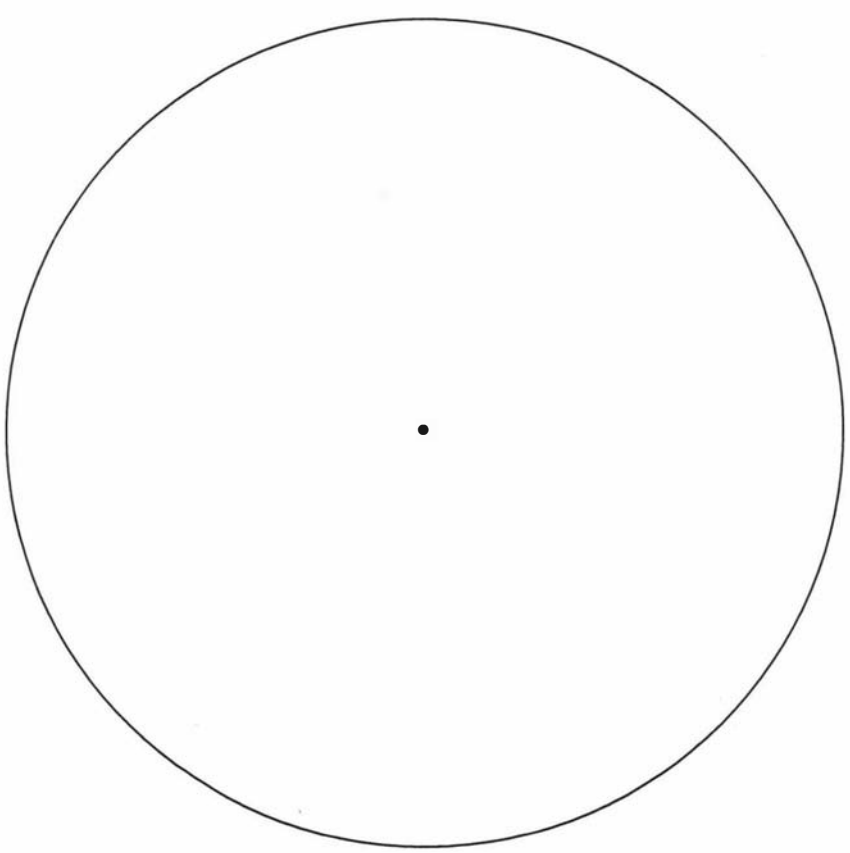
The main areas of my life:

1. ..... 6. .....
2. ..... 7. .....
3. ..... 8. .....
4. ..... 9. .....
5. ..... 10. .....

Think of an average (seven day) week and divide the circle below into the main areas of your life according to the time you spend on them.



Think of your ideal week and divide the circle below into the main areas of your life according to the time you would ideally like to spend on them.



Compare the two circles.

Are you happy with the amount of time you are spending on each area of your life in an average week?

Are there any changes you could realistically make to bring your average week and your ideal week more closely in line?

Consider the extent to which your top five values are expressed in the areas of your life. For example, if one of the top five things you value is friendship, are you happy with the amount of time you spend with your friends?

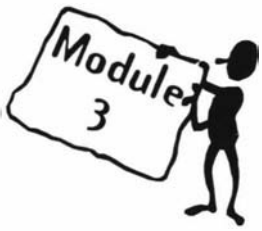
Indicate the extent to which you feel satisfied with the way your top five values are expressed in your life.

Value	Very Satisfied	Somewhat Satisfied	Not at All Satisfied

Is the match of your values and the way your life is spent causing any stress for you?

Are there any particular areas of your life where you find it more difficult to express your values?

Are there any changes you could realistically make to incorporate more of what you value into your life?



Problem Solving

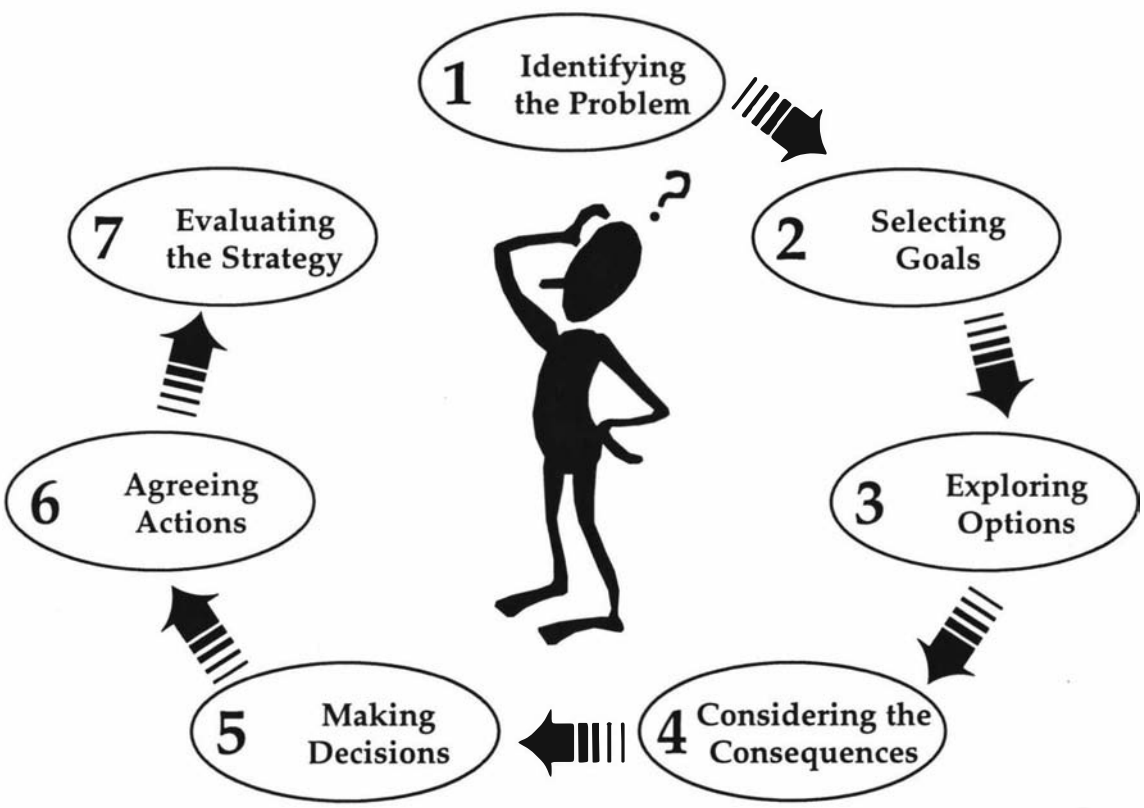
Goals

1. To learn a problem solving model.
2. To commit to some action steps as a result of the model.

Rationale for Learning the Problem Solving Model

The purpose of learning and practicing a model to deal with stress related problems is that once this workshop is over, the steps learnt in the model will provide a constructive way to deal with any new problems. The following model is very flexible and the step-by-step process it encourages means that although it may take some time to reach a solution, once reached, there is a high degree of success.

The Seven Stages of Problem Solving



The facilitator will encourage and assist you to choose an issue and work through the steps of the model. To start with it is best to choose a simple issue and one that you do not mind discussing.

Step 1: Problem Identification – What is the concern?

> *"The first step in learning is confusion."*
> John Dewey

The first step is simply to write down the problem. Identifying the problem may seem simple, but it is important to be clear and specific about the situation. This will make the next steps in the problem solving model much easier. For example, "We need $100 more than we earn each week to cover our living expenses" is much clearer than "We are broke".

With issues that are very distressing or confusing, it may be difficult to know exactly what the problem is. If a problem is complex, the best thing is generally to break it down into smaller sub issues and deal with these one at a time. Sometimes it can help to rephrase the question from "What is the problem?" to "What would you like to change?" Some people find it is easier to get clarity when they put the information down visually. Others prefer just to list all aspects of the problem and then go through the list and identify the aspects they want to begin working on. Use which ever method seems easiest for you to get your problem down in concrete terms.

Step 2: Selecting Goals – What do I want?

> *"You can't get what you want if you don't ask for it."*
> Madonna

Once you have an understanding of the problem, the next step is to look at ways of changing the situation that is causing stress. In other words to set some goals. When you have your goals check that they are:

- **S** pecific
- **M** easurable
- **A** chievable
- **R** ealistic
- **T** ime based

Step 3: Exploring Options – What can I do?

> *"There is nothing more dangerous than an idea when it is the only one you have."*
> Unknown

Now that you have set a goal or goals, it is important to develop a plan that ensures that you will reach them. One of the first things to do is to generate lots of strategies to reach your goals. It is also important to anticipate any potential barriers. If you consider which obstacles might cause you to stumble, it is easier to put strategies in place to overcome this.

Brainstorming

At this point it is essential to keep an open mind so that you can consider all sorts of creative solutions. Brainstorming is a useful technique for this. Brainstorming is a simple way of generating a range of alternatives in response to a particular issue. For brainstorming to work most effectively you first need to reframe your issue as a question. Next allow yourself about ten minutes to think of all the possible responses to your question. Scribble them down or ask some one to take notes for you.

The keys to brainstorming are:

- **Go for quantity**. The more ideas you get down, the more chances you have of getting a good one.
- **Don't judge your ideas**. Evaluation is the final part of this process. At this stage it is important that you don't censor an idea just because it seems a bit wild. Sometimes the best ideas are generated from ones that originally seemed over the top.
- **Consider crazy options**. This gives you the best chance of breaking free from traditional ways of thinking.

Once the ten minutes are over you can critically review all the ideas. Some won't be at all feasible, but keep an open mind and you may find that an idea that you were initially tempted to dismiss actually could be an option to build on. You may find that two reasonable ideas could be combined to make a great idea.

Personal Resources

Another thing to consider when exploring your options is your personal resources. Often our resources are greater than we think, but it is important when we are under stress and our resources are low that we don't over extend ourselves. One way to think about our strengths is to consider if we have ever faced a similar issue in the past. If the answer is yes, it can be valuable to consider how you coped before and what worked well for you.

In addition to your personal strengths there may be people in your life who are prepared to help you. It is worth also keeping them in mind when you consider your options. If you need help thinking about the support that is available in your life, just ask the facilitator.

Step 4: Considering the Consequences – What might happen?

Once the ways of reaching your goals have been decided upon, it is important to step back and consider what the consequences of these changes will be, not just for yourself, but also for the other people in your life. Unpacking the consequences of a proposed action may highlight issues that could have otherwise been overlooked. For example, sometimes a solution that looks great in the short term, is not so ideal in the long term. It is worth thinking about how your decisions will affect the important people in your life. Also it is important to consider what the disadvantages are to your choice and if you are prepared to accept them.

One simple method of assessing the consequences of a proposed action is to draw up a list of pros and cons for each one. (See page 16 for an example table.)

Step 5: Decision Making – What is my decision?

After you have assessed the pros and cons of the ways of reaching your problem solving goals, you are now in a position to choose the most feasible solution. That is the one that has the greatest gain with the least negative consequences. You may decide on a plan with a single course of action or you may need to consider pursuing several courses of action at the same time or following a series of solutions, so that if one does not work there is a back-up plan.

In some instances it becomes obvious at this point that you might need to reassess the problem or get more information before continuing. If this is the case, you may need to run through steps 1 – 4 again!

Step 6: Agreeing Actions – *Now do it!*

> *"Whatever you can do*
> *Or dream you can, begin it.*
> *Boldness has genius,*
> *Power and magic in it."*
> Goethe

Your choice of action is likely to be most effective if it is:

- Described step-by-step.
  "Inch by inch, it's a cinch, yard by yard, it's hard."
- Based on a goal that is achievable and within your resources. The best goals are challenging, but not overwhelming.
- Able to be monitored. Set a date to review your progress.

Step 7: Evaluation – Did it work?

You will be the best judge of your own progress. When the date you have chosen to review your goal comes up, look at your original goals and assess the degree to which you have achieved what you wanted.

If you have achieved your goals – ***congratulations!***

If your goals are only partially achieved, you will need to explore why this is. Perhaps you need more time or more resources. Maybe your situation has changed. It will help to go back to the problem solving model and revise your goals in light of what you now know. Set a new date for review and keep at it!

Now it's your turn

Choose an issue that is causing you stress (nothing too complicated!) and follow the Seven Step Problem Solving Model to reach a solution.

Step 1: Problem Identification – What is the concern?

Step 2: Selecting Goals – What do I want?

> *"As long as we believe something is impossible it will be, the moment we see it as possible we change our lives."*
>
> Spinoza

Step 3: Exploring Options – What can I do?

Brainstorming Ideas:

> *"I like thinking big. If you're going to be thinking anyway, you might as well be thinking big."*
>
> Donald Trump

Personal Resources:

Personal Strengths	*Support*

Step 4: Considering the Consequences – What might happen?

> *"It is not the strongest of the species, nor the most intelligent, that survive, it's the ones most responsive to change."*
>
> Charles Darwin

Analysis of Consequences		
Action	**Pros**	**Cons**
eg. Get divorced	Solves the problem	Might cause a few problems!

Step 5: Decision Making – What is my decision?

.....

.....

.....

.....

Step 6: Agreeing Actions – *Now do it!*

Check that your choice of action ...

- is described step-by-step
- focuses on achievements rather than behaviour
- is realistic
- can be monitored, set a date to review your progress

Action Plan

Action to be taken: .....

.....

.....

.....

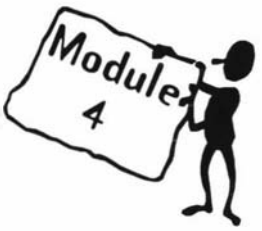
.....

.....

Start Date: ..... **Review Date:** .....

Step 7: Evaluation – Did it work?

> *"Vision without action is merely a dream. Action without vision just passes the time. Vision with action can change the world."*
>
> Joel Barker



Stress Analysis

Goals

1. To gain an understanding of what stress is and what it does to our bodies.
2. To learn how to use your stress diary.
3. To experience a relaxation exercise.

My Example of a Stress Experience

Sometimes when we are under pressure, all we know is that we are "stressed". However, before we can make any progress with stress we need a much greater understanding of what stress means to each of us. The facilitator will guide you through an exercise to do this.

What I thought about the incident (including any mental images)

.....

.....

.....

The emotion(s) I experienced as a result of the incident (my mood or feelings)

.....

.....

.....

What I did in relation to the incident (my behaviour)

.....

.....

.....

The physical symptoms I experienced as a result of the incident

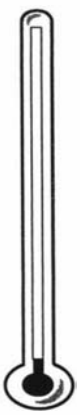
.....

.....

.....

Homework - Your Stress Diary

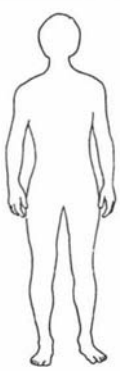
On the next page you will find a sample page for a Stress Diary. You will be given more of these pages. Your homework exercise for the week is to fill in one of these pages per day. The facilitator will have gone over what you are required to do. However, as a reminder all you have to do is choose one incident each day that you found stressful and make a few quick notes about it.



Firstly, you will see a space to briefly describe the incident. Just include enough information so it will make sense to you when you look back at the page.

Below this is the picture of the "**Stress Thermometer**". You will be asked to put two lines on this. A dotted line to indicate how stressful your day was overall and a solid line to indicate how stressful you found the particular incident that you will be focusing on.

Next to this are some words that describe emotions. You can either tick as many of these "**Emotion Bubbles**" as apply to how you felt about the incident or include your own more appropriate words in the blank bubbles.



At the bottom left of the page is a picture of "**Stacy Stressy**". All you have to do with Stacy is to mark on the figure where you experienced physical symptoms in relation to the incident.

Finally, next to Stacy is a space to describe the thoughts that went through your head at the time of the incident. Below this is a space to describe anything else that was going on for you at the time. For example, where you tired or hungry or had you just completed some difficult work? Simply note down anything that seems relevant.

Stress Diary

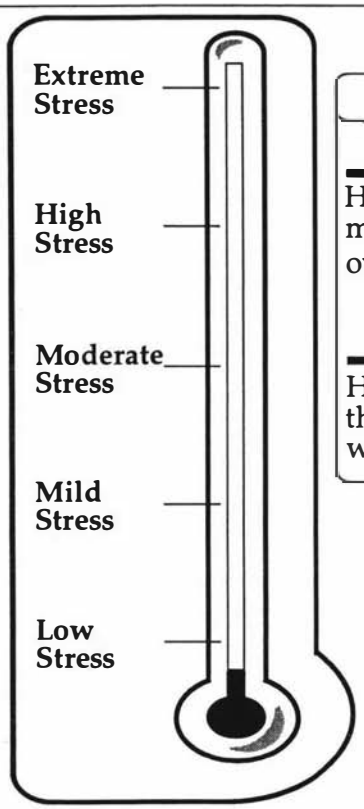
The Incident: .....

.....

.....

Date: .....

Stress Thermometer

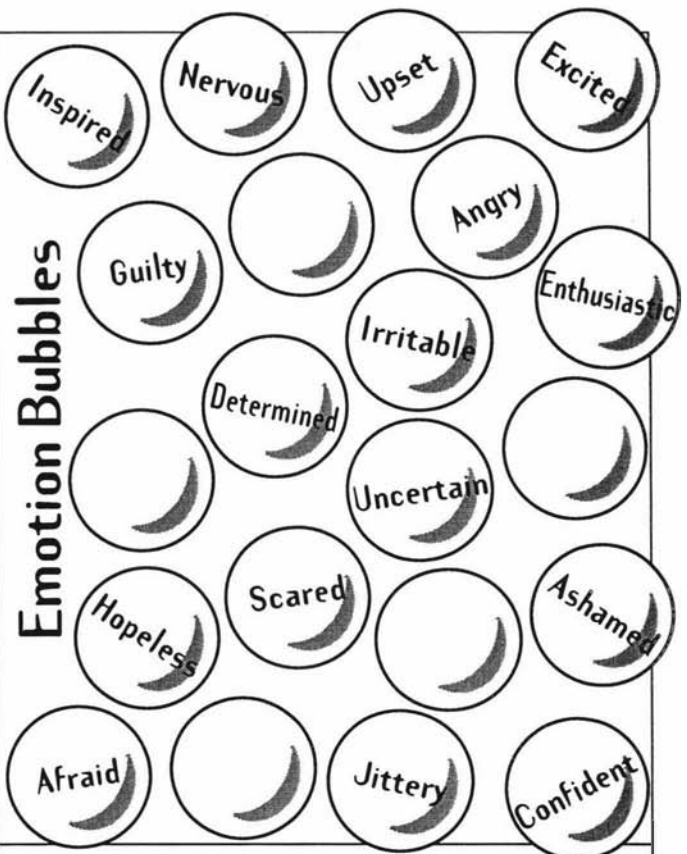


KEY

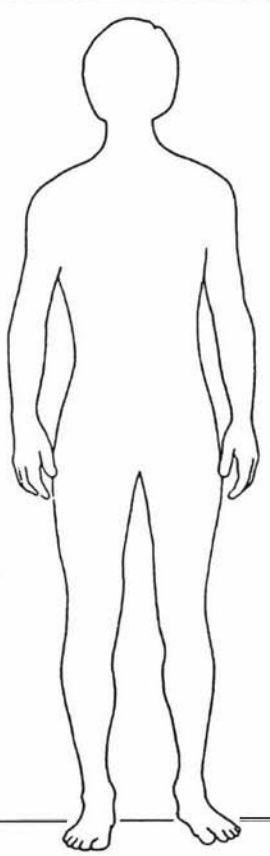
How stressful my day was overall

How stressful the incident was

Emotion Bubbles



Stacy Stressy (Physical Symptoms)



Thoughts and Other Factors

Thoughts

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.....

What else was going on?

.....

.....

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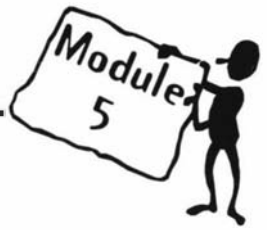
.....



"Twisted" Thinking

Goal

1. To learn about "Twisted" Thinking and how it can add to stress.

Rationale for Learning About "Twisted" Thinking

> *"People are disturbed not by things but by the views which they take of them."*
>
> Epictetus

One of the key things about stress is that whether a person thinks an event is stressful depends to a large extent on what they think about the event.

For example, one person might experience severe stress at the thought of speaking in front of a group of their colleagues, while another could be thrilled at the opportunity. In this way our thoughts can actually increase or decrease the stress in our lives.

Most people most of the time are engaging in self-talk. This is our internal dialogue and it includes all the things we say to ourselves to describe and interpret our world. If this self-talk is accurate and in line with reality, then all is well. However, self-talk can be irrational, illogical, untrue or overly negative and this will cause stress.

These thinking errors or "Twisted" Thinking tend to be very common. Many people find that in certain situations, especially when they are anxious or not performing well, that negative messages just pop into their heads.

Some people describe these as being like tapes that turn on automatically when you least want them. The thing about these tapes is that they are hard to turn off and although they are irrational, they are extremely believable. The messages are very powerful because they occur so quickly and are generally only on the very edge of awareness, often appearing as a kind of emotionally charged short hand. This means that these messages very rarely get challenged.

It is important that "Twisted" Thinking does not go unchecked. The first step is to identify any thoughts that may fall into this category.

"Twisted" Thinking is learned behaviour. Many of our twisted thoughts will have been with us since childhood, so they can be hard to budge. However, the good news is that any learned behaviour can be unlearned.

The facilitator will help you with an exercise to uncover some of your automatic thoughts.

Identifying Your A-B-C's

Activating Event	**B**eliefs	**C**onsequences
Example: Your partner cancels a date with you because they have to work.	You think that their work is more important to them than you are.	You are miserable and grumpy, and don't call your partner for three days.

Activating Event	**B**eliefs	**C**onsequences
Example: You miss out on a promotion you were certain you had got.	You think ...	You feel / do ...

Activating Event	**B**eliefs	**C**onsequences
Example: You end up screaming at your children in the supermarket and suddenly notice that people are staring at you.	You think ...	You feel / do ...

Now go through your Stress Diary and think back to some of the situations that were stressful for you. See if you can break the experience down into this A-B-C format. This is easiest if you take it step-by-step in the following order:

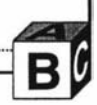
Step 1
Describe briefly what the ***A*ctivating event** was (what happened).

Step 2
Write down the ***C*onsequences** of this event (what did you do/how did you feel?).

Step 3
Write down any thoughts, ***B*eliefs** or assumptions that caused you to feel this way.

***A*ctivating Event #1**	***B*eliefs**	***C*onsequences**
What happened?	**What were you thinking?**	**What/how did you feel?**

***A*ctivating Event #2**	***B*eliefs**	***C*onsequences**
What happened?	**What were you thinking?**	**What/how did you feel?**



Activating Event #3	**B**eliefs	**C**onsequences
What happened?	**What were you thinking?**	**What/how did you feel?**

"Twisted" Thinking

Your facilitator will explain these types of twisted thinking and afterwards you will be asked to generate your own examples with a partner.

All or Nothing Thinking

This is when we see things in black and white terms only, without any shades of grey. For example:

"I hate my boss. He is useless and pathetic. There is nothing decent about him at all. My only option is to leave this job."

Your example:

Fortune Telling

This is when we assume that because things are not so good now, that they will continue this way or even get worse in the future. For example:

"My computer is broken again. I just know that it will take forever to fix and that I'll get no work done. I can see that it is going to be the start of a bad week."

Your example:

Filtering

This is where we take all the negative parts of ourselves and/or a situation and magnify them while filtering out all the positive aspects. For example:

"My boss said she really liked my report, but I bet that was because she didn't have time to read it properly."

Your example:

.....

.....

.....

Personalising

This is when we blame ourselves for things that really aren't our responsibility. Or when we think that every thing other people do or say is a reaction to us. For example:

"My teenager is in trouble at school again. It really is my fault. If I were a better mother this would never have happened."

Your example:

.....

.....

.....

Phoneyism

This is when there is an inconsistency between the way others see us and the way we see ourselves. So that if others see us as competent and we don't feel that way, we feel that we are really phoney or just faking it. For example:

"The committee said that they had faith in me and that they could trust me, but any day now I will do something that shows them how useless I really am."

Your example:

.....

.....

.....

Perfectionism

This is when we condemn ourselves for not fully achieving an impossible goal. For example:

"I got the job finished quite quickly, but a person with my experience really should have got it done even faster."

Your example:

Mind Reading

This is when we assume that we ***know*** what another person is thinking just by observing their actions. Usually this has negative consequences for ourselves. For example:

"My co-worker didn't ask me if I wanted a coffee. I must have done something to annoy her. I just know she doesn't like me."

Your example:

Over-generalization

This is when we draw conclusions from one event or rate ourselves or others on the basis of one event as opposed to considering the whole situation or the whole person. For example:

"That new person arrived late on their first day. They must be utterly useless."

Your example:

Magnification

This is when we blow a single event or series of events out of proportion. For example:

"If I lose my job it will be the worst thing that could ever happen to me."

Your example:

.....

.....

.....

Shoulds

Many people suffer with ***shoulds***. They feel compelled to do things or be a certain way without questioning if this way of behaving really makes sense. They operate from a list of inflexible rules about how they and others should act. Any deviation from these rules is bad which means that they are often in a position of judging others and finding fault with them. For example:

"I should never make a mistake."

"My partner should want to come home early and spend time with me."

Your example:

.....

.....

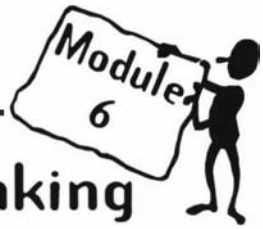
.....

Twisted Thinking Self Audit

Rate yourself against each thinking error in the table using the following scale:

1 I think like this very frequently
2 I think like this quite frequently
3 I think like this occasionally
4 I never think like this

Belief	Your Example	Rating
All or Nothing Thinking		
Fortune Telling		
Filtering		
Personalising		
Phoneyism		
Perfectionism		
Mind Reading		
Over-generalization		
Magnification		
Shoulds		



Untwisting "Twisted" Thinking

Goal

1. To learn strategies to untwist "Twisted" Thinking.
2. To review the homework.

Untwisting "Twisted" Thinking

Step 1: Monitor the Distortions

The first step to untwisting "Twisted" Thinking is to recognise the problem in the first place. This is much harder than it sounds. Firstly, because when we are stressed it is very difficult to think clearly, and secondly because our beliefs are usually so deep-seated that we are entirely unaware of them. Our beliefs act like a lens through which we see the world and just like we aren't aware of lenses in our glasses we are generally not aware of any quirks in our thinking.

Therefore, step one is checking your thoughts for thinking errors. Often just monitoring negative thoughts and recognising "Twisted" Thinking can help you to see the problem more realistically.

Think about a recent stressful experience and ask yourself some of the following questions to see if you can identify any "Twisted" Thinking.

Questions to Challenge My "Twisted Thinking"

- ◯ What is the evidence for my belief?
- ◯ Am I jumping to conclusions?
- ◯ What alternatives are there to my belief?
- ◯ Am I assuming my view of things is the only one possible?
- ◯ What is the effect of thinking the way I do?
- ◯ What are the advantages and disadvantages of thinking this way?
- ◯ Am I asking questions that have no answers?
- ◯ What thinking errors am I making?
- ◯ Am I thinking in all or nothing terms?
- ◯ Am I using "ultimatum' words in my thinking?
- ◯ Am I totally condemning myself or another on the basis of a single event?
- ◯ Am I concentrating on my weaknesses and neglecting my strengths?
- ◯ Am I blaming myself for something which is not really my fault?
- ◯ Am I taking things personally which have nothing to do with me?
- ◯ Am I expecting myself to be perfect?

- ◯ Am I using a double standard?
- ◯ Am I only paying attention to the negative side of things?
- ◯ Am I over-estimating the chances of a disaster?
- ◯ Am I exaggerating the importance of events?
- ◯ Am I fretting about how things should be, instead of accepting and dealing with them as they are?
- ◯ Am I assuming I cannot do anything to alter my situation?
- ◯ Is the outcome really going to be catastrophic?
- ◯ Am I predicting the outcome instead of experimenting with it?

Step 2: Examine the Evidence

Once you have identified the thinking error, the next step is to examine the evidence for it and not just to automatically believe that it is true. Ask yourself, what is the actual evidence for the way I am thinking? For example, if you think that your kids never help around the house, get them to make a list of what they actually do to contribute.

Your example:

.....

.....

Step 3: The Double Standard

Sometimes we are very hard on ourselves over our actions. It is a good idea to consider how we would treat a friend or co-worker if they were in the same situation. Often we are much more understanding of others than we are of ourselves. Then we need to realistically consider why we treat ourselves so harshly.

Your example:

.....

.....

Step 4: The Experiment

If you are still not convinced, carry out an experiment or a survey. Ask your friends and co-workers whether they agree with your thinking errors. For example, do they see you as incompetent if you arrive late for work?

Your example:

.....

.....

Step 5: Thinking Grey

If you tend to think of problems in all or nothing terms, try and find some middle ground or grey area. For example, if you don't get a report finished on time, are you a total idiot or could you just be somewhat of an idiot? Is your boss really a moron or does this just describe some aspects of her behaviour? Try assessing the different aspects of the situation on a rating scale with 0 = failure and 10 = success.

Your example:

.....

.....

Step 6: Re-attribution

Instead of blaming yourself or others for a particular problem, try and think of alternative ways of looking at the situation. For example, consider if there were other factors that may have contributed to the situation. If you do this, it is often easier to get on with solving the problem rather than feeling guilty or angry about it.

Your example:

.....

.....

Step 7: Cost-benefit Analysis

Sometimes assessing the value of unhelpful or negative beliefs can really put the issue in perspective. Ask yourself how helpful it is to have these types of thoughts. Making a list of the advantages and disadvantages of holding rational beliefs versus irrational beliefs can be quite enlightening.

Reviewing Homework

List any examples of "Twisted Thinking" that you found from the incident described in your homework.

.....

.....

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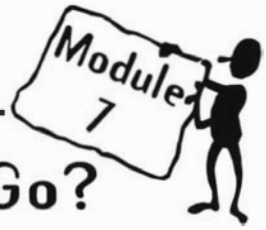
Review the "What Else Was Going On" section of your Stress Diary. Note down any patterns or trends you see emerging in the stressful incidents.

What strategies can you put in place to reduce the effects of any stress patterns?



Where Does My Energy Go?

Goals

1. To gain a sense of how our personal energy resources are used.
2. To generate ideas for coping strategies.
3. To commit to one small self-care change.

> *"If only I had known I was going to live so long, I would have taken better care of myself."*
>
> Unknown

Cups and Jelly Beans

This is an exercise to help you identify how you allocate your personal energy resources and to see if there are ways you can replenish your energy supply.

The facilitator will give you paper cups and jelly beans. Label the cups with your main priorities. Make sure you label one of them "Me"!

Now pretend the jelly beans represent your energy supplies. Allocate the jelly beans to the cups according to how much energy you give to each area. Try not to eat your jelly beans until the end of the exercise.

Discuss the following questions with a partner:

Did you have enough jelly beans? ◯ Yes ◯ No

Were you happy with the distribution of the jelly beans? ◯ Yes ◯ No

If not, what would you like to change?

.....

.....

.....

When you are under pressure, which cup do you take the jelly beans from?

.....

How do you replenish your energy supply?

.....

.....

.....

How often do you do this?

If this is not enough, what strategies could you put into place to gain more energy?

Ideas for Coping Strategies - Filling Up My Backpack

Thinking Small

> *"True life is lived when tiny changes occur."*
> Leo Tolstoy

Often when we think of making changes in our lives we want to do something big and dramatic. Unfortunately, if we aren't careful, these big changes last two days until "real life" takes over again. This week try and commit to one very small change that will make your life easier or that will make you feel that you are taking better care of yourself.

Before you commit to this change think about:

- Stumbling blocks to this change.
- Ways to overcome these stumbling blocks.

I, ... commit to .....
Name

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I am sure that I may be tempted to .....

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but this will not happen because I will .....

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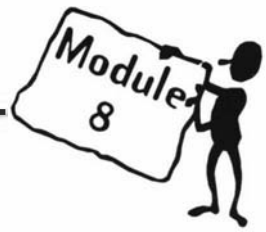
Signed Date Witness



Evaluations

Goals

1. To complete the evaluation forms.
2. To review the expectations from Module 1.

> *"Security is mostly a superstition. It does not exist in nature. Life is either daring adventure or nothing."*
> Helen Keller

References & Recommended Reading

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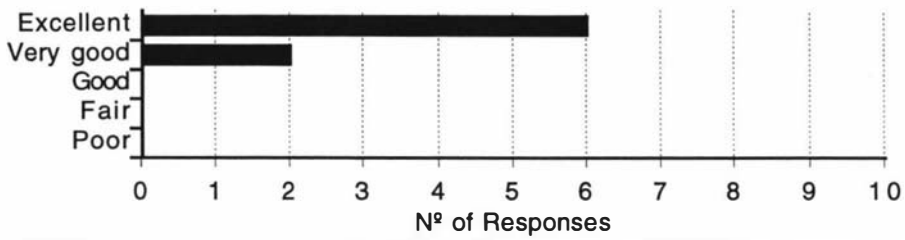
Raeburn House
North Shore Community Health Network Inc

Thriving in the Stress Place
Evaluation / Feedback Summary

Warkworth Fridays, 26 May and 2 June

8 out of 8 attendees returned the evaluation form

1. Overall rating for the course.



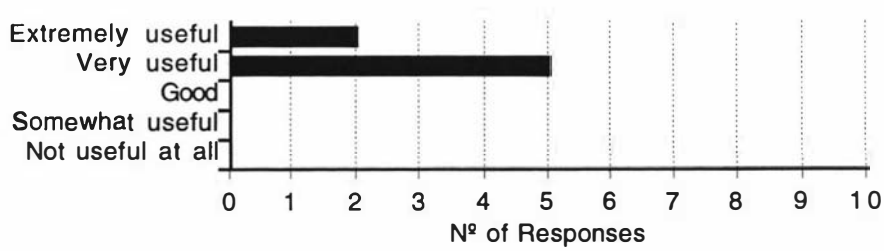
2. Which parts of the workshop did you find particularly useful?

- Twisted Thinking module. Enjoyed the jelly bean exercise – very visual. Looking at values and how my time is spent in relation to these.
- Looking at main areas of my life and identifying time we spend in each area. Problem Solving. Twisted Thinking.
- Questions relating to ABC model.
- Twisted Thinking. Action plan.
- Stress Diary. Problem solving technique.
- Identifying the causes of stress. Exercises. Being able to discuss exercises in groups. Keeping the Stress Diary.
- I found the part on Twisted Thinking and how to combat Twisted Thinking particularly useful.
- Twisted Thinking unravelling in combination with Stress Diary highlighting symptoms / reasons for stress.

3. What improvements can you suggest for future workshops?

- A copy of the stress relaxation technique.
- Can't think of any.
- Maybe incorporate a few more relaxation techniques.
- Found the pace of the first day a little slow.
- No response (x4)

4. How useful will these processes be for you?



No response (x1)

Comments ...

- The course really made me look at where the stress in my life was coming from, and that there was quite a lot that I could change to get rid of some of the stress in my life.
- I will be more aware of my stress levels hopefully – and able to have strategies to deal with these.
- It has made me think of stress in a different way and taught me strategies for dealing with stress.
- (Very useful) especially with taking stuff to clients.
- No response (x4)

continues ...

5. **One word to sum up the workshop?**
   - Great
   - Informative (x2)
   - Interesting
   - Useful
   - Well worth attending
   - Realistic
   - Well-constructed

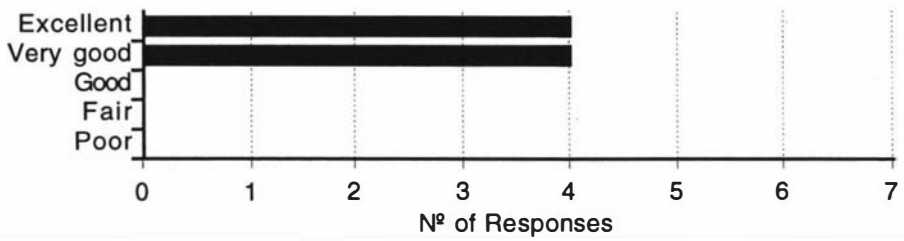
Raeburn House
North Shore Community Health Network Inc

Thriving in the Stress Place
Evaluation / Feedback Summary

Raeburn House Mondays, 12 and 19 June

8 out of 9 attendees returned the evaluation form

1. Overall rating for the course.



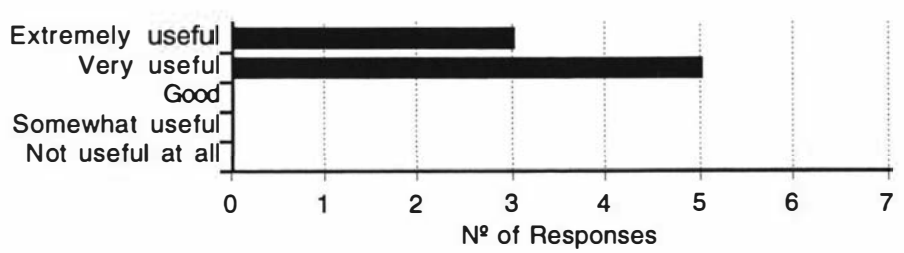
2. Which parts of the workshop did you find particularly useful?

- Hard to decide - it was all so good. But especially good - The Problem Solving Stages, "Under the Microscope" - helping us to look at what we value and the percentage of our time going in to that area. The "Twisted Thinking" section was enlightening.
- Recognising stress, symptoms and ways of dealing with it.
- Twisted Thinking principles. Problem solving strategies.
- The examples and exercises. The excellent facilitator.
- Group interaction and discussion. Dealing with personal issues.
- Resources, worksheets were very good. Sharing thoughts and ideas. Hearing strategies, etc. Ruth had used.
- All of it.
- Talking things through. Discussing strategies and thinking things through.

3. What improvements can you suggest for future workshops?

- Maybe follow-up, support calls by phone. The notes given out were excellent – can't think of any improvements.
- Nil.
- A follow-up day course to see how the theory has helped the practical side of stress in the work place with the same participants.
- Some people were very quiet and weren't drawn into group discussion enough, but would probably have had interesting things to say.
- If it is a day workshop consider charging a little extra and providing lunch - or make sure everyone knows to bring their own lunch.
- No response (x3)

4. How useful will these processes be for you?



Comments ...

- Helped me to realise looking after myself and my stress levels is also benefiting the organisation I work for and my family. Work too often takes precedence over family, and basically my values are "Family First" so I should make sure this happens.

continues ...

Question 4 comments continued.

- As a field worker in the community, the course has offered and taught many valuable lessons in recognising stress and how to treat it. The facilitator, Ruth, was exceptionally good, amusing and conscientious.
- Will try lots of the strategies. Good to see things broken down into definable small chunks rather than just feeling stressed, but not being able to define different areas.
- No response (x5)

5. One word to sum up the workshop?

- (Very) Worthwhile
- Helpful
- Thought provoking (x2)
- Excellent (x2)
- Enjoyable (x2)

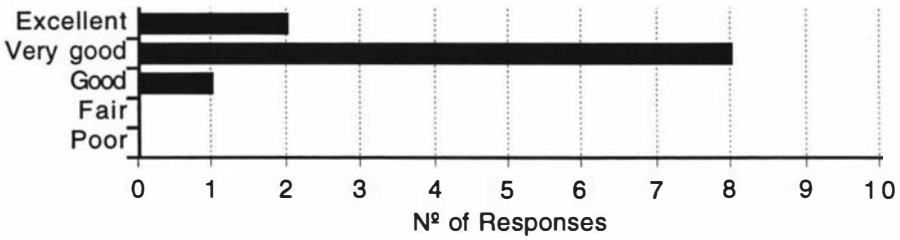
Raeburn House
North Shore Community Health Network Inc

Thriving in the Stress Place
Evaluation / Feedback Summary

Health Promotion Forum Fridays, 23 and 30 June

11 attendees returned the evaluation form

1. Overall rating for the course.



Comments ...

- Help with knowing how to release your stress.
- Ruth is a very good speaker – not boring at all and refers back to life experiences.
- Very well delivered by tutor.
- Value for money.
- Good value.
- No response (x6)

2. Which parts of the workshop did you find particularly useful?

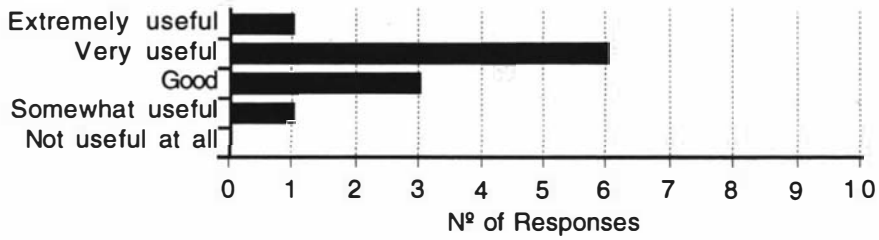
- Stress Diary, Where Does My Energy Go, Problem Solving.
- Coping techniques and "Twisted Thinking".
- First session: Problem Solving exercise and the Stress Diary.
  Second session: "Twisted Thinking" and writing a letter to yourself.
- Stress Diaries for homework. Coping Strategies. Problem Solving model.
- Sharing.
- "Twisted Thinking".
- Second day.
- Time to look at own stress (work / personal), setting goals, pie charts, setting values priorities.
- Breaking down of stress.
- The questionnaires were self revealing and made me realise I need to take more control of my life.
- The strategies with identifying and dealing with stress.

3. What improvements can you suggest for future workshops?

- It doesn't need improvements.
- Using all of the time allocated, ie. it was known it was 9:30am–4:30pm, use all the time as we are prepared to be there for that long.
- More interactive activities.
- Separate workshops for managers and field staff.
- Starting time good, time to manage other things in life.
  Would have liked earlier confirmation of acceptance in course.
  [Health Promotion Forum administration, not Raeburn House.]
- Nil!
- N/A
- No response (x4)

continues ...

4. How useful will these processes be for you?



Comments ...

- I have already practised strategies from last week's class and have been quite successful!
- No response (x10)

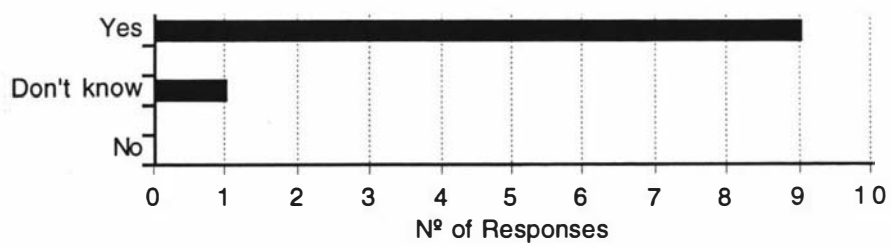
5. One word to sum up the workshop?

- Helpful
- Interactive
- Useful
- Enjoyable
- Tiring
- Enlightening
- Exciting
- Excellent
- Awesome
- No response (x2)

6. This is a new workshop for the HPF to run. How well do you think it works for the health promotion workforce?

- Excellent, because it makes you realise how important you are as a person.
- Very well. (x2)
- Works well.
- Very useful.
- It will work well and be quite significant for our type of work.
- Yes, could be of great benefit to help workers identify their stressors.
- It is important in today's climate.
- A definite need for health professionals and all hard workers.
- No response (x2)

7. Would you recommend it to others?



No response (x1)

Comments ...

- I have been totally inspired by this course and know it will be helpful to others.
- No response (x10)

continues ...

8. **How relevant was this workshop to your work situation?**
   - Very relevant. We have a lot of conflict within the work place. My learnings will definitely help me!
   - There have been times when I have needed this more.
   - Work very stressful at present. More work related examples would have helped.
   - Very relevant in that it will help me cope, identify signs and manage my stress.
   - Very relevant for staff.
   - Extremely.
   - Very.
   - No response (x4)

9. **Any other comments?**
   - Welcoming environment. Excellent catering. Very good handouts.
   - The Questionnaire 2, and possibly the first one, focused on recipients which was for me more of a personal health type model – I don't work with individuals as a Health Promoter, it is Public Health / population based, so groups of people.
   - I liked the two day format. Great workshop – very timely for me.
   - Earlier notification of acceptance in workshop.
     [Health Promotion Forum administration, not Raeburn House.]
   - Thank you to Ruth and all organisers.
   - No response (x6)

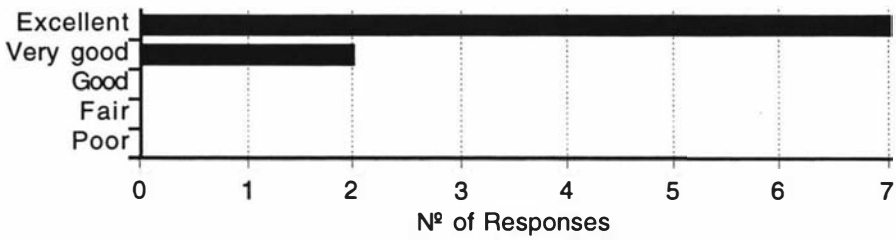
Raeburn House
North Shore Community Health Network Inc

Thriving in the Stress Place
Evaluation / Feedback Summary

Auckland Women's Health Centre Thursdays, 29 June and 6 July

9 out of 10 attendees returned the evaluation form

1. Overall rating for the course.



2. Which parts of the workshop did you find particularly useful?

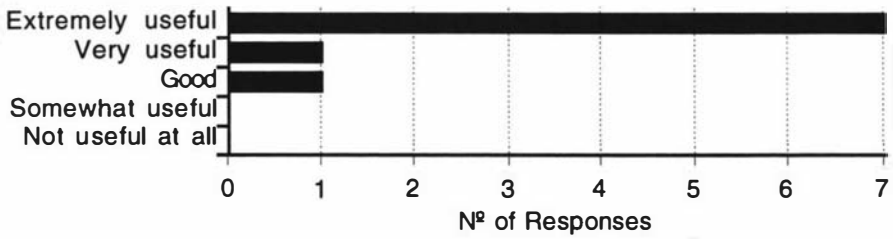
- Looking at Values closely and analysing also "Twisted Thinking" talk.
- Participation from all involved. Sharing experiences. Equality. Great facilitator who was down-to-earth and very direct with tremendous sensitivity.
- Great facilitator, good to be with a group of women with similar work backgrounds.
- Identification of basic values and "Twisted Thinking".
- Sharing in a group of women, with common needs. Looking at coping skills that we each have. Looking at our values.
- Filling in workbook. Discussions and examples from group. Concept that our cognitive perception contributes to our stress and also is a major strategy for managing stress.
- Identifying values. Keeping Stress Diary clarified that it was my "Twisted Thinking" causing most of my stress. Info and exercises on untwisting "Twisted Thinking". Problem solving exercise. Where My Energy Goes exercise.
- Time management. Recognizing stress – ways of simplifying it.
- "Twisted Thinking", untwisted thinking, balancing.

3. What improvements can you suggest for future workshops?

- More time to spend looking closer at reactions to values and how they can be changed. More discussion around boundaries, saying "no".
- Longer course time, maybe 3-4 days duration.
- I would like it to be longer, but realistically if it is aimed at community workers the two day format works best. I would of liked more time for sharing and relaxation exercises.
- Maybe time management. Nothing else.
- Begin fairly close to stated time.
- Would be great to have more time, but that in itself could create more stress. I'd like to re-meet in six weeks to 2 months to have an update and refocus on my goals.
- Longer time frame, eg. 10 x Thursdays.
- Possible understanding other cultures (may help to explain why particular things are done in a certain way), eg. the use of terms "selfish" are commonly used by persons with English as a second language who are not meaning to be offensive, but are trying to convey and express as best as possible.
- No response (x1)

continues ...

4. How useful will these processes be for you?



Comments ...

- Very good if they are actioned by group participants as a way of recognizing and reducing stress in their lives.
- "What can I say?" There hasn't been another stress management workshop like this to benchmark against.
- Great reminder on how to manage our stress in both work and personal life.
- A reminder of the skills I have, and useful to hear other women's skill around coping.
- Will come to think about what I've learnt and put ideas into practice at work and home.
- Written notes are great, exercises very clear and easy to use. Most of the material we could also hand on to be used by clients.
- Wonderful workshop! Excellent facilitator!!
- Understanding people and why they do the things they do is very interesting and reveals where a person is at, where they have come from and what makes them who they are. I enjoy people and I enjoyed your workshop. You have a warm an pleasant manner, sensitive and respectful. Thank you.
- No response (x1)

5. One word to sum up the workshop?

- Useful
- Excellent (x2)
- Really beneficial
- Enlightening
- Strength
- Great
- Fantastic – thanks
- Backpackful

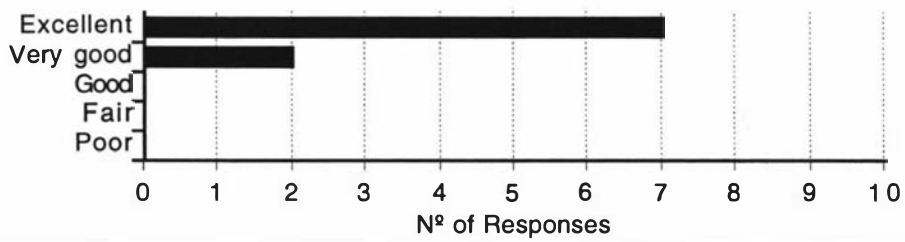
Raeburn House
North Shore Community Health Network Inc

Thriving in the Stress Place
Evaluation / Feedback Summary

Raeburn House Mondays, 5 and 12 August

9 out of 9 attendees returned the evaluation form

1. Overall rating for the course.



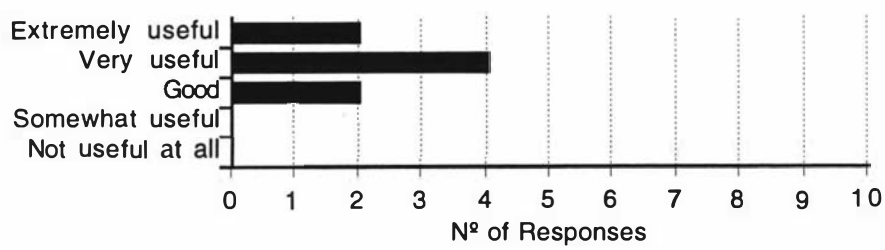
2. Which parts of the workshop did you find particularly useful?

- Analysis of causes of stress. Tools for management.
- Discussion between the attendees (facilitator allowed a good amount of time to talk and share experiences. Goal setting and identifying triggers and traits relating to myself, stress and my whole life.
- All the parts – the Values exercise, Problem Solving, Twisted Thinking, etc.
- Relating my values with my actual life, boundary setting, problem solving techniques, Twisted Thinking.
- Stress Thermometer and Emotions. Identifying causes of stress.
- Twisted Thinking and identifying stress triggers.
- All of it was very useful, not only did we identify causes of stress, but also were given strategies to alleviate it.
- Stress Analysis, Problem Solving, Values, Twisted Thinking, and discussion amongst the group.
- Identifying stress and learning how to cope with it – setting boundaries.

3. What improvements can you suggest for future workshops?

- I would have found it even better if I could have attended the course with a group working in the same field, ie. community work. I think this area brings unique characteristics and issues. It was still great to meet others not in similar areas.
- Follow-ups. Maybe charge more and provide a healthy lunch.
- Perhaps some strategies or list of helpful books.
- Nothing at the moment.
- None.
- Good as is.
- A follow-up in 3-4 weeks to see how you are coping will help to keep you on track, perhaps?
- No response (x2)

4. How useful will these processes be for you?



No response (x1)

continues ...

4. continued.

Comments ...

- Suitable for Health Education at school.
- Ruth – absolutely wonderful, knowledgable facilitator. Loved your style, very enabling and empowering, and realistic! Thank you for sharing your wisdom and enthusiasm.
- I really enjoyed the course and the way it was presented, and how we were involved in the course.
- This course has given me some options and opened my eyes, potentially the tolls we were given were life changing!! Thank you for running the workshop.
- Very well planned programme – good ideas for self and imparting to colleagues.
- No response (x4)

5. One word to sum up the workshop?

- Great
- Great – it's a new beginning, a first step
- Empowering (x2)
- Revolutionary / transformational
- Enlightening
- Worthwhile
- Focus
- Excellent

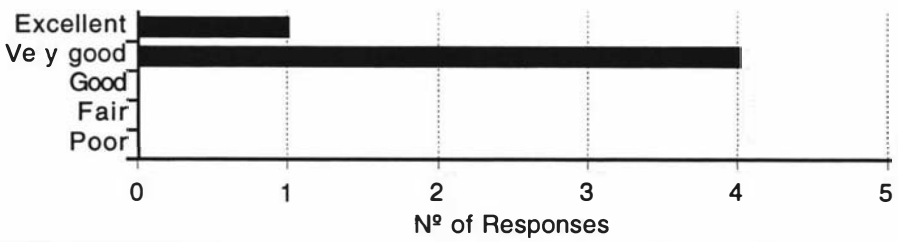
Raeburn House
North Shore Community Health Network Inc

Thriving in the Stress Place
Evaluation / Feedback Summary

Auckland Women's Health Centre Wednesdays, 30 August and 6 September

5 out of 8 attendees returned the evaluation form

1. Overall rating for the course.



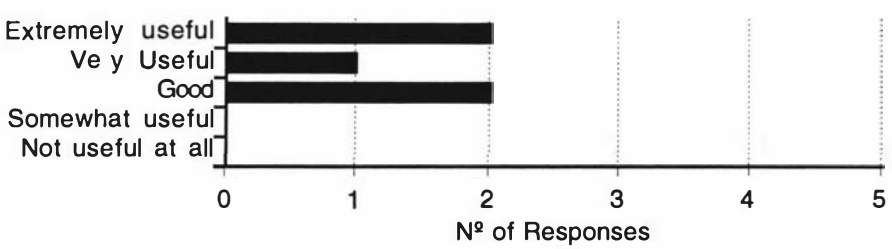
2. Which parts of the workshop did you find particularly useful?

- Rationale for learning the Problem Solving Model. The Seven Stages of Problem Solving. Stress Analysis. Untwisting "Twisted Thinking". Reorganizing our energy into different things.
- Time out to look at where I'm at. How to identify the problems. Analysis – how to.
- Strategies for re-energising. Problem solving strategies. "Twisted Thinking" and strategies for untwisting.
- Talking to others / sharing ideas, strategies. Manual – good resource for the future. Having women only.
- The sharing of ideas. "Twisted Thinking".

3. What improvements can you suggest for future workshops?

- To have it longer.
- Nothing specific.
- Large table to sit around / press on when recording notes.
- Shared lunch.
- No response (x1)

4. How useful will these processes be for you?



Comments ...

- I enjoyed it very much. It gave a greater insight on a lot of personal things and made me aware of the 'warning' signs of stress.
- The recommendation to start small will help to ensure implementation will happen and hopefully be maintained.
- I've already shared with volunteers the problem solving.
- No response (x2)

5. One word to sum up the workshop?

- Useful
- Thought-provoking
- Motivating
- Inspiring
- Valuable

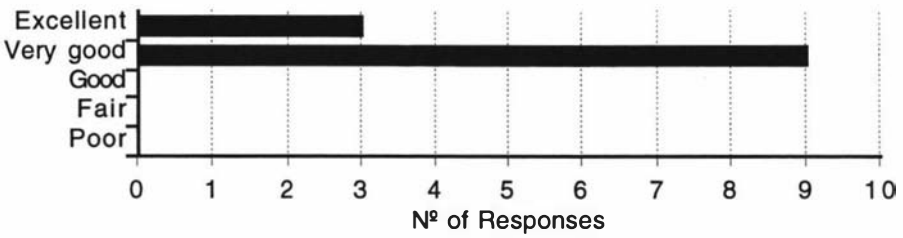
Raeburn House
North Shore Community Health Network Inc

Thriving in the Stress Place
Evaluation / Feedback Summary

Freemans Bay Community Centre Fridays, 8 and 15 September

12 out of 19 attendees returned the evaluation form

1. Overall rating for the course.



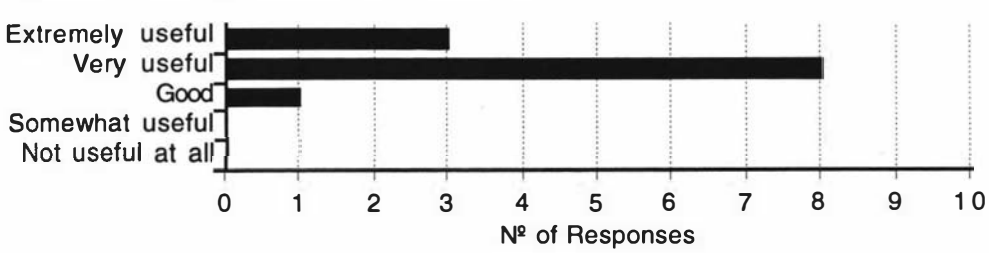
2. Which parts of the workshop did you find particularly useful?

- Everything. I attended with thoughts that I wasn't under much stress, but soon realised that I was. The course was an eye-opener.
- CBT – ABC, card values.
- The exercises. The new faces and points of view aired. The information on stress indicators and mind twister.
- Using cards to identify values and time spent. "Jelly Beans" exercise looking at where our energy goes and coming up with strategies how to improve energy level. Relaxation techniques.
- The strategies.
- Modules on "Twisted" Thinking, Untwisting "Twisted" Thinking, and Problem Solving. Encouragement/commitment to think small.
- "Twisted" Thinking, Stress Strategies. All of the workshop was valuable.
- All of it. (x2)
- Problem Solving, "Twisted" Thinking.
- "Twisted" Thinking.
- Exercises, explanations, user-friendly work book.

3. What improvements can you suggest for future workshops?

- None. Down to Earth, enhancing course.
- Follow-up session three months later.
- Refresher workshops once a year to remind us of coping strategies. Small group work rather than staying in large group. 9:30am–3:00pm, good length of time for workshop.
- Change seating on a two day course.
- Stress related to clients. Management of stress in the work environment.
- No response (x7)

4. How useful will these processes be for you?



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Question 4 continued

Comments ...

- I had a completely stress-free week, so I shall keep my folder very handy. The breathing exercise is great and I've used it three times so far.
- It was good to put into words and practice strategies and ideas that have been in my head – but now properly formulated.
- A very clear format and good practical information.
- No response (x9)

5. One word to sum up the workshop?

- Awesome – thank you Ruth
- Awesome
- Awesomely, enlightening.
- Refined strategies that I knew, but didn't use.
- Worthwhile – reinforced a lot of what I already knew. I need constant reminders!!
- Relaxing
- Stimulating
- Interesting
- Great
- Vital
- Helpful
- Stressless – and very helpful

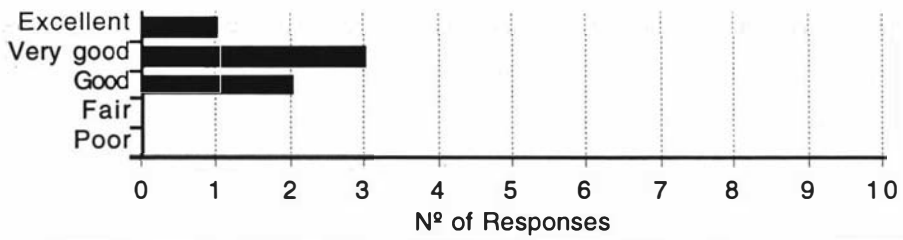
Raeburn House
North Shore Community Health Network Inc

Thriving in the Stress Place
Evaluation / Feedback Summary

Friendship House, Manukau City Wednesdays, 13 and 20 September

6 out of 7 attendees returned the evaluation form

1. Overall rating for the course.



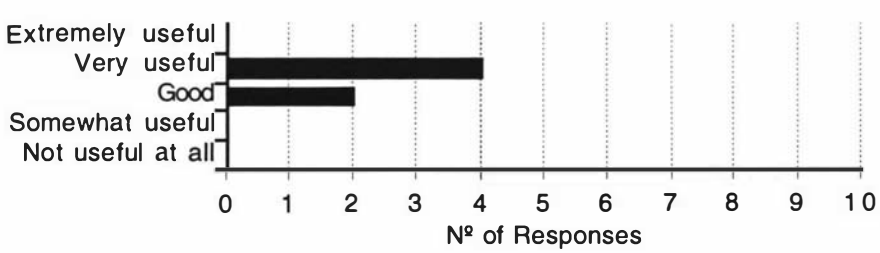
2. Which parts of the workshop did you find particularly useful?

- Relaxation techniques. The Stress Diary was excellent to track down stress and how it effects our bodies. The problem solving exercise was great! It helped me clear my thoughts to take action and I know it helped others more deeply in this workshop.
- All parts were helpful. I found the "Twisted" Thinking section particularly interesting. Also the values assessment was a great starting point. I liked the relaxed pace.
- Recognising the impacts of "Twisted" Thinking and looking to ways to avoid the consequences of this. Remembering to give myself time, to nurture myself and to take more control of situations.
- "Twisted" Thinking.
- Practical exercises for relaxation / breathing.
- Place, facilitator, get friends, chance to find out who I am and what am I. Got some relaxation methods.

3. What improvements can you suggest for future workshops?

- To have a break before 1 $^{1}/_{2}$ hours have gone.
- Clearer instructions before tasks to be done.
- No response (x4)

4. How useful will these processes be for you?



Comments ...

- An excellent tutor!
- Some of the techniques can be handed on to people I work with. Many thanks for a very useful workshop.
- Very useful, but only if I remember to put the practices into place – to persevere.
- No response (x3)

continues ...

5. **One word to sum up the workshop?**
   - Informative
   - Timely! I knew what to do, but I wasn't doing it! Now I will!
   - Appropriate
   - Positive
   - Organised
   - Fine

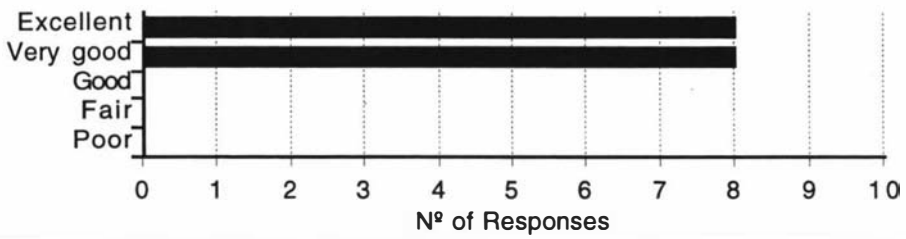
Raeburn House
North Shore Community Health Network Inc

Thriving in the Stress Place
Evaluation / Feedback Summary

Framework Trust Thursdays, 14 and 21 September

16 out of 25 attendees returned the evaluation form

1. Overall rating for the course.



2. Which parts of the workshop did you find particularly useful?

- The physical complaints that one may endure due to high stress levels.
- The pie charts of time allocation, Problem Solving, appropriate thinking, resource allocation.
- The "Jelly Beans" exercise, to be aware how many beans/energy to put in a cup and how to shift the beans so that the energy is more "ideal". Problem Solving! Very good! (also for homework.) How to cope with stress.
- Stress Analysis.
- Goal Setting, What Do You Value, "Twisted" Thinking.
- All. All were particularly helpful to me in one way or another.
- Handouts/examples, competent facilitator, aware/revised strategies to manage stress and anger. Enjoyed self letters.
- Problem Solving, ie. personal resources, considering consequences, etc. Daily Stress Diary. "Twisted" Thinking, enjoyed the types of "Untwisted" Thinking.
- Under the Microscope. Where Does My Energy Go. Letters to Myself – reminder.
- Going over cognitive distractions.
- Was very balanced. Good delivery of info.
- Whole workshop extremely useful. Good reminder of self-care. Recognising and acknowledging stress. Socialising with others.
- The "Jelly Bean" exercise showed me in a very practical way what I have always known, waste to much time. Sitting next to Deborah and having lots of fun. Going out to lunch with people I don't normally mix with. Getting to know other staff members. These things are very important to me, learning how to be part of a group.
- Sharing of other people's experience – I am not alone. The second session – we shared strategies to overcome stress. Ruth pointed out that any Joe Blogg can apply these strategies and that you don't need to be a rocket scientist to find out how.
- The first day was excellent. A lot of the material was new to me, the breaks were well placed and the balance of facilitator explanation, teaching and participant activities was good.
- All true knowledge is. Used actual happenings.

3. What improvements can you suggest for future workshops?

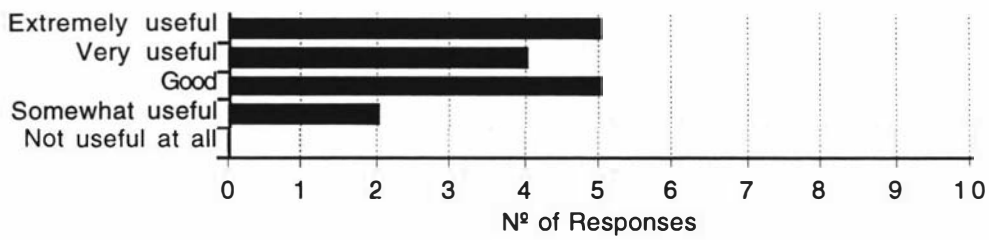
- Possibly smaller groups. A mixture of people from other services.
- More emphasis on biological effects of stress. Role plays on assertiveness, conflict management and boundary setting to limit personal damage.
- More personal support, more time for each person (skills).
- More small group work. More discussion around interpersonal stress.
- None. Very good workshop in my opinion.
- Possible smaller groups. Mixture of other individuals from different organisations. Follow-up/refresher courses.

continues ...

Question 3 continued

- An advanced course. Assessing levels of stress management knowledge prior to course starting.
- We could apply role plays and maybe have more small group interactive work rather than one-one.
- Day two could be more interactive. I felt that less emphasis on "Twisted" Thinking would be more effective for me as I have personally done RET myself as a means to counteract clinical depression. I would have preferred a mix of people from different organisations to provide more psychological safety. I usually share freely as I have taken part in heaps of workshops like this and sharing personal material can give others too much power.
- Some "Yes or No" questions. More time for questions. Less questions, after all, it's answers one wants.
- No response (x6)

4. How useful will these processes be for you?



Comments ...

- They highlighted some of my forms of coping, though recognising there are areas that still need working on.
- A very useful course.
- This course is useful for home and work, and above all, very useful! in a practical situation. Thanks!
- Good for building teamwork and supporting one another in the field of care-giving.
- Thought provoking course covering a lot in two days. Flowed beautifully. Tutor has amazing facilitating skills.
- Attempt to incorporate small processes into daily activity. Also useful for working with clients.
- Although aware of many of the methods discussed, it was reinforcement of these methods and recognising that skills and peer support is important.
- Good to start at 9:30am.
- Processes will be very useful for me if I can put them into practice. Which is why I say "Good" and not "Extremely Useful", as I have a bad track record when it comes to putting theory into practice.
- The stress management is very beneficial to my daily life, especially when stress is around work. It's made me more aware of how to deal with it and definitely balance my energy evenly around my priorities.
- Provided can remember.
- No response (x5)

5. One word to sum up the workshop?

- Positive
- Team-building
- Great (x2)
- Kapai
- Excellent (x2)
- Wonderful
- Useful
- De-stressed
- Awesome
- Enjoyable
- Fun
- Thank you!
- Valuable
- Pleasant

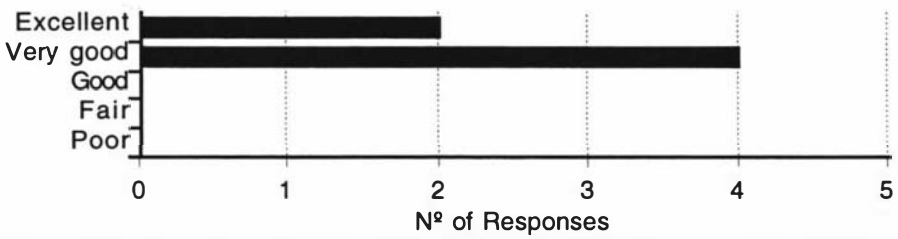
Raeburn House
North Shore Community Health Network Inc

Thriving in the Stress Place
Evaluation / Feedback Summary

Auckland Women's Health Centre Saturdays, 23 and 30 September

6 out of 7 attendees returned the evaluation form

1. Overall rating for the course.



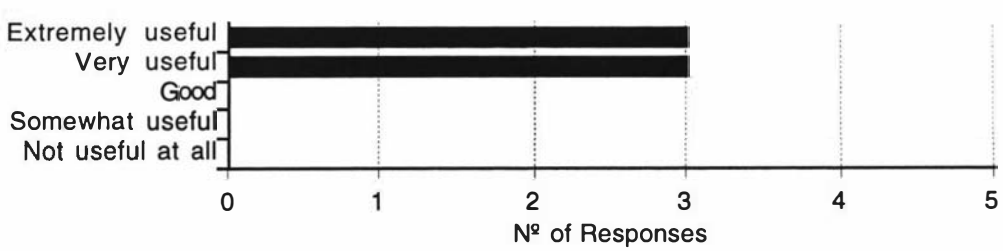
2. Which parts of the workshop did you find particularly useful?

- Strategies for managing stress. Opportunities for brainstorming and list making that was helpful.
- Explanation of "Twisted" Thinking – can identify!
- Looking at patterns of thought. Learning to make small changes
- Identifying your own skills. Been given strategies or ideas to cope with stress. The structure overall was very good. Course wasn't pushy for time.
- Open discussion. Great exercises, well thought through content to raise awareness and develop insight.
- Discovering how stress plays out in my life especially as a physical response. Day diary, to look at what goes on around stressful situations, were an excellent tool that I will use to get a greater awareness of what stress is doing to me.

3. What improvements can you suggest for future workshops?

- More notes, perhaps as homework, but this may well be covered by recommended reading.
- Get more people involved.
- More thorough introductions to get more of a sense of what people are bringing into the workshop, the kinds of stress people are dealing with.
- None at this time.
- No response (x2)

4. How useful will these processes be for you?



Comments ...

- Both for me and to pass on in work place.
- Will help to keep things in context.
- Improved awareness of stress and need to act to alleviate/minimize stress when it is unhelpful.
- Look at my behaviour, helps me change or make choices that serve me better. That I'm a player worthy of all I give to others, and endeavour to do more.
- No response (x2)

continues ...

5. **One word to sum up the workshop?**
   - Useful
   - Satisfying
   - Inspiring
   - Awesome
   - Excellent – good reminder
   - Informative

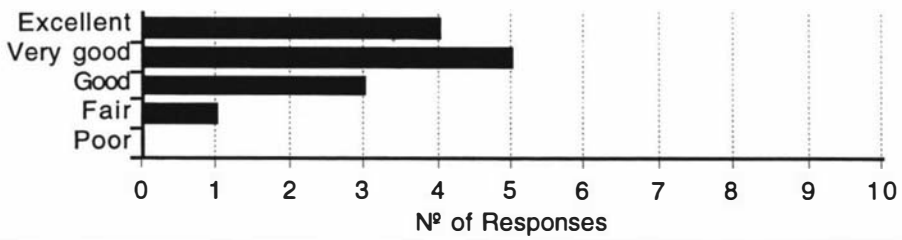
Raeburn House
North Shore Community Health Network Inc

Thriving in the Stress Place
Evaluation / Feedback Summary

Link House, Hamilton Mondays, 9 and 16 October

13 out-of 19 attendees returned the evaluation form

1. Overall rating for the course.



2. Which parts of the workshop did you find particularly useful?

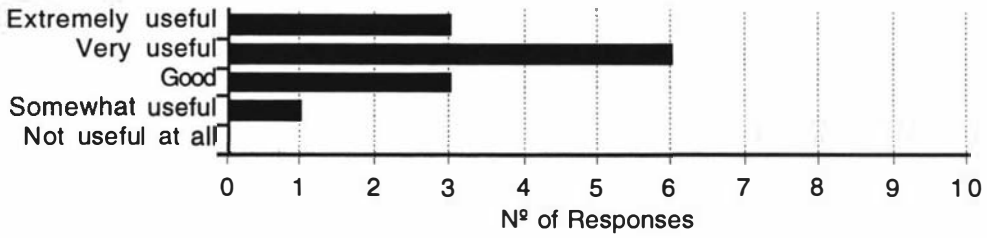
- Secrets of people who deal well with stress. I knew the stuff, I just needed a jolt.
- Group participation.
- A-B-C model and Problem Solving – I enjoyed learning about different ways to cope with stress. Looking at some strategies around how to cope with stress level.
- Under the Microscope and "Twisted" Thinking.
- The group activity on Problem Solving.
- Problem Solving strategies. "Twisted" Thinking. I like the letter to yourself to be forwarded at a later time.
- Looking at "Twisted" Thinking messages and recognising which ones apply to me. Problem Solving.
- Identifying stress, "Twisted" Thinking and coping strategies.
- Recognising what creates my stress, the strategies to (hopefully) reduce it. Understanding the thought patterns surrounding it.
- Identifying my values and where I place my energy. Particularly useful because I could take the time to reassess them to more of my liking. Regaining control.
- Identifying and understanding 'stress'. How others deal with stress.
- Chatting, discussing personal applications in small groups.
- "Twisted" Thinking. Values / time exercise.

3. What improvements can you suggest for future workshops?

- Introduction at the beginning of the second day.
- Slow the pace. Some parts could be explored more in-depth.
- Another workshop – learn more about stress.
- More group discussion and feedback.
- More work in small groups encourage participation. Reflection in the whole group after each exercise would assist integration of ideas.
- Maybe more interactive / hands-on work.
- Not really. Perhaps follow-ups as agencies tend not to do it again! This is not really an improvement, but a suggestion for the participants benefit in say six months.
- Catered.
- More interaction, less lecturing.
- A bit more doing, less listening.
- No response (x3)

continues ...

4. How useful will these processes be for you?



Comments ...

- Stressful times will make me take stock first.
- Thank you Ruth for travelling so far for us. I enjoy your sense of humour and your 'easy listening' manner.
- Most of this is revision and reaffirming my own practices, and useful for that.
- Recognising thought patterns has assisted me, I'm one who needs reasoning for what has happened or why someone behaves a certain way.
- Great for me and for family members too. Also a model to work from with clients.
- I think they are a few of many schools of thought to consider.
- I learnt so much.
- No response (x6)

5. One word to sum up the workshop?

- Thank you!
- Inspiring
- Valuable
- Well done
- Okay (x2)
- Interesting
- Useful
- Good
- Brill
- Kapai!!!
- Informative
- A relief to identify the stress struggle

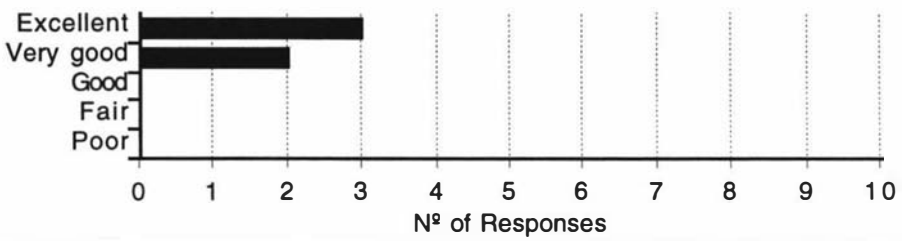
Raeburn House
North Shore Community Health Network Inc

Thriving in the Stress Place
Evaluation / Feedback Summary

Framework Trust Wednesday 11 and Thursday 19, October

5 out of 10 attendees returned the evaluation form

1. Overall rating for the course.



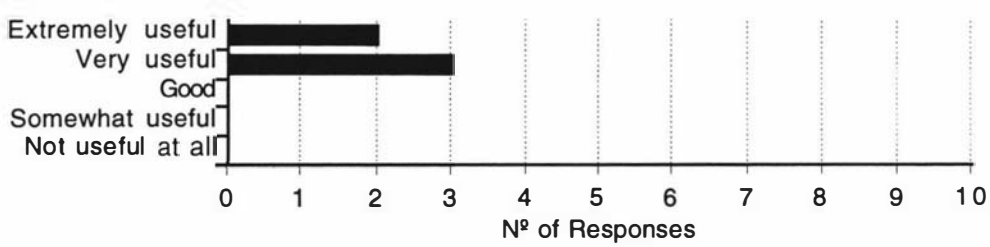
2. Which parts of the workshop did you find particularly useful?

- Looking at stress and managing. Learning to cope and move on. Controlling emotions and to concentrate on myself.
- All of it – role division, information about stress, breaking down (eg. coping strategies, stress Problem Solving), etc. Vibrant, energetic presentation – good role model, especially as you experience stress yourself.
- Speak out one's experiences. Sharing theory and expectation.
- "Twisted" Thinking – recognising my own thoughts and strategies to deal with them. Going through the process of Problem Solving model. Relaxation technique (they worked!).
- Learning to identify my stress and coping strategies. Getting bigger pictures. Values especially good.

3. What improvements can you suggest for future workshops?

- Role playing. Physical activity. More interaction.
- Maybe more experiential.
- To arrange more time / days. Invite some people who are being stressed and learn and consult practically.
- None.
- Maybe just longer workshop and more in-depth.

4. How useful will these processes be for you?



Comments ...

- Definitely learned about stress identifying and managing it. Changing processing of thinking, more looking rational.
- Filling in the stress barometer has given insight into 'how' I stress – leading to acknowledging signs of stress. Thank you!
- The workshop empowers the knowledge of stressed situation, receiving individual secret way of coping with the situation. High value for all social workers.
- No response (x2)

continues ...

5. **One word to sum up the workshop?**
   - Realistic
   - Useful / Awesome
   - Relax and peace
   - Practical and attainable
   - Fantastic!!

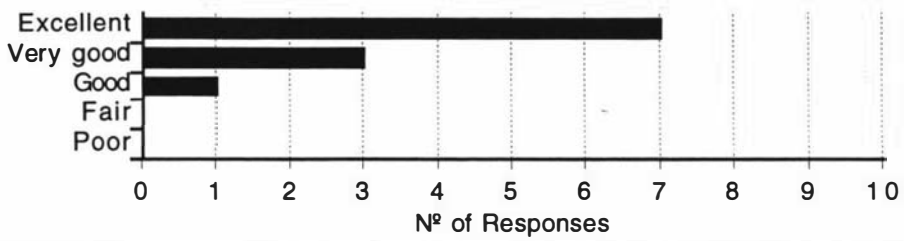
Raeburn House
North Shore Community Health Network Inc

Thriving in the Stress Place
Evaluation / Feedback Summary

Auckland City Council Community House Co-ordinators
Ferndale House, Mt Albert Friday 13 and Wednesday 25, October

11 out of 14 attendees returned the evaluation form

1. Overall rating for the course.



2. Which parts of the workshop did you find particularly useful?

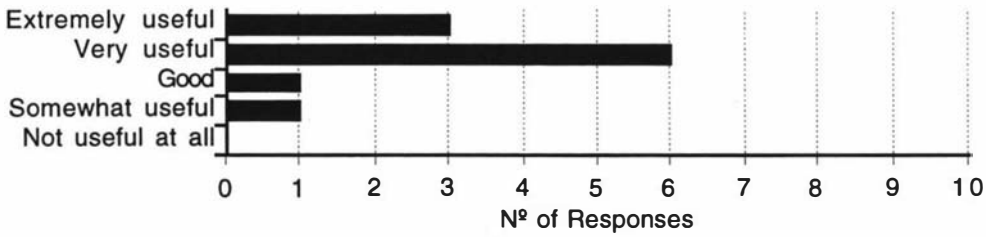
- The two circles: time usage vs ideal time usage. "Twisted" Thinking.
- Bringing to light my own understanding of stresses that I had been, up until then, unable to completely recognise. Verbalising assisted with this immediately.
- Discussion on "Twisted" Thinking and lists of qualities of people who cope well.
- The pie chart, session one. So simple, yet so effective.
- How to control stress better. Discussions.
- I found the whole of the workshop useful as it was helpful in so many ways
- Problem Solving technique. Sort out if stress is real or only how I perceive relaxation at end of first day. Self awareness of stress situation and do something then rather than stew and later.
- Examining values (pie graph). Problem Solving model – tools. "Twisted" Thinking. Stress Diary – very good exercise.
- Better reminded that it is OK to say 'no'. Learning about "Twisted" Thinking and that it is not so much the situation, but how you react to it. Being reminded to accept 'what is'.
- Tools for coping strategies. Realising what stress is.
- Coping strategies.

3. What improvements can you suggest for future workshops?

- I felt that the workshop was well thought out and put together.
- Workshop was wonderful.
- Whiteboard throughout, otherwise nothing.
- None at all.
- Early time finish. People provide own tape for relaxation talk – voice for later play.
- Group participation (verbal, practical).
- Sometimes instead of throwing a question to whole group and waiting for an answer, it's too easy to sit back and not contribute, I feel that to go round whole group can be interesting and individuals can 'pass' if they want to.
- Nothing at present. A follow-up.
- No response (x3)

continues ...

4. How useful will these processes be for you?



Comments ...

- Should be held more often.
- More should be held.
- To give perspectives on how to view things differently.
- Need to be aware on daily basis of stress and use strategies regularly.
- Problem Solving model, very good tools for solving situations.
- I thought the idea of posting a letter to yourself as a reminder was excellent.
- At present, I feel I can handle my stress. However, as the stress levels rise, I would use the strategies then.
- No response (x4)

5. One word to sum up the workshop?

- Invigorating
- Excellent
- Enjoyable (x2)
- Very enjoyable
- Great
- Good
- Refreshing
- Interesting
- Super – Wonderfully beneficial at a time when it was needed.
- Really great. Enthusiastic facilitator

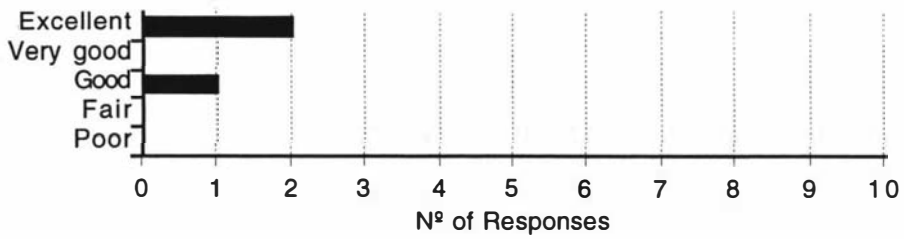
Raeburn House
North Shore Community Health Network Inc

Thriving in the Stress Place
Evaluation / Feedback Summary

Evaluations Mailed to Raeburn House
Unknown Venues Wednesday, 31 January, 2001

3 attendees returned the evaluation form

1. Overall rating for the course.



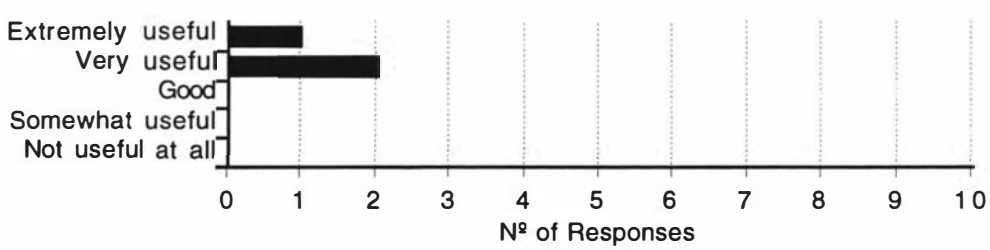
2. Which parts of the workshop did you find particularly useful?

- Useful data on stress strategies for management. "Twitsed" Thinking, etc. good.
- Considering this was the first ever for me, I found every part of the course/ workshop particularly useful to me and this enables me to understand not only clients but meyself too, with my future referrence to my employment.
- The whole workshop was presented well and I have found it all very useful and just interesting and fun learning.

3. What improvements can you suggest for future workshops?

- More interactive components.
- Perhaps memos sent out to different organisations on a regular basis about stress and how best to understand the problems we face in today's society. Ways weare able to try and prevent situations before they arise.
- Maybe next time put words and their meaning at the back of the handout.

4. How useful will these processes be for you?



Comments ...

- I enjoyed the facilitator's approach – warm and knowledgeable.
- It will help me to encourage other co-workers to do this workshop so they too can understand the stresses of ourselves and clients we work with and accept a better understanding of how to deal and cope with some of the situations we got ourselves into without realising what we're doing.
- I have no comments at all except that I highly recommend this workshop to anyone.

5. One word to sum up the workshop?

- Timely!
- Awesome
- Excellent