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**THE ROLE OF PERSONALITY AND COPING  
ON THE WELL-BEING OF  
SOUTH AFRICAN IMMIGRANTS**

**A thesis in partial fulfilment of the requirements  
for the degree of  
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## ABSTRACT

This thesis explores and researches the outcome variables of loneliness, depression, well-being and anxiety in terms of immigration. It investigates the impact and relationships of demographics, personality and coping on these outcome variables. The research sample consisted of South African immigrants who had lived in New Zealand for six years or less. The research collected quantitative data through a questionnaire. Participants were acquired through the South African New Zealand Trust (SANZ) and by word of mouth, using a snowballing technique. The questionnaire was distributed by post to willing participants. The questionnaire consisted of six scales: the revised UCLA Loneliness scale, the General Health Questionnaire, the Beck's Depression Inventory, the State-Trait Anxiety Inventory, the NEO-FFI and a coping scale consisting of items from the Cybernetic Coping Scale and the Cope Scales. In addition to the scales it included questions concerning demographics. Overall, these immigrants experienced normal levels of loneliness, anxiety, depression and well-being. Significant differences in the outcome variables were found for gender, marital status, employment status, pertinent job skills/qualifications, being a member of SANZ, involvement in community activities and distribution of friends. Significant differences were also found for demographics in terms of personality and coping. The predictive ability of personality and coping towards the outcome variables was evaluated. Neuroticism was found to be a significant predictor of the outcome variables, whereas the other personality traits and coping were not significant predictors of the outcome variables.

# CHAPTER ONE

## 1 Introduction

“New Zealand is an immigrant country” (Pernice & Brock, 1996, p. 511). According to the New Zealand Immigration Service, in seven years from 1992 to 1998, New Zealand accepted 255,408 immigrants for permanent residence ([http://www.immigration.govt.nz/research\\_and\\_information](http://www.immigration.govt.nz/research_and_information)). During those seven years, South Africa has contributed to 7% of the total number of immigrants and has featured in the top 10 nationalities of immigrants. In 1998 South Africa ranked third in the top 10 and contributed 12% of the total immigrants to New Zealand. This makes immigration in general and South African immigration in particular an extremely important issue that needs to be researched further to facilitate and improve resettlement procedures in New Zealand, enabling the harmonious integration of immigrants.

There are various theories about the difficulty immigrants have in adjusting to the host society and the resulting development of mental health problems. The social selection theory attributes the development of these problems to the individual's predisposition ignoring any difficulties encountered in the new environment (Pernice & Brock, 1996). The social causation theory focuses purely on external causes influencing the development of these problems. On the other hand, the multivariate model of the immigrant adaptation process looks at pre-immigration factors, individual demographic factors and post-immigration factors and issues present in the host society (Rogler, Cortes, & Malgady, 1991). Demographic factors seem to have the least effect on mental health, but pre-immigration factors can cause depression, anxiety and post-traumatic stress disorders (Rogler et al., 1991). Pre-immigration motives and causes of immigration play a part in the success of the immigration process (Kunz, 1973). Post-immigration factors can also affect mental health, with discrimination being the most crucial factor which is associated with higher levels of anxiety and depression (Rogler et al., 1991; Padilla, Cervantes, Maldonado, & Garcia, 1988). Two other post-immigration factors, which are of great importance, are unemployment and separation from family (Holtzman & Bornemann, 1990). Unemployed people display higher levels of depression which rapidly diminish

once employment is found. Separation from family affects mental health whereas support of family actually protects people from stress and promotes well being (Holtzman & Bornemann, 1990). In a study performed to assess specific stressors experienced by Mexican and Central American immigrants to the United States, it was found that the three major strains were related to post-immigration factors (Padilla et al., 1988). The immigrants reported these strains as 1) being unable to communicate in English, 2) having difficulty in finding employment and 3) living illegally in the United States.

Diminished mental health is often associated with immigration, but it is not a foregone conclusion and depends very much on moderating factors such as the nature of the host society, the type of acculturating group and individual characteristics (Berry, 1990). The nature of the host society can be one of pluralist or multicultural ideologies or one of assimilationist ideologies (Westermeyer, 1990). Pluralist or multicultural ideologies promote and encourage cultural diversity and therefore moderate the acculturation process, whereas assimilationist ideologies produce pressure to conform to a single culture and therefore hinder the acculturation process by causing cultural identity conflicts (Berry, Kim, Minde, & Mok, 1987; Westermeyer, 1990). Sociocultural and economic characteristics of the society can also have a moderating influence on the acculturation process (Hattar-Pollara & Meleis, 1995). The type of the acculturating group refers to whether the group is viewed as immigrants, refugees, native people, ethnic groups or sojourners (Berry, 1990; Westermeyer, 1990). Individual characteristics refer to demographic, social and psychological factors, as well as mode of acculturation, which are all to some extent dependent on both pre-migratory and post-migratory experiences and knowledge (Berry, 1990).

Immigrants also have to deal with their cultural identity and with their identification with the host country which occurs by establishing new social networks. These social networks involve dealing with new behavioural norms and values of the host society (Rogler et al., 1991). These behavioural norms and values may be detrimental if they are composed of damaging stereotypes and prejudices, thus causing poor self-esteem and self-image in the immigrants. Resolving cultural identity and formation of social networks occurs through the process of acculturation. This occurs by adopting one of the following modes of acculturation: assimilation, marginalisation, separation or integration (Berry, 1990;

Berry et al., 1987; Sam & Berry, 1995). Assimilation refers to the migrant identifying only with the host society's culture and ignoring his own cultural identity (Berry, 1990; Berry et al., 1987; Sam & Berry, 1995; Westermeyer, 1990). Marginalisation refers to the migrant not becoming involved in the host culture and at the same time not maintaining his own ethnic culture (Berry, 1990; Berry et al., 1987). Separation refers to the migrant focusing on his own ethnic culture with minimal involvement and contact in the host culture. Integration refers to the migrant identifying with both the host and his own ethnic culture, thus maintaining his own cultural identity, but at the same time becoming integrated into the larger dominating cultural framework (Berry, 1990; Berry et al., 1987; Westermeyer, 1990). This has been considered to be a balanced combination (Rogler et al., 1991) and it has been suggested that migrants that make most use of integration tend to adapt more successfully to living in a new society and culture and have better mental health than those who use other modes of acculturation (Berry et al., 1987; Sam & Berry, 1995).

Acculturation goes hand in hand with acculturative stress. The concept of acculturative stress is given to stress that has arisen due to the acculturative process and where the source of the stressors is identified as residing in the acculturation process. (Berry, 1990; Berry et al., 1987; Westermeyer, 1990). This stress can lead to lowered mental health, depression, anxiety, feelings of marginality and alienation, identity confusion and higher levels of psychosomatic symptoms (Sam & Berry, 1995; Westermeyer, 1990). For some individuals acculturative changes may be perceived as stressful, whereas for others it may be seen as opportunities for development (Westermeyer, 1990). Acculturation for some individuals can lead to enhanced life chances, improved health status, better living conditions and better health care relative to their previous environment and circumstances.

Generally though, acculturative stress affects individuals to some extent in a negative way. Furnham (1990) describes acculturative stress in terms of culture shock and looks at the psychological and emotional aspects of culture shock. "Culture shock is precipitated by the anxiety that results from losing all our familiar signs and symbols of social intercourse. These signs or cues include the thousand and one ways in which we orient ourselves to the situations of daily life." (Furnham, 1990, p. 280). Furnham (1990) describes six emotional and

psychological aspects of culture shock:

- 1) Strain produced in dealing with psychological adaptations.
- 2) Sense of loss and deprivation due to loss of friends, status, profession and possessions.
- 3) Feeling rejection from the host society or dealing with own rejection of the new culture.
- 4) Identity confusion, role confusion and different role expectations.
- 5) Feelings of surprise, anxiety, disgust and indignation with the new culture and its values.
- 6) Dealing with feelings of impotence and lack of control when unable to cope with the new environment.

Some researchers conceptualise immigration as occurring in phases.

Furnham (1990) describes four phases of immigration:

1. The honeymoon phase where the initial reaction to the host country is one of enchantment, wonder, fascination and enthusiasm.
2. The crisis phase where the immigrant becomes aware of differences in language, different cultural values and concepts, lack of familiar signs and symbols which then leads to feelings of inadequacy and frustration and causes anger and anxiety.
3. Recovery phase is where the crisis phase is resolved by the immigrant adapting to his new environment and culture.
4. In the adjustment phase the immigrant begins to enjoy the new culture and new environment and it starts to become a familiar way of life.

Fischman (1986) also refers to these phases and attempts to provide a time scale for them. He perceives the honeymoon phase to occur in the first year where feelings of happiness and satisfaction were reported by refugees. The crisis phase occurs in the second year due to the delayed realisation that they will not be returning to their old life and to their friends and family that have been left behind. In the third year feelings of distress and inadequacy stabilise in the recovery phase and are replaced by feelings of adjustment and stability which then lead onto the adjustment phase. However, immigrants have different experiences and different pre-migratory, post-migratory and individual factors which would play a role in determining the length of each phase.

There are various pre-immigration and post-immigration factors which

determine the level of acculturation and adaptation of immigrants to their new host country. The success of acculturation and adaptation is often divulged through outcome variables such as depression, loneliness, anxiety, well-being and happiness. At the same time other personal characteristics of the individual play a part and personality and coping behaviour play an integral part in the resettlement process of immigrants. This thesis aims to explore the outcome variables of depression, loneliness, well-being and anxiety in terms of South African immigration. This exploration will also include personality and coping and the influence or connection they have with the outcome variables. Demographics and their relation with the outcome variables, personality and coping will also be investigated.

## CHAPTER TWO

### 2 Literature Review

This chapter covers a review of the relevant literature. The constructs which are explored and discussed in this thesis are made up of outcome variables consisting of: loneliness, depression, anxiety and well-being and independent variables consisting of personality and coping. The outcome variables will first be discussed with an overview on the theoretical aspects, followed by a discussion on the association between the outcome variables and relevant demographics. This will progress onto exploration into personality and the influence it has on the outcome variables and the relation between personality and demographics. An examination of coping will follow, touching on the theory behind coping, the impact of coping on the outcome variables and the relation between coping and demographics. Finally the interaction between coping and personality and their effect on the outcome variables are discussed.

Due to the extent of the constructs to be discussed, the discussion has had to cover a broad area and due to the breadth of the material the depth of the discussion has been somewhat limited in its scope.

#### 2.1 Loneliness

“Loneliness is caused not by being alone but by being without some definite needed relationship or set of relationships....Loneliness appears always to be a response to the absence of some particular type of relationship or, more accurately, a response to the absence of some particular relational provision.” (Weiss, 1973, p. 17).

Weiss (1973) divides loneliness into two types: emotional loneliness and social loneliness. Emotional loneliness emerges when there is an absence of a close emotional attachment or an intimate relationship. Social loneliness occurs when there is an absence of an engaging social network, meaningful friendships or feeling of belonging to a community. During emotional loneliness individuals may suffer from anxiety, restlessness and emptiness, whereas during social loneliness they may suffer from boredom and feelings of marginalisation (Lunt, 1991). In Weiss's (1974) framework neither individual nor social factors seem to

have direct impact on loneliness. Instead, both affect the variables of social provisions which in turn influence levels of loneliness. Social provisions are described as relationships where the following take place: attachment, social integration, nurturance, reassurance of worth, reliable alliance and guidance. Different relationships provide different types of social provisions. A lack of social provisions produces loneliness, for example a lack of social integration tends to produce social loneliness and a lack of attachment produces emotional loneliness (Weiss, 1974). Social loneliness has been found in foreign students, however no emotional loneliness was found. This is to be expected since social loneliness is associated with cultural displacement (Hsu, Hailey, & Range, 1987). In terms of immigration, another type of loneliness that can occur is cultural loneliness which occurs when immigrants feel that the connection with their own cultural heritage has been severed (Kim, 1999).

Most approaches to loneliness tend to focus on definitions based on three assumptions. Firstly, that loneliness results from one's perceptions of deficiencies in the social sphere, secondly that loneliness is subjectively experienced by the individual and may or may not have a concrete foundation and thirdly, that loneliness is normally a distressing experience (Kraus, Davis, Bazzini, Church, & Kirchman, 1993; Peplau & Perlman, 1982). The causes of loneliness tend to be focused on both individual factors, such as personality traits and characteristics, and on social factors based on the person's social environment and social relationships (Kraus et al., 1993). These factors do not necessarily influence loneliness directly; for example personality traits can affect the social environment which in turn affects loneliness, thus personality will indirectly affect loneliness levels.

After reviewing the literature on loneliness, Kraus and colleagues (1993) believe that attempts at identifying the causes and consequences of loneliness focus on two approaches: the 'individual factors' approach and the 'social factors' approach. The 'individual factors' approach suggests that personality traits may make individuals more susceptible to feelings of loneliness. Lower self-esteem, shyness, extraversion, social anxiety and neuroticism have all been linked to loneliness (Kraus et al., 1993). Lonely people tend to have certain personality characteristics: they tend to be shy, introverted and less willing to take social risks (Peplau & Perlman, 1982). Loneliness is often associated with self-deprecation,

low self-esteem and inadequate social skills. These personal characteristics can make the person less socially desirable, may influence the person's behaviour in social situations producing unsatisfactory social interactions and may influence how effective the person is in dealing with social relational changes by avoiding, minimising or alleviating loneliness (Peplau & Perlman). This approach also emphasises the cognitive processes with which individuals form a perception of their social environment and of their social relationships (Peplau & Perlman, 1982; Stokes, 1985) proposing that loneliness can occur due to a perceived dissatisfaction with one's social environment and relationships.

The 'social factors' approach suggests that there is a direct link between the social environment and feelings of loneliness (Kraus et al., 1993; Stokes, 1985). The individual who has few social contacts, few close friends, and low-density social networks has been found to be more susceptible to loneliness and to experience greater levels of loneliness (Kraus et al., 1993). The social environment and social relationships can also be viewed as acting as social reinforcement and the amount and type of social interactions that satisfy a person depends on the person's social reinforcement history (Perlman & Peplau, 1982). When people experience insufficient social reinforcement to satisfy their needs they may be prone to developing loneliness.

Other studies have found that qualitative measures of social relationships and evaluations of the social network tend to be more directly linked with loneliness than other social network factors (Kraus et al., 1993). In one proposal, loneliness is viewed as being mostly affected by individuals' perception and evaluation of their social environment (De Jong-Gierveld, 1987). Individuals may be dissatisfied with their social network and may perceive their relationships as inadequate. This subjective evaluation affects loneliness levels and mediates the effect of objective features of the social environment on loneliness (De Jong-Gierveld, 1987). De Jong-Gierveld has separated quantitative features, such as number of friends, from qualitative features of the social environment, such as satisfaction with relationships and intimacy. The qualitative features are seen as being more important in their influence on loneliness levels. The importance of other social factors such as employment status and marital status were also taken into account, but were found to have a less significant effect on loneliness than the qualitative factors.

Loneliness can be triggered by changes in a person's social relations (Peplau & Perlman, 1982). This can include becoming widowed, separated or divorced, entering into a new community or losing close friends or family (Weiss, 1973). In terms of immigration, immigrants will experience a variety of these factors at the same time, for example entering into a new community and feeling the loss of family and friends, making them more vulnerable to loneliness. Loneliness can also be triggered by changes in a person's social needs or desires whereby loneliness will develop if these needs or desires are not met (Peplau & Perlman, 1982).

## 2.2 Well-being

Well-being has predominantly been studied through subjective well-being, whereby subjective well-being is defined in terms of life satisfaction and positive affect whereby the individual whose well-being is being assessed determines what this life satisfaction is and whether positive affect is being experienced (Diener, 1984).

Subjective well-being has three areas of definition. Firstly it is subjective and resides within the experience of the individual (Campbell, 1976). Secondly, the absence of negative affect is not enough and it must include positive affect. Thirdly, the measure of subjective well-being is one of global assessment of all aspects of a person's life (Diener, 1984). Andrews and Withey (1976) also found three components to subjective well-being: life satisfaction as perceived by the individual, positive affect and negative affect.

Ryff (1989) on the other hand, proposed approaching the research on well-being from a different perspective. She suggested that well-being be researched by assessing personal psychological functioning, rather than assessing affect and general satisfaction. She felt that subjective well-being research lacked theoretical back-up and so she incorporated several theoretical perspectives to define her perception of psychological well-being. These perspectives (cited in Cooper, Okamura, & McNeil, 1995) included Jung's (1993) theory on individuation, Roger's (1961) view of the fully functioning person, Allport's (1961) conception of maturity and Maslow's conception of self-actualisation. Ryff developed and validated six measures of distinct components of psychological wellness: positive evaluation of

one's past life (self-acceptance), a sense of continued growth and development as a person (personal growth), the belief that one's life is purposeful and meaningful (purpose in life), the possession of quality relations with others (positive relations with others), the capacity to manage effectively one's life and surrounding world (environmental mastery) and a sense of self-determination or autonomy (Ryff, 1989; Ryff & Keyes, 1995).

There are various theories on subjective well-being. Telic theories are endpoint theories which maintain that happiness or well-being is reached when some state, such as a goal or need, is attained. One theoretical proposal made by Wilson (1960, cited in Diener, 1984) proposed that the fulfilment of needs leads to happiness and the persistence of unfulfilled needs leads to unhappiness.

Alternative telic theories look at where the striving for well-being is derived from. In needs theories people have certain inborn or learned needs that they seek to fulfil. They may or may not be aware of these needs, but it is thought that happiness will follow from their fulfilment. In contrast, goal theories are based on specific desires which the person is aware of. The person is consciously seeking certain goals and the fulfilment of these goals leads to happiness (Michalos, 1980). Telic theories have many shortcomings as they are difficult to test and many are not falsifiable.

Telic theories place the emphasis of happiness on endpoints, on the other hand, activity theories view happiness as being a by-product of human activity and behaviour. The theory of flow perceives activities as being pleasurable when the challenge is matched to the person's skill level. An activity leads to boredom when it is too easy and to anxiety when it is too difficult (Csikszentmihalyi, 1975, cited in Diener, 1984).

Associative theories are based on memory, conditioning and cognitive principles. Cognitive approaches about well-being are still in their infancy. One cognitive approach conceives well-being as being related to the attributions people make about the events happening to them (Swarz & Clore, 1983). For example, good events may bring the most happiness if they are attributed to internal, stable factors. Another cognitive approach views happiness as being related to associative networks in memory. People will recall memories that match their current emotional state (Bower, 1981). This suggests that happy people could develop a rich network of positive associations and a more limited and isolated network of negative ones, so that more ideas and events would trigger happy

ideas and affect and these people would tend to react to more events in a positive way.

Judgement theories assume that happiness results from a comparison between some standard and actual conditions and if actual conditions exceed the standard then happiness will develop (Diner, 1984). In the case of satisfaction such comparisons may be conscious, whereas in the case of affect comparisons may be unconscious. In social comparison theory, other people are used as a standard, so that if people are better off than others they will feel satisfied and happy (Carp & Carp, 1982; Michalos, 1980). In adaptation (Brickman, Coates, & Janoff-Bulman, 1978, cited in Diener, 1984) and the range-frequency (Parducci, 1968, 1982, cited in Diener, 1984) theories, a person's past life is used to set the standard, so that if the person's current life exceeds this standard it will probably lead to happiness. Standards may come about in different ways, but in each case they are used as a basis from which judgement can take place.

There are two opposing causal models of subjective well-being: top-down model versus the bottom-up model. The bottom-up model perceives well-being to be generated from particular domains such as marriage, work and family, and well-being results from having many specific moments of happiness in life (Brenner & Bartell, 1983; Bryant & Marquez, 1986; Wood, Rhodes, & Whelan, 1989). The top-down model, by way of contrast, takes into consideration a person's predisposition to interpret experiences in either positive or negative ways and this predisposition determines one's evaluation of satisfaction in particular domains. The subjective interpretation of events, rather than the objective events themselves, is the primary influence on well-being (Feist, Bodner, Jacobs, Miles, & Tan, 1995). However, research shows that both models are actually involved in subjective well-being and thus a bidirectional model of causality is suggested.

Immigration is a major life event whereby the individual has to adapt to new environments and a new way of life. Recent immigrants tend to have lower levels of well-being compared to non-immigrants (Anson, Pilpel, & Rolnik, 1996). Immigrants that have recently immigrated tend to suffer from lower levels of well-being, compared to immigrants that have resided in the host country for a few years (Anson et al., 1996; Lay & Nguyen, 1998).

## 2.3 Depression

Depression relates to a disturbance in mood, which can range from one end of the continuum, characterised by normal changes of mood to the other end of the continuum characterised by clinical depression (Schwartz & Schwartz, 1993). Depression can be seen as a normal reaction to certain life events and circumstances, but can also be seen as an unwarranted reaction to situations which should not elicit this kind of reaction. Depression is a complex phenomenon which cannot be easily defined as it manifests itself in different people and often in different ways at different times in the same person (Schwartz & Schwartz, 1993). It can be accompanied by a variety of behaviours, such as loss of enthusiasm, a slow down in mental and physical activity, and cognitive distortions such as negative thoughts (Joiner & Coyne, 1999).

The Beck's Depression Inventory (Beck & Steer, 1987) was developed by Beck derived from his theory of depression which is based on three aspects of a depressed person's cognition which he refers to as the "cognitive triad" (cited in Gotlib & Hammen, 1992). Beck proposes that the "cognitive triad" is apparent in depressed people due to their misinterpretations and misperceptions of ongoing events and occurrences. This "cognitive triad" refers to cognitive distortions, faulty information processing and negative self-schemas. Depressives more often than not perceive their situation negatively when they could perceive it positively. They distort their perceptions by engaging in faulty information processing and draw negative conclusions about situations even when there is no evidence for such negativity. Depressives also seem to make use of negative self-schemas, where a schema refers to stored knowledge which affects encoding, comprehension and retrieval of new information (Gotlib & Hammen). Negative self-schemas influence the selection, encoding, organisation and evaluation of stimuli in a negative manner, which then leads to depressive states.

## 2.4 Anxiety

"Anxiety is an unpleasant feeling of generalized fear and apprehension, often of unknown origin, accompanied by physiological symptoms." (Doctor & Kahn, 1989, p. 43). Anxiety emerges due to anticipation of a dangerous situation, this can be triggered either internally from thoughts or externally from the

environment, but the dangerous situation may actually not take place. When suffering from anxiety one is most often unable to specify what one is anxious about. With anxiety there is normally a certain degree of fear present, but fear can be differentiated from anxiety. Fear tends to occur in response to a recognised and existing external threat, whereas anxiety is a response to a person, object or situation which the individual has come to fear through learning and experience and which may or may not be warranted (Doctor & Kahn, 1989). Anxiety is characterised emotionally by subjective feelings of tension, apprehension, nervousness and worry (Spielberger, Gorsuch, & Lushene, 1970).

Anxiety can be a very helpful phenomenon when dealing with life events. Anxiety forces an individual into action when facing a threatening situation and can help you cope with the situation (Bellenir, 2000). However, when anxiety gets out of control and takes the form of an anxiety disorder, then it can have the opposite effect and it can prevent the individual from coping and be very disruptive. An anxiety disorder may make you feel anxious most of the time without any apparent reason for it (Bellenir, 2000). It can become very debilitating and an anxious person may stop doing certain activities to avoid the anxiety or may suffer from occasional bouts of anxiety which are so intense that they cause the person to become terrified and immobilised.

Since the threat that an anxious person perceives is not always obvious, it is difficult to determine the cause of anxiety. Psychoanalytic theory proposes that anxiety occurs due to an unconscious conflict that originated in the individual's past, whereas learning theory proposes that anxiety is a learned behaviour which has been learnt over time in dealing with certain situations (Doctor & Kahn, 1989). This suggests that the behaviour can be reversed and unlearned. In recent research, there has been some evidence that biochemical imbalances may be related to some anxiety problems (Doctor & Kahn).

Anxiety has been categorised into two types: trait anxiety and state anxiety. This distinction was first introduced by Cattell and associates (Cattell, 1966; Cattell & Scheier, 1961, 1963, cited in Spielberger et al., 1970) and later further developed by Spielberger (1966, cited in Spielberger et al., 1970). Trait anxiety has been defined as "relatively stable individual differences in anxiety-proneness" (Spielberger et al., 1970, p. 6). Different people may have a different propensity to anxiety and a different tendency to perceive stressful situations as threatening and

to respond to those situations with anxiety. State anxiety, on the other hand, is characterised by “consciously perceived, feelings of tension and apprehension, nervousness and worry, accompanied by or associated with activation and arousal of the autonomic nervous system.” (Spielberger, 1985, p. 176). It is important to perceive that state anxiety is a transitory emotional state, whereas trait anxiety is incorporated into a person’s personality and is comprised of consistent table individual differences defining the individual’s propensity to anxiety.

## **2.5 The Demographics and the Outcome Variables**

Demographics which are thought to be interrelated with immigration have been incorporated into this research. The demographics which are of interest in this research consist of: age, tenure, gender, marital status, employment status, relevance of qualifications/skills in the current job, employment status of spouse/partner and whether any periods of unemployment have been experienced while living in New Zealand. In the social support arena the demographics of interest are whether they are a member of an organisation or church and whether they attend any activities related to these. Partaking in community activities, having family members living in New Zealand, knowing someone on arrival, distribution of friends and having dependants are also social support demographics of interest. Other demographics to be researched are place where living, adaptation to New Zealand and satisfaction with lifestyle. Only the demographics for which research has been previously performed are discussed in the literature review.

### **2.5.1 Age**

Loneliness is most often associated with the elderly and it is thought that the older the person the more likely they are to experience loneliness (Fees, Martin, & Poon, 1999). In contrast, a study performed by Page and Cole (1991) provides evidence that loneliness is more common among young adults than the elderly. This difference in levels of loneliness between the young and the elderly could be explained by the concept that young adults may have higher expectations of their relationships and may feel more lonely because their expectations are not met,

compared to the elderly who may have more realistic expectations due to life experience and therefore better able to cope with relationship changes or losses (Revenson & Johnson, 1984). For older people living without a partner, the experience of loneliness was felt less in the 'oldest old' than among the 'young old' (Peters & Liefbroer, 1997). In other studies, no evidence was found to support the relation between age and loneliness levels (Baum, 1982; Mullins, Elston, & Gutkowski, 1996).

Immigrants aged 26-35 years experienced significantly more psychological problems and less well-being than any other age group (Abbott, Wong, Williams, Au, & Young, 1999). Perhaps this occurs because immigrants in this age group experience particular pressures related to establishing new careers and having young families, often without the support of parents and extended family. In another study looking at 55 year-olds and over, the 55-59 year old group reported high levels of mental health problems, whereas the 60 to 69 age range reported the lowest levels, indicating that mental health does not necessarily deteriorate with the advance of age (Himmelfarb, 1984).

Age has been found to correlate negatively with anxiety, so the older you are the less you suffer from anxiety symptoms (Christensen, Jorm, Mackinnon, Korten, Jacomb, Henderson, & Rodgers, 1999; Henderson, Jorm, Korten, Jacomb, Christensen, & Rodgers, 1998). This is an unexpected result as generally it is thought that older people would be more disposed to anxiety due to opportunities in life being limited by their age and having to face various anxiety provoking events such as illness, immobility and physical impairment. Anxiety has been found to be at its lowest levels in the oldest age group, with both state and trait anxiety decreasing across the adult life-span (Nakazato & Shimonaka, 1989). It may be that older people have experienced enough stressful events in their lives to have developed adequate coping strategies to deal with their anxiety.

In terms of depression, younger people are more likely to suffer from depression (Wu & DeMaris, 1996) and depression has been found to decline with age (Christensen et al., 1999; Henderson et al., 1998). However, it is thought that this would actually occur in reverse and from research involving depression the suggestion is that the nature of depression may differ across age groups and thus it may not be correctly diagnosed in the older age groups (Christensen et al., 1999).

### **2.5.2 Tenure**

In this research tenure refers to the amount of time that immigrants have been residing in the host country. In research undertaken by Anson and associates (1996), for the first three years after migration, immigrants tended to suffer from an increase in distress, less happiness, poorer family functioning, fewer social contacts and found daily life less manageable and meaningful. Migration entailed excessive losses of family, social networks, employment, socio-economic status and a familiar environment, with these losses impacting negatively on physical, psychological and social well-being. This improved as the amount of time of residence in the host country increased. Thus, the longer the period of residence in the host country the less prominent were the consequences for well-being. In terms of immigrants living in New Zealand, the longer the period of residency the better the adjustment (Abbott et al., 1999).

In a study of Vietnamese students residing in Canada, recent immigrants had higher levels of depression compared to immigrants who had lived in Canada for a longer period of time (Lay & Nguyen, 1998). Those residing in Canada for less number of years also suffered from higher levels of anxiety. A longer tenure in Canada enabled immigrants to adjust and acculturate to their new country of residence enabling depression and anxiety levels to diminish.

### **2.5.3 Marital Status**

In a study on loneliness performed on a large sample of adults, out of the various demographic variables taken into account, the strongest predictor of loneliness was marital status (Page & Cole, 1991). Studies have found that loneliness tends to be most prevalent amongst single people and less prevalent in married people (Essex & Nam, 1987; Page & Cole, 1991; Weiss, 1973). It is not the state of being married that affects loneliness, but rather having a partner within or outside of the household, that makes the difference (Peters & Liefbroer, 1997). A study of students found that students without a steady partner tended to be more lonely than students who had a steady partner (Stephan, Fath, & Lamm, 1988). A partner provides companionship and friendship and keeps loneliness at bay. Where marital statuses have been considered separately, the married and never-married were found to be less lonely than the formerly married (Essex &

Nam, 1987). Widowhood is also linked with loneliness (Koropecjy-Cox, 1998). The severity of loneliness for widowed and divorced persons is dependent on the amount of time that they have been widowed or divorced; the longer the time period from when they were first widowed or divorced the less loneliness they tend to feel (Essex & Nam, 1987; Revenson & Johnson, 1984). In contrast, Baum (1982) found that marital status is not always associated with levels of loneliness.

In terms of depression, marital status has been found to be a significant predictor of depression among women (Veda, Kollody, & Valle, 1986). Women who had been married, but were now divorced or separated showed the highest levels of depression compared to married and never-married women. The never-married had the lowest levels of depression, while widowed women showed similar levels in depression as the married. In other studies with large samples of both men and women, the results showed that the married suffered the least from depression, the formerly married suffered the most, and the never-married were somewhere in between (Christensen et al., 1999; Lubin, Zuckerman, Breytspraak, Bull, Gumbhir, & Rinck, 1988; Pearlin & Johnson, 1977). In the formerly married group, separated people tended to experience the most depression, with divorced and widowed persons experiencing similar levels. The never-married tended to experience more isolation than the married and had more problems in establishing an extensive social life and maintaining social contacts, thus making them more susceptible to depression than married people (Pearlin & Johnson, 1977). Isolation can therefore lead to depression. There are differences in the degree of isolation experienced by unmarried persons: the widowed are the least isolated, followed by the never-married, the divorced and then the separated (Pearlin & Johnson, 1977). Being unmarried tends to be associated with depression, but it is more readily associated with depression when the person is socially isolated from others (Pearlin & Johnson, 1977). Other factors to take into consideration are social and economic strains. When an unmarried person is subjected to these strains they become more susceptible to depression. It has been suggested that marriage functions as a protective barrier against these strains and the person is better able to deal with these strains, than if they were not in a marital relationship (Pearlin & Johnson, 1977).

It is due to this protective barrier that married individuals experience greater well-being (Gove, Hughes, & Style, 1983; Horwitz, White, & Howell-White, 1996;

Mookherjee, 1997; Wood et al., 1989), whereas single individuals tend to suffer more from lower levels of well-being (Abbott et al., 1999; Marks, 1996). This includes the divorced, separated or widowed who have all been found to be at risk for psychological distress (McDonald, Vechi, Bowman, & Sanson-Fisher, 1996).

In terms of anxiety, anxious people tend most often to be unmarried (De Beurs, Beekman, Van Balkom, Deeg, Van Dyck, & Van Tilburg, 1999). Single people were found to have the highest level of anxiety compared to married, divorced, separated or widowed people (Lubin et al., 1988).

#### **2.5.4 Gender**

Various studies performed on loneliness using the UCLA loneliness scale, have found no significant differences in loneliness for gender (Russell, Peplau, & Cutrona, 1980; Wheeler, Reis, & Nezleck, 1983). Others have found differences and males tended to have higher levels of loneliness than females (Wiseman, Gutfreund, & Lurie, 1995). By comparison, other studies using other measures of loneliness, have found females to be more lonely than males (McWhirter, 1997; Page & Cole, 1991). However, this is not always the case, some studies have found males to be more lonely than females (Mullins et al., 1996). A widely accepted view is that males may have difficulty in admitting to their feelings of loneliness because they perceive their feelings of loneliness to be a personal and social failure (Rokach & Brock, 1997), thus not always allowing the differences in loneliness between males and females to be portrayed correctly. Men and women may experience different degrees of loneliness, but they experience the same types of loneliness (McWhirter, 1997).

Females tend to suffer more from depression than males (Christensen et al., 1999; Krause, 1986; Lubin et al., 1988; Nolen-Hoeksema, 1990). A study on Iranians living in the United States found women to be more anxious and depressed than the men; this seemed to be due to the fact that the women were less acculturated than the men (Ghaffarian, 1987). The men were generally employed and had more opportunity to become acculturated through their workplace, whereas the women tended to be housebound and had less opportunities for acculturating. This indicates that less acculturated individuals have more adjustment problems that can lead to depression and anxiety.

Differences in depression among gender is demonstrated across most age groups, except for college students and people aged 65 years or older where no gender differences are displayed (Nolen-Hoeksema, 1990). In the age group 65 and older, depression may be misdiagnosed and under reported as this group may be reluctant to admit to emotional problems and depression may be displayed through somatic symptoms causing depression to be underreported. Unmarried females tend to be more depressed than unmarried males (Wu & DeMaris, 1996). It is thought that females are possibly more depressed than males because they are exposed to more strains in life and greater hardship than males, rather than the view that females are more depressed due to having more vulnerability to stress (Wu & DeMaris, 1996). In contrast, a study performed on Latin American immigrants living in the U.S., and one of the first studies to do so, reported male immigrants as having significantly higher depression scores than their female counterparts (Padilla et al., 1988). It is thought that this was because the males were more likely to be employed and therefore subjected to more stressors. They also had fewer coping strategies available to them, were affected by role strain due to loss of social status and had fewer economic or personal resources available to look after their families which could then all lead to the development of depression.

Being female has also been associated with increased levels of anxiety (De Beurs et al., 1999; Nakazato & Shimonaka, 1989). It is difficult to know why this is so, as these studies did not explore the reasons behind this finding. In measures of trait anxiety women have shown higher levels of trait anxiety than men (Stoner & Spencer, 1986). This could be because women are more willing to report feelings of anxiety than men. Female immigrants have also been associated with a poorer state of well-being (Abbott et al., 1999).

### **2.5.5 Employment**

Immigrants new to their host country are disadvantaged by the threat of unemployment, the loss of their previous jobs and also the loss of social support from their colleagues, friends and family members (Schwarzer, Hahn, & Fuchs, 1995). Thus, looking for adequate employment and trying to establish social contacts and new friendships become forefront issues to be dealt. Those that are

more successful in dealing with these issues are expected to experience better psychological well-being and adaptation. Those that did not find employment suffered from depression and other psychological symptoms (McDonald et al., 1996; Schwarzer et al., 1995). These psychological symptoms could be minimised through social support. This implies that social support buffers the effects of unemployment (Schwarzer et al., 1995).

A study carried out on new immigrants to Canada, showed that immigrants experienced difficulties in finding employment (Aycan & Berry, 1996). Employment related experiences had significant impact on psychological well-being and on adaptation. The longer the unemployment period, the more likely the immigrants were in experiencing acculturative stress, adaptational difficulties, developing a negative self-concept and becoming alienated from society. A large gap in socio-economic status was found between the previous status they held before coming to Canada and the current status they now held in Canada. The greater the loss in socio-economic status the less satisfaction they experienced with their lives in Canada. Employment provides purpose to life, provides socio-economic status, provides identity and enables social relationships to develop. The more one interacts with others in the host society, the faster one acquires skills to deal with the new society and to manage everyday life in the new country (Aycan & Berry, 1996). A great amount of social interaction takes place in the workplace, therefore being unemployed not only impacts negatively on well-being, but also hinders the adaptation process.

Changes in employment status are related to levels of psychological well-being and unemployment leads to lower levels of psychological well-being (Kessler, Turner, & House, 1988; Murphy & Athanasou, 1999; Shamir, 1986). The transition from unemployment into paid work leads to an increase in well-being (Jackson, Stafford, Banks, & Warr, 1983). For immigrants living in New Zealand, those that had secured employment before migrating had higher levels of well-being compared to those that were unemployed after arriving in new Zealand (Abbott et al., 1999).

Unemployed individuals are affected by higher levels of depression and anxiety compared to the employed (Shamir, 1986; Smari, Aranson, Hafsteinsson, & Ingimarsson, 1997; Wu & DeMaris, 1996). Page and Cole (1991) found employment status not to be a predictor of loneliness in a large sample of adults

(Page & Cole, 1991).

### **2.5.6 Children, Family and Friends**

Friends and children can be very important in minimising feelings of loneliness. It appears that for older persons that are not emotionally close to their friends or children, the marital relationship is very important in reducing the risk of loneliness (Hall-Elston & Mullins, 1999). The marital relationship provides support and comfort. On the other hand, when older persons are emotionally close to their friends and children, the marital relationship's influence on loneliness is less important. Marriage tends to be associated with lesser loneliness, but unmarried people who have friends or family are less lonely than married people who have no friends or children (Hall-Elston & Mullins, 1999). It was also found that people with no friends and no children experienced greater loneliness than those with children and with friends (Mullins et al., 1996). Friends and family are important in that they form the social network for people and fulfil the people's needs for social contact, thus alleviating loneliness.

Frequency of contact with family is not very important for emotional well-being; rather the qualitative state of relationships is more important and a better predictor of well-being (Essex & Nam, 1987). The qualitative state of satisfaction with relationships with family members and friends has been associated with higher levels of well-being (Chou, 1999).

In terms of dependants, childlessness is not linked to greater loneliness or depression for either men or women (Koropeckyj-Cox, 1998) and being childless is not related to well-being in any way (Chappell & Badger, 1989).

### **2.5.7 Activity and Religious Involvement**

Participation plays a part in well-being, especially where people take part in organised regular activities and are members of an organisation (Palmore & Luikart, 1972). Involvement in social organisations and their activities, group affiliations and becoming involved in group activities are all associated with psychological well-being (Mookherjee, 1994; Wann & Hamlet, 1994). There is probably a two way effect in this association: persons who are more active in

activities derive substantial life satisfaction from such activities and depressed persons with low life satisfaction may withdraw from such activities. People who are involved in group activities are less lonely than people that do not participate in group activities (Wann & Hamlet, 1996).

In terms of religion, research into the practice of religion has shown that religious faith reduces the level of negative affective symptoms, thus increasing levels of well-being (McCrae & Costa, 1986). Church membership ( $\beta = .119, p < .05$ ) and frequency of church attendance were found to be significant predictors of well-being ( $\beta = .104, p < .05$ ) (Mookherjee, 1994). Church attendance may lead to more involvement in church activities which in turn gives rise to well-being. In contrast, in other research, religion has not been found to be a significant contributor of well-being (Francis & Bolger, 1997).

### **2.5.8 Social Support**

Stokes (1985) refers to four dimensions of a person's social network that are important for well-being. The first is size of the social network. The second is the number of people in the network that one feels close to. The third is the percentage of family members in the network. The fourth is the density of the network which refers to the degree with which members of the network are interconnected and know each other. A high density network is thought to provide a sense of community and a sense of belonging to a group (Stokes, 1985). For immigrants, the loss of one's social network and family ties can have a devastating psychological effect. Strong family ties that existed when family members lived in close proximity of one another and provided great support and stability become altered through the process of migration and are no longer able to provide that support and stability (O'Connell, 1994).

Network size is one of the most important predictors of loneliness; the larger the network people have the less lonely they will feel (Peters & Liefbroer, 1997; Vaux, 1988). Network density is also an important predictor of loneliness, people with high density networks tend to be less lonely (Stokes, 1985; Vaux 1988). Frequency of interaction and quality of relationships within the network also play a role (Revenson & Johnson, 1984; Vaux, 1988). Satisfaction with one's social network, network size and network density are the demographics most strongly

related to loneliness (Jones & Moore, 1989).

Among older Korean immigrants, it was found that those who had stronger ethnic attachment also had more emotional support available to them and these immigrants were more satisfied with their social support and had lower levels of loneliness (Kim, 1999). This study found that the greater the amount of social support and the greater the number of social network members, the less lonely they felt.

Well-being has been found to be integrally associated with social support (Vega, Kollody, & Valle, 1986). Availability of family support benefits psychological well-being (Holahan & Moos, 1986). Successful cross-cultural adaptation is important for immigrant well-being. It has been found that making use of host communication channels contributes to cross-cultural adaptation, whereas making use of ethnic communication channels is related to lower levels of cross-cultural adaptation and thus lower levels of well-being (Shah, 1991). Asian immigrants in the U.S. who reported greater social and cultural ties with the host society and fewer traditional ones, had better mental health than those who reported lower levels of involvement in the host society and culture (Mehta, 1998).

Depressed individuals tend to have fewer social contacts, a less self-affirming social environment, are less sociable and have less close relationships than non-depressed individuals (Holahan & Moos, 1994; Joiner & Coyne, 1999). Depression is also associated with high expectations of social support. The support provided may be adequate, but may not satisfy the individual's high expectations above the norm (Joiner & Coyne).

In one study, elderly individuals were found to suffer less from depression when they were receiving an adequate amount of social support (Holahan & Holahan, 1987). In this same study, a link was found between qualitative aspects of social support and the mental well-being of elderly individuals, where social integration, reassurance of worth and guidance were positively related to mental well-being. Two types of social support are instrumental social support and emotional social support. Instrumental social support provides advice, assistance or information whereas emotional social support provides moral support, sympathy or understanding (Carver, Scheier, & Weintraub, 1989). Elderly Korean immigrants found instrumental support was not helpful in controlling their levels of depression, but emotional support was found to diminish the impact of life stress and to

suppress depression (Lee, Crittenden, & Yu, 1996).

### **2.5.9 Satisfaction with Lifestyle**

Satisfaction with lifestyle in the host country is a demographic related to immigration and which can assist in adaptation and acculturation to the new country of residence. One of the few studies to consider this immigrant-related variable was research carried out by McDonald and associates (1996) on Latin American immigrants living in Australia. They found that the immigrants that suffered from the highest psychological distress were those that were not satisfied with their life in Australia.

### **2.5.10 Interaction Amongst the Outcome Variables**

The outcome variables of loneliness, depression, anxiety and well-being are interrelated and often present together in varying combinations. Suffering from anxiety has been associated with decreased well-being (De Beurs et al., 1999). Anxiety is associated with loneliness; the greater the anxiety the greater the feelings of loneliness, the greater these feelings the greater the decrease in well-being (Fees et al., 1999; Hojat, 1983). Loneliness is not only accompanied by anxiety, but also by depression (Hojat, 1982, 1983). Depressed people tend to suffer from loneliness, especially emotional loneliness (Hsu et al., 1987). Depression is also strongly associated with the presence of anxiety (Farmer, 1998) and even though anxiety and depression are separate entities, they are highly correlated and often exist together (Christensen et al., 1999; De Beurs et al., 1999).

## **2.6 Coping**

This section of the thesis discusses coping. It first looks at coping in a general sense and then discusses coping in terms of the outcome variables. Further discussion is made in regards to coping and demographics, of which only the demographics which appear in the literature are discussed.

Coping can be defined as “the person’s cognitive and behavioral efforts to

manage (reduce, minimize, master, or tolerate) the internal and external demands of the person-environment transaction that is appraised as taxing or exceeding the person's resources." (Folkman, Lazarus, Gruen, & DeLongis, 1986b, p. 572). Coping has two major functions: firstly it may regulate stressful emotions and this is termed emotion-focused coping, and secondly it may alter the environment or situation producing the stress and this is termed problem-focused coping (Folkman et al., 1986b; Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986a; Lazarus & Folkman, 1984). Individuals have been found to use more problem-focused forms of coping in situations which they think they are able to change or over which they have some influence and tend to use emotion-focused forms of coping in situations where they perceive few options being available to change the situation's outcome (Folkman et al., 1986b).

Coping can be conceptualised in terms of the primary determinants of coping processes of which there are two approaches have been devised: the dispositional approach and the contextual approach (Holahan, Moos, & Schaefer, 1996). The dispositional approach assumes that it is stable person-based factors which determine the choice of coping strategies, whereas the contextual approach assumes that it is transitory situation based factors which determine the choice of coping strategies. Lazarus and Folkman (1984) are in favour of a contextual approach. They view coping as a response to specific situations and see coping as a dynamic process that changes over time due to situational demands and situation appraisals and is not necessarily influenced by personality factors. Where change occurs in the person-environment relationship a re-evaluation and reappraisal of the situation takes place which then influences subsequent coping efforts (Lazarus & Folkman, 1984). An integrative conceptual framework which incorporates both the dispositional and contextual approaches is more appropriate in the determination of coping strategies (Holahan et al., 1996). This framework includes the environment which poses certain situations for the individual and also the individual's personal characteristics consisting of demographics and coping resources such as personal traits and social resources. Both the environmental and personal factors influence situations and life changes, and these in turn influence well-being.

Differences and variance in coping occurs because each person has a different view of what is at stake in a stressful situation (primary appraisal) and

also has a different view in stressful situations on what are the available options for coping with the stressful situation (Folkman et al., 1986a). Four types of coping have been proposed: cognitive-approach, behavioural-approach, cognitive-avoidance and behavioural-avoidance (Cronkite & Moos, 1995; Holahan et al., 1996). From these four types of coping, two of the types refer to approach coping which consists of techniques such as problem solving and seeking information. People who make more use of approach strategies tend to cope better with life and to suffer less from psychological symptoms, such as depression and anxiety. The avoidance types of coping, on the other hand, consist of strategies such as denial and withdrawal. Making use of avoidance coping tends to be associated with psychological symptoms such as depression.

Edwards and Baglioni (1993) created the Cybernetic Coping Scale which was derived from Edward's (1988, 1992, Edwards & Cooper, 1988, cited in Edwards & Baglioni, 1993) cybernetic theory of stress. This theory views stress as the discrepancy between the individual's perceived state and desired state and coping is conceptualised as an attempt to reduce or eliminate the negative effects of stress on well-being caused by this undesirable state. Five forms of coping are recognised in the Cybernetic Coping Scale and labelled accordingly: bringing the situation into conjunction with desires (changing the situation), adjust desires to meet the situation (accommodation), reduce the importance associated with the discrepancy (devaluation), improve well-being directly (symptom reduction) and direct attention away from the situation (avoidance). A study on South African immigrants living in New Zealand found that the most commonly used strategies after immigrating were 'accommodation' and 'changing the situation' (Bennett, Rigby, & Boshoff, 1997). Both these strategies are associated with better adaptation and integration into the host culture. In the acceptance phase of immigration, South African immigrants with a high degree of negative affect were found to be using the coping strategies of 'changing the situation', 'accommodation' and 'symptom reduction', whereas 'avoidance' coping strategies were used mostly in the phases of immobilisation, denial and anger.

### **2.6.1 Coping Related to Anxiety and Depression**

'Avoidance' coping has been related to anxiety and depression, but for

women focusing on their emotions and not avoiding them has also been related to depression and anxiety (Smari et al., 1997). In contrast, active coping has been unrelated to anxiety or depression. Men tend to make more use of active coping than women, but women seem to benefit more from perceived social support which seems to act as a buffer against depression and anxiety.

Depressed people tend to use emotion-focused coping rather than problem-focused coping (Lazarus, 1986). Emotion-focused coping has been found not to be effective as a coping strategy and it actually increases emotional distress instead of minimising it (Aldwin & Revenson, 1987). Individuals who most often used the coping strategy of 'seeking social support' showed lower levels of depression, whereas those individuals who used positive cognitive coping by focusing on positive aspects of the situation showed lower levels of anxiety (Nakano, 1991). Individuals with low levels of depression engage in more problem-oriented coping, compared to those with high levels of depression who engage more in emotion-focused coping (Bruder-Mattson & Hovanitz, 1990; Endler & Parker, 1990b; Lazarus & Folkman, 1984). From this, it is assumed that depressed individuals are more focused within themselves and this may prevent them from being able to focus on external aspects such as tasks or problems that need to be dealt with (Endler & Parker, 1990b). Avoidance-oriented coping is used in similar ways by both depressed and non-depressed persons.

In terms of immigration, depression (due to cultural loss) and anxiety (due to uncertainty about the new way of life) were the psychological problems most frequently experienced by new immigrants in Canada (Berry, 1998). Those immigrants who actively attained some form of integration into the host society experienced fewer of these problems compared to other immigrants who attempted other forms of acculturation.

### **2.6.2 Coping Related to Loneliness and Well-being**

When it comes to loneliness coping strategies can satisfy a person's social needs by any of the following: changing the social relations, changing the person's social needs or desires and changing the person's perception of his social deficiencies (Peplau & Perlman, 1982). In coping with loneliness, the most important coping strategies were acceptance and reflection (Rokach & Brock,

1998). Acceptance and reflection make use of the person being alone and allows them to become aware of their fears, needs and desires. In this way they get to know themselves intimately due to solitude and by attempting to understand the causes of loneliness and its implications they are able to perceive loneliness as an existential condition which can at times be unavoidable, but can also promote enjoyment of one's own company. Other coping strategies were making use of one's social support network, becoming more involved in leisure and work-related activities and using religion as a means of belonging and being connected to others (Rokach & Brock, 1998). In terms of well-being, in a sample of lawyers it was found that those who used other coping strategies showed less symptoms of psychological distress than those who made use of 'avoidance' coping (Kobasa, 1982).

### **2.6.3 Coping and Social Support**

Social support plays a part in coping and can help a person cope better by enhancing the person's ability to cope or can directly act as a coping mechanism whereby the person in question willingly seeks out social support as a means of coping. Social support has two types of effects: main effects and buffer effects (Cohen & Syme, 1985; Dunkel-Schetter & Bennett, 1990; Lee et al., 1996; Olstad, Sexton, & Sogaard, 1999). Buffer effects imply that social support protects the person from the harmful effects of stress on health and well-being, whereas main effects imply that social support enhances well-being regardless of presence or absence of stress. In the buffer effect, social support may intervene between the stressful event and the experience of stress by altering or preventing a stressful response to the event (Cohen & Syme, 1985; Lee et al., 1996; Olstad et al., 1999). Making use of social resources as a coping strategy may reduce the effect of a harmful situation or may enhance a person's coping ability to deal with that situation. In the main effect, social support may provide a perception that in the event of a stressful event others will provide help and this may increase a person's well-being by bolstering the person's self-esteem and increasing their control over the environment (Cohen & Syme, 1985; Lee et al., 1996; Olstad et al., 1999).

With regard to social support from family, nurses in Singapore who received greater family support found that they were more stress-resistant and had higher

levels of job satisfaction (Boey, 1998). These same nurses who were receiving family support also tended to use less 'avoidance' coping behaviour. The social support they received enabled them to use more effective coping strategies.

Particular coping strategies have been found to be related to the amount of support a person receives. When people use effective coping strategies which allow them to cope better with an event, they are more likely to receive social support, whereas if they cope badly with an event they are likely to get less social support (Dunkel-Schetter & Bennett, 1990). Problem solving, seeking social support and positive reappraisal were all associated with greater support. People who had greater personal and social resources tended to rely on active approach coping and were less likely to use 'avoidance' coping (Dunkel-Schetter & Bennett, 1990; Holahan & Moos, 1987, 1994). 'Avoidance' coping is associated with negative events and is a response to a threatening situation when personal and contextual resources are scarce. Social support may allow the person to perceive the situation in a less threatening manner and therefore not having to use 'avoidance' coping.

#### **2.6.4 Age and Coping**

Older adults have been found to use more mature coping strategies than younger adults and age differences were found in the ability to apply more effective strategies. Even though younger adults knew which strategies were effective ways of coping, they were not always able to apply this knowledge (Irion & Blanchard-Fields, 1987). Adolescents have greater difficulty dealing with both the cognitive and the affective demands of highly emotional situations (Blanchard-Fields, 1986). This may explain why younger adults tend to use less effective coping strategies.

McCrae (1989) found that changes in use of coping strategies over time are not obvious and if they do occur tend to be very subtle. In one study, older people coped in much the same way as younger people and where differences occurred in their coping these were due to different life situations which were encountered (McCrae, 1982). Where age differences were unrelated to types of situations, it was found that middle-aged and older people were less inclined to rely on immature coping strategies, such as hostile reaction and escapist fantasy,

compared to younger people.

In another study, younger people used more active, interpersonal, problem-focused forms of coping which consisted of confrontive coping, seeking social support and planned problem. Older people used more passive, intrapersonal emotion-focused forms of coping which consisted of distancing, acceptance of responsibility and positive reappraisal solving (Folkman, Lazarus, Pimley, & Novacek, 1987). Older people were also reported as making greater use of cognitive reinterpretation of situations using principalisation which uses general principles and truisms, or by using reversal which emphasises the positive aspects of a situation (Diehl, Coyle, & Labouvie-Vief, 1996). Older adults also reported a greater tendency to use suppression and withhold inappropriate feelings whereas younger adults were more inclined to use strategies that were outwardly aggressive or consisted of immature psychological strategies such as displacement, projection, regression or rationalisation. Thus there is some support for a growth or maturity hypothesis when it comes to coping (Diehl et al., 1996).

### **2.6.5 Gender and Coping**

Differences in coping for gender were found where men used more problem-focused coping such as self-control and keeping feelings and emotions to themselves, whereas women used more emotion-focused coping and more positive reappraisal (Endler and Parker, 1990b; Folkman et al., 1987; Ptacek, Smith, & Dodge, 1994; Ptacek, Smith, & Zanas, 1992; Weider & Collins, 1993). Women have also been reported to use more avoidance orientated coping than men (Endler & Parker, 1990a). Coping strategies that are effective in reducing stress for males are often found not to benefit females (Brudder-Mattson & Hovanitz, 1990).

In other studies, women sought more social support (Ptacek et al., 1994; Ptacek et al., 1992) whereas men sought less social support (Hobfoll, Donahoo, Ben-Porath, & Monnier, 1994). Men also made more use of strategies that were outwardly aggressive (Diehl et al., 1996; Hobfoll et al., 1994) whereas women used internalising strategies, intrapunitive strategies (Diehl et al., 1996) and assertive strategies (Hobfoll et al., 1994) as a means of coping.

When looking at gender differences in emotion-focused coping, men were

found to use less emotion-focused coping than women in situations that could not be changed and had to be accepted (Folkman & Lazarus, 1980). However, these differences were found to be related to different life contexts and these contexts tended to be different for men and women. Under similar circumstances and contexts men and women tended not to differ in their use of emotion-focused coping.

### **2.6.6 Coping and Marital Status**

In one study assessing coping strategies in terms of coping with loneliness; divorced, single, separated and widowed individuals coped with loneliness in similar ways and tended to focus on work and its environment as a means of alleviating their loneliness (Rokach & Brock, 1998). On the other hand, married individuals coped with loneliness by making more use of their social support network, but at the same time also used avoidance of social interaction and self-induced isolation to come to terms with their loneliness and to accept it (Rokach & Brock, 1998).

## **2.7 Personality**

This section of the thesis discusses personality and the attributes and qualities associated with different personality traits. A discussion follows on demographics which have been previously researched in the literature and their connection with personality. A discussion on the influence of personality on the outcome follows.

Personality is made up of traits. Traits consist of behavioural responses that have a tendency to remain stable across different situations and environments (Diener, 1998). The Five-factor model of personality is based on the concept that personality consists of five fundamental traits: neuroticism, extraversion, agreeableness, conscientiousness and openness to experience (Costa & McCrae, 1985; Diener, 1998).

Extraversion includes such characteristics as sociability, stimulus seeking, dominance, high activity and warmth (Costa & McCrae, 1985). Extraverts are sociable, assertive, active, talkative, like people and prefer large groups and

gatherings. They also like excitement and stimulation. Introversion is more difficult to define as it is not necessarily the opposite of extraversion and can rather be conceptualised as the absence of extraversion. Introverts are reserved, independent, loners, even tempered and lead a more even pace of life.

Extraversion tends to be highly correlated with positive affect (Diener, 1998). It is thought that since positive affect is experienced by both introverts and extroverts when they are involved in social activities and extroverts experience more positive affect than introverts, then it is possible that extroverts experience greater levels of positive affect due to the greater amount of time that they spend in the company of other people (Diener). A second possible reason for the experience of positive affect is that the social situations they spend time in generate this positive affect. A third possible reason, is that extraverts may experience more positive events than introverts, that their behaviour may be more conducive in attracting positive events or positive situation outcomes.

Neuroticism consists of characteristics such as anxiety, pessimism, irritability, bodily complaints, and interpersonal sensitivity (Diener, 1998). All of the characteristics involved in neuroticism are unpleasant and a neurotic individual has a tendency to experience negative thoughts and emotions such as impending failure, pessimism, unworthiness and helplessness. The reasons why neurotics have such negative experiences are not clearly defined, but they may have systems that are very reactive to negative stimuli and therefore experience negative emotions that lead to negative thoughts. Individuals who score low on neuroticism are emotionally stable, calm, even tempered and relaxed (Costa & McCrae, 1985).

Agreeableness is a trait which is apparent when the individual is engaged in interpersonal interactions (Costa & McCrae, 1985). This is demonstrated through sympathy, cooperativeness, altruism and helpfulness towards others. Non-agreeable people tend to be egocentric, competitive and sceptical of others intentions.

Conscientiousness consists of characteristics such as purposefulness, strong will, determination, scrupulousness, punctuality and reliability (Costa & McCrae, 1985). People high on the conscientiousness trait tend to be high achievers in life and often are very successful in the academic or occupational arenas. The negative side to high conscientiousness is that it may lead to compulsive

neatness, fastidiousness or workaholic behaviour. People low in conscientiousness are less exacting in their behaviour and may not have such high standards of achievement.

The trait of openness refers to the concept of being open to new experiences (Costa & McCrae, 1985). Openness consists of characteristics such as active imagination, aesthetic sensitivity, attentiveness to inner feelings, preference to variety, intellectual curiosity and independence of judgement. Open individuals demonstrate curiosity about their inner and outer worlds. They are willing to undergo different experiences, have novel ideas and entertain unconventional values. Their experience of negative and positive emotions tends to be more intense than closed individuals. Closed individuals, on the other hand, tend to be conservative in outlook, more conventional in their behaviour and prefer the familiar.

Personality traits affect behaviour, the personal environment, the social environment and impact on the way individuals live their lives. Personality traits are thus relevant in the development of loneliness, anxiety, depression and well-being and also relevant for the type of coping behaviour chosen and used by each person. The examination of personality traits allows deductions to be made about which personality traits are involved in different contexts. Of particular interest in this thesis is to determine which personality traits facilitate the immigration process and which are detrimental, especially since no previous research in this area has been undertaken.

### **2.7.1 Personality, Age and Gender**

Higher levels of conscientiousness and agreeableness have been found in older age groups, whereas higher levels of neuroticism, extraversion and openness have been found in younger age groups (Yang, McCrae, & Costa, 1998). This is replicated in other research which found a decline in neuroticism in older age groups (Henderson et al., 1998). For gender differences in neuroticism were found whereby women had higher levels of neuroticism compared to men (Lynn & Martin, 1997).

### **2.7.2 Personality, Social Support and Social Participation**

Extraversion was found to be related to making use of social support (Krause, Liang, & Keith, 1990). People who are extraverted tend to make more social contacts than introverted people and therefore make more use of social support. Neuroticism also has implications for social support, whereby individuals high in neuroticism tend to perceive that they have inadequate social support, whereas individuals low on neuroticism have the inverse perception (Bolger & Eckenrode, 1991). An increase in levels of neuroticism leads to an evident increase in integration within the family. This family integration is not always beneficial for the individual as it is predictive of symptoms of anxiety. Only integration with members of leisure and religious groups, and friends and neighbours seem to be beneficial in protecting the neurotic individual against stress effects. Other evidence, based on the benefits of social support has found that individuals that are able to experience higher levels of interpersonal warmth are able to benefit from available social support, irrespective of their support network size (McLennan, Gotts, & Omodei, 1988). Individuals low in interpersonal warmth, on the other hand, are unable to make use and benefit from social support, even though their support network size may be extensive. It is thought that neurotics are unable to benefit from social support due to their lack of interpersonal warmth.

Positive affect and social activity have been found to be mutually interrelated (Watson, Clark, McIntyre, & Hamaker, 1992). Social interaction leads to higher levels of positive affect which in turn increases the desire to be socially active and involved. Thus, positive affect seems to be both a cause and effect of social interaction. Extraverts have been found to be more socially involved and to participate more in social activities (De Man & Efraim, 1987).

### **2.7.3 Personality and Well-being**

Both extraversion and neuroticism have emerged as strong predictors of psychological well-being, whereby neurotics have lower levels of well-being compared to extraverts who have higher levels of well-being (Cooper et al., 1995; McCrae & Costa, 1991; Schmutte & Ryff, 1997). Openness leads to both positive and negative affect, and seems to have no net effect on well-being (Diener, 1998;

McCrae & Costa, 1991) and is unrelated to whether people experience more or less life satisfaction (Diener, 1998). Agreeableness and conscientiousness, on the other hand, both lead to more positive affect and less negative affect, thus being associated with higher levels of well-being. Even though conscientiousness and agreeableness are related to well-being their level of relation is lower compared to extraversion and neuroticism (Diener).

Individuals with high levels of neuroticism have been found to be less happy and generally lacking in well-being (McLennan et al., 1988). These individuals tend to report more interpersonal problems than those with lower levels of neuroticism, but they do not differ in their reports of problems about illness, fatigue, work or academic studies (Gunthert, Cohen, & Armeli, 1999). This can occur for various reasons, possibly because they interpret their interpersonal occurrences in a more negative way or other people respond poorly to the negative affect that is experienced by neurotics.

#### **2.7.4 Personality, Depression and Anxiety**

It has been found that individuals with high levels of neuroticism experienced more daily conflicts and were more likely to react to them in a negative way, most often with anger and depression (Bolger & Zuckerman, 1995). It was not the exposure to the conflicts that caused the anger and depression to develop, but rather the way the individual reacted to the conflict. Extraversion and introversion were found to affect anxiety, with introverts having high levels of anxiety and extroverts having low levels of anxiety (Naditch & Morrissey, 1976). Neuroticism has been related to anxiety; these individuals tended to suffer from high levels of anxiety when experiencing a stressful time or in social situations (Schmidt & Riniolo, 1999).

#### **2.7.5 Personality and Loneliness**

Both extraversion and neuroticism are related to loneliness (Stokes, 1985). Extraverts tend to be less lonely (Hojat, 1982) because they have larger social networks from which they receive social support and companionship (Stokes, 1985). On the other hand, neurotics tend to be more lonely than non-neurotics

(Hojat, 1983; Stokes, 1985). The reasons why are not clear because neurotics do not necessarily have a problem in forming friendships and maintaining them. Neurotics may be more sensitive to friendship deficits and may develop increased loneliness in response to deficiencies in their social networks. Also since neurotics are predisposed to negative thoughts and emotions, they may simply view themselves in a negative light and see themselves as lonely and isolated (Stokes).

## **2.8 Personality and Coping**

In this section the interrelation of personality and coping as portrayed in the literature is discussed and its influence on the outcome variables is also explored.

Coping can be influenced by situational factors such as the type of stressful event and also by the appraisal made of that situation, but personality also plays an influential role on coping (Nakano, 1992; O'Brien & DeLongis, 1996).

Personality traits can influence the process of coping by influencing the way in which a situation is appraised and also coping may be dependent on certain capacities of the individual which directly affect the individual's behaviour (Lazarus, 1966). Most research done on coping and personality has revolved around the personality traits of neuroticism and extraversion, very little research has involved openness, conscientiousness and agreeableness (Hewitt & Flett, 1996).

Neuroticism has been found to be correlated with certain coping strategies such as hostile reaction, escapist fantasy, self-blame, sedation, withdrawal, wishful thinking, passivity and indecisiveness (McCrae & Costa, 1986; Suls & David, 1996). Neurotics have a tendency for escape-avoidance coping and less inclination to put into practice planned problem solving. They also tend to engage in more confrontation when faced with stressful experiences than non-neurotics (O'Brien & DeLongis, 1996). Neurotics tend to experience high levels of emotional distress and this can be attributed to their use of escape-avoidance and confrontation. Both of these are associated with less well-being and negative outcomes to situations. Other coping strategies used by neurotics were self-blame, wishful thinking, hostile reaction and acceptance. However these strategies were generally found to be ineffective and to actually increase distress (Gunthert et al., 1999).

On the other hand, extraversion has been found to be correlated with rational action, positive thinking, substitution and restraint (McCrae & Costa, 1986). Extraverts make more use of 'avoidance' and 'seeking social support' as coping strategies compared to introverts (Nakano, 1992; Watson & Hubbard, 1996). At the same time extraverts tend to report more happiness than introverts (Hotard, McFatter, McWhirter, & Stegall, 1989).

With regard to openness, people who are considered to be open are more likely to use humour when coping with a stressful situation whereas closed individuals rely more on faith (McCrae & Costa, 1986). Humour and faith, even though they appear at opposite poles of the openness trait, have been found to be among the most effective coping strategies. Individuals with high levels of openness tended to appraise situations in a positive manner (O'Brien & DeLongis, 1996; Suls & David, 1996) and were also found to have more empathy for others and to be more open to the feelings of others (O'Brien & DeLongis, 1996). Other effective strategies of coping for open individuals included problem-focused strategies such as rational action and seeking help and also certain emotion-focused strategies such as expressing emotions, cognitive restructuring and self-adaptation (McCrae & Costa, 1986).

Conscientiousness has been consistently associated with problem-focused coping (O'Brien & DeLongis, 1996; Shewchuck, Elliott, MacNair-Semands, & Harkins, 1999; Watson & Hubbard, 1996) and people high on conscientiousness make more use of active strategies and are less likely to rely on drugs and alcohol as a way of coping (Suls & David, 1996). They also use less escape-avoidance and less self-blaming strategies in their coping (O'Brien & DeLongis, 1996).

People with high levels of agreeableness tend to avoid confrontation as a way of dealing with stressful situations and also seek social support (O'Brien & DeLongis, 1996; Suls & David, 1996)

### **2.8.1 Personality, Coping and Effects on Depression and Anxiety**

Neuroticism tends to be negatively related to well-being; people with high levels of neuroticism tend to use coping strategies considered to be ineffective and which are conducive to negative thoughts or emotions. Neurotics normally rely on emotion-focused coping (Shewchuck et al., 1999). Individuals with high levels of

neuroticism were more likely to use self-controlling and confrontive coping compared to individuals with low levels of neuroticism, but these coping strategies were equally detrimental and not very effective for both types of individuals (Bolger & Zuckerman, 1995). Self-control coping used by individuals with low levels of neuroticism was effective in preventing depression, but this type of coping increased depression for individuals with high levels of neuroticism. With escape-avoidance coping, it was unrelated to high levels of neuroticism, but caused increases in depression for people with low levels of neuroticism. People with high levels of neuroticism tend to make use of confrontive coping when conflicts arise and because confrontive coping leads to depression it can be deduced that neuroticism leads to depression (Bolger & Zuckerman).

### **2.8.2 Personality, Coping and Effects on Well-being**

People with high levels of neuroticism report a higher number of problems in their lives, have intense negative mood states, such as anxiety, depression, and irritability, and neurotics use less effective coping strategies (Suls, Green, & Hillis, 1998). Thus neuroticism impacts heavily on a person's well-being and neurotics have lower levels of well-being.

A review of the literature of the outcome variables, personality and coping has been presented. This literature review forms the base from which this research can take place. It provides background knowledge and theory on the constructs which will be researched, including an exploration into the interaction of the constructs and their relation with relevant demographics. Some of the discussion has been limited due to the extent of the material available and the obvious constraints of including it all in a literature review chapter.

## **2.9 Research Objectives**

There are various research objectives which need to be investigated for this research project on South African immigration. They are the following:

- To assess whether various demographic variables are related to significant differences in the outcome variables consisting of: loneliness, depression, anxiety and well-being.

- To evaluate whether the demographics are associated with certain personality traits or coping strategies.
- To evaluate whether certain personality traits are associated with the outcome variables and also whether certain coping strategies are associated with the outcome variables.
- To evaluate whether personality is correlated with coping strategies.
- To investigate whether personality and coping strategies are predictors of well-being.
- To investigate whether gender, loneliness, depression, state anxiety and trait anxiety predict well-being.

## CHAPTER THREE

### 3 Methodology

#### 3.1 Sample

This research was questionnaire based and a total of 500 questionnaires were posted. Out of those, 211 questionnaires were filled in and returned. This was a 42% response rate which is considered to be high given that the expected response rate for survey research in the Social Sciences is only 30% or less (Schweigert, 1998).

The sample consisted of 210 South African men and women that had immigrated to New Zealand in the last six years. The sample was found to contain 118 women and 89 men, with three questionnaires having omitted the gender. The average age of the women was 41.14 years (SD = 11.73) . The average age of the men was 42.28 years (SD = 11.49). The average tenure in New Zealand for the women was 2 years and 8 months (SD = 18.87) and for the men was 2 years and 9 months (SD = 18.79). The majority of the sample (86%) were married or had a de facto relationship with a partner and only a small minority of 14% were single, divorced or widowed (Refer to Table 1 in Chapter 4). The majority of the sample lived in a major city, whereas only 17% lived in a small town or rural geographical area (Refer to in Chapter 4).

#### 3.2 Procedures

##### 3.2.1 Participants Acquisition

Three strategies were used to recruit participants: speaking at SANZ events, publishing articles in South African community publications, and using the snowball technique. The initial starting point was to contact the South African New Zealand Charitable Trust (SANZ) as a large number of South Africans living in New Zealand are members of SANZ. Due to the Privacy Act members could not be contacted or mailed directly, so SANZ published an article regarding the

research project in their bimonthly magazine called 'Connections'. The article provided information on the researcher and research project and appealed to South Africans living in New Zealand to participate in the research. Anyone interested could contact the researcher by phone or via e-mail. The participants that were required for the research were South Africans that had been living in New Zealand for up to a maximum of six years with the exclusion of children.

Auckland SANZ events were also used to recruit participants. Information about the research was presented at a business breakfast, a monthly social gathering held for retired and elderly South Africans and a monthly social gathering held for South African women. An appeal was made for people in these forums to take part in the research. At all these events business cards with the researcher's contact details were distributed so that people could contact the researcher if they wished to participate in the research. These cards could also be passed onto other South Africans in the community, such as friends or family members, who might be interested in participating in the study. At all the social gatherings information sheets and questionnaires were also made available to anyone who wanted them immediately.

Regional contacts for SANZ were approached and they offered to pass on information regarding the research to their members either at local events or through local publications published for the South African community. 'Indaba' magazine, the local magazine for South Africans living in the Bay of Plenty, and the local Wellington magazine for South Africans published articles regarding the research and asked people to volunteer as research participants.

The snowball technique is a technique which identifies prospective participants with specific characteristics by asking participants to nominate or approach other potential participants that they know (Biernacki & Waldorf, 1981). This technique is best used when eligible participants are easily identifiable, where they know similar people and where participants are expected to be cooperative. This is particularly applicable for immigrant communities that have strong social networks know (Biernacki & Waldorf). People who contacted the researcher to participate in the study were asked to pass on information regarding the research to their family and friends who qualified to participate in the research. Where the participant had an email address, an email was sent out containing information about the research and asking anyone interested to please contact the researcher.

The participant was then able to forward this email onto other prospective participants. Email facilitated communication and made it quicker and easier to contact as many prospective participants as possible.

### **3.2.2 The Information Sheet and Questionnaire**

The research matter posted out to participants consisted of an information sheet and a questionnaire. Refer to Appendix A to view the information sheet.

The questionnaire consisted of 10 pages of statements and questions to be answered and was divided into two sections (see Appendix B). The first section was made up of multiple choice questions or statements in which one answer had to be selected. This section consisted of psychological tests to measure loneliness, well-being, depression, trait anxiety, state anxiety, personality and coping styles. The second section consisted of questions regarding the participant's demographic details. This was a mixture of one answer questions and multiple choice questions.

### **3.2.3 Human Ethics Committee**

The information sheet and questionnaire together with the required forms were put forward to the Human Ethics Committee at Massey University for approval.

### **3.2.4 Data Gathering**

People who wanted to take part in the research contacted the researcher and supplied their postal address. Information sheets and questionnaires were posted out to participants with two questionnaires per household. Participants were asked to fill in the questionnaire and post it back within two weeks.

## **3.3 Measures**

The questionnaire measured the following constructs: loneliness, well-being, depression, trait anxiety, state anxiety, personality and coping.

### 3.3.1 The Revised UCLA Loneliness Scale

The Revised UCLA Loneliness scale was used to measure loneliness (Russell, Peplau, & Cutrona, 1980). This scale consists of 20 items of which 10 items reflect satisfaction with social relationships and the other 10 items reflect dissatisfaction with social relationships with the items randomly presented in the scale (Russell et al., 1980). The scale is scored using a four-point Likert scale with anchors ranging from 'never' to 'often'. Ten items are reverse scored. The total score is calculated using all of the 20 items and the minimum score that can be obtained is 20 and the maximum score 80.

Russell et al. (1980) reported a high internal consistency for the Revised UCLA scale with a Cronbach alpha coefficient of 0.94 for a sample of students. A correlation of 0.91 was also found between the original UCLA scale and the Revised UCLA scale for the same sample. They also reported concurrent validity. In a second study (Russell et al., 1980), performed on a bigger sample of college students, the Cronbach alpha coefficient was also found to be 0.94 and the correlation between the original UCLA scale and the Revised UCLA scale was also found to be 0.91. The Revised UCLA loneliness scale significantly correlates with the Beck's Depression Inventory scale ( $r = .62$ ), with the Costello-Comrey Anxiety scale ( $r = .32$ ) and with the Depression scale ( $r = .55$ ) (Russell et al., 1980). Measures of social activities and relationships and measures of the Revised UCLA scale were examined and concurrent validity was reported. Discriminant validity was demonstrated by examining relationships between scores of the Revised UCLA scale and scores of personality and mood.

### 3.3.2 General Health Questionnaire (GHQ)

Psychological well-being was measured using the General Health Questionnaire (GHQ) (Goldberg & Williams, 1988). The questionnaire assesses the inability to function in a healthy way and also looks at distressing factors which have made an appearance (Goldberg & Williams, 1988). The GHQ only looks at present and recent health problems. The version of the GHQ used was the 30 item version referred to as the GHQ-30 (Goldberg & Williams, 1988). This scale is scored using a five-point Likert scale and the total score is calculated using all 30 items with the minimum score that can be obtained being 0 and the maximum

score being 90. When looking at the scores for the GHQ, one needs to keep in mind that that high scores in the GHQ scale are indicative of low levels of well-being and low scores are indicative of high levels of well-being.

The Cronbach alpha coefficient for the GHQ-30 had an average of 0.87 for various samples of mainly students, thus supporting internal consistency (Goldberg & Williams, 1988). With test-retest reliability, DePaulo and Folstein (1978, cited in Goldberg & Williams, 1988) found a reliability correlation of 0.85 in a small sample of neurological patients. Firth-Cozens (1987, cited in Goldberg & Williams, 1988) found test-retest correlation to be 0.36 for a sample of medical students.

In studies (cited in Goldberg & Williams, 1988) which were performed to investigate the correlation between measures of the GHQ and measures of criterion interviews, it was found that for the GHQ-30 the median coefficient for seven studies was 0.59.

The GHQ-30 has had the most validity studies performed on it compared to the GHQ-12, the GHQ-28 and the GHQ-60. From 29 studies the median value for sensitivity was 81% and 21 of the studies obtained values within 10% of this median, where sensitivity refers to the probability that a 'true case' will be correctly identified (Goldberg & Williams, 1988). The specificity median was 80% and 24 studies had specificity values within 10% of the median, where specificity refers to the probability that a 'true normal' will be correctly identified (Goldberg & Williams, 1988). This demonstrates high validity for the GHQ-30.

### **3.3.3 NEO-FFI**

Personality was assessed using the NEO Five-Factor Inventory (NEO-FFI) (Costa & McCrae, 1992). The NEO-FFI is based on a shortened version of the Revised NEO Personality Inventory (NEO PI-R) and consists of 60 items altogether (Costa & McCrae, 1992). These items are divided up into five scales or personality domains consisting of 12 items each. Each scale measures a different domain of personality, these domains consisting of neuroticism, extraversion, openness, agreeableness and conscientiousness (Costa & McCrae, 1992). The subject had to choose an answer from a five-point Likert scale with anchors ranging from 'strongly disagree' to 'strongly agree'. Reverse scoring was

administered to 27 items of the test. For each scale the total score obtained could range from a minimum of 0 to a maximum of 48.

The NEO-FFI domain scales were correlated with the domain scales of the NEO PI-R in the Augmented Baltimore Longitudinal study of Aging (ABLSA) performed by Shock et al (1984, cited in Costa & McCrae, 1992). This produced a range of correlation coefficients from 0.77 to 0.92 for the different domains, thus indicating high correlation with the NEO PI-R. (Costa & McCrae, 1992). The Cronbach coefficient alpha of internal consistency was calculated from the 'Employment Sample' which was a sample used in the administration of the NEO-PI to men and women employed by a large national organisation (Costa & McCrae, 1992). The Cronbach coefficient ranged from 0.68 to 0.86 for the different personality domains displaying an acceptable internal consistency (Costa & McCrae, 1992). Convergent and discriminant validity was displayed through correlating the NEO-FFI with the five-factor model based on adjective reports obtained by Costa & McCrae (1985, cited in Costa and McCrae, 1992) and the NEO PI-R completed by spouses and peers obtained by Costa and McCrae (1992) and by McCrae (1991) both cited in Costa and McCrae (1992). The NEO-FFI has proved to be an instrument that is appropriate for many populations and for adults of all ages (Costa & McCrae, 1992).

### **3.3.4 Beck's Depression Inventory**

The Revised Beck's Depression Inventory (BDI) was used to measure depression (Beck & Steer, 1987). This depression scale consists of 21 groups of statements whereby the statements in each group are numbered zero to three (Beck & Steer, 1987). The subjects had to choose the statement in each group of statements which best describes the way they have been feeling in the past week and circle the number of that statement. The total score of the BDI can vary from a minimum of 0 to a maximum of 63. The BDI was originally devised to measure depression levels in psychiatric patients, but has since then been used extensively to detect depression in non-psychiatric adolescents and adults (Beck & Steer, 1987).

The mean Cronbach coefficient alpha has been reported by Beck, Steer, and Garbin (1988, cited in Beck & Steer, 1987) as being 0.86 for nine psychiatric

samples and 0.81 for fifteen non-psychiatric samples, demonstrating a high internal consistency for both clinical and non-clinical populations. Test-retest correlations for these samples found a correlation ranging from 0.48 to 0.86 for psychiatric patients and 0.60 to 0.90 for non-psychiatric patients. Thus, non-psychiatric samples showed more stability in their BDI scores than psychiatric samples.

For construct validity Beck, Weissman, Lester, and Trexler (1974, cited in Beck & Steer, 1987) investigated the construct validity of the Revised BDI with the construct of hopelessness using the Hopelessness scale (HS). They found that the scores of the BDI were positively correlated with the scores of the HS scale for all the six normative samples they used and the correlations ranged from 0.38 to 0.76 demonstrating construct validity for the Revised BDI.

Beck, Steer, and Garbin (1988, cited in Beck & Steer, 1987) investigated correlations between the Revised BDI and concurrent measures of depression across various samples. The mean correlation between clinical ratings of depression and measures of depression by the BDI was 0.72 for psychiatric patients and 0.60 for non-psychiatric patients. They also found a mean correlation of 0.73 between the BDI and the Hamilton Psychiatric Rating Scale for Depression (HRSD) for 5 psychiatric samples (Hamilton, 1960, cited in Beck & Steer, 1987). Both these findings indicate concurrent validity.

### **3.3.5 State-trait Anxiety Inventory**

Anxiety was measured using the State-Trait Anxiety Inventory (STAI) (Spielberger et al., 1970). Spielberger and associates view anxiety as two related, but different constructs which take the form of a state or trait. A state is viewed as being transient and occurring at a particular moment in time in response to an unpleasant situation or experience. A trait is viewed as a personality trait which defines the anxiety proneness of an individual to perceive a situation as threatening or dangerous and to respond to the situation with an elevated state of anxiety.

Spielberger et al. (1970) developed the State-Trait Anxiety Inventory for measuring anxiety in high school students, college students and adults. The State-Trait Anxiety Inventory consists of two separate self-report scales, the State

Anxiety (S-Anxiety) scale and the Trait Anxiety (T-Anxiety) scale, each consisting of 20 statements. The statements for the S-Anxiety scale are scored using a four-point Likert scale with anchors ranging from 'not at all' to 'very much so'. The statements for the T-Anxiety scale are also scored using a four-point Likert scale, but with anchors ranging from 'almost never' to 'almost always'. Ten items are reverse scored for the S-Anxiety scale and nine items for the T-Anxiety scale. The S-Anxiety scale assesses how the respondent feels at this moment in time, whereas the T-Anxiety scale assesses how the respondent generally feels most of the time. For both anxiety scales the total score can vary from a minimum of 20 to a maximum of 80.

Stability studies were carried out on a sample of high school students and the test-retest coefficients ranged from 0.65 to 0.75 for T-Anxiety and 0.34 to 0.62 for S-Anxiety, providing a relatively high stability for T-Anxiety, but low stability for S-Anxiety (Spielberger et al., 1970). This was expected for S-Anxiety as it is dependent on situational stress.

Cronbach alpha coefficients were reported as ranging from 0.86 to 0.95 for T-Anxiety and 0.89 to 0.91 for S-Anxiety for various normative samples depicting high internal consistency for both scales (Spielberger et al., 1970).

Correlations between S-Anxiety and T-Anxiety for various normative samples ranged from 0.59 to 0.75 providing relatively high validity for the STAI (Spielberger et al., 1970). Persons that measure highly on T-Anxiety also tend to have a high score for S-Anxiety. Correlations with the Cornell Medical index found a correlation of 0.70 for both the S-Anxiety and the T-Anxiety scales indicating that medical symptoms are related to high anxiety scores (Spielberger et al., 1970).

### **3.3.6 Cope Scales and the Cybernetic Coping Scale**

Coping was assessed using a combination of items taken from two different coping measures and consisted of 28 items in total. Twenty items were taken from the 40 item Cybernetic Coping Scale (CCS) (Edwards & Baglioni, 1993). Eight items were taken from the Cope Scales (Carver et al., 1989) and were incorporated to measure ways of coping with regards to seeking social support for instrumental reasons and to seeking social support for emotional reasons. These items were spread evenly and randomly across the 20 items of the CCS scale and

the wording was changed to the past tense to fit in with the way in which the CCS items were worded. The 20 items chosen from the CCS scale consisted of four items from each sub-scale of the CCS, which made an assessment of usage of the following coping strategies: 'accommodation', 'changing the situation', 'devaluation', 'avoidance' and 'symptom reduction' (Edwards & Baglioni, 1993). These 20 items were also randomly presented. Each item was scored using a five-point Likert scale with anchors ranging from 'strongly disagree' to 'strongly agree'. The minimum score that could be attained for each group of items was 0 and the maximum score 16.

In a study which compared the construct validity of the Ways of Coping Checklist (WCCL) with the 40-item version of the Cybernetic Coping Scale (CCS), moderate support for the construct validity of the CCS was put forward (Edwards & Baglioni, 1993). All of the five CCS sub-scales showed a reliability greater than 0.70 ranging from 0.779 to 0.945.

The Cronbach alpha coefficient for the 'seeking instrumental social support' scale and for the 'seeking emotional social support scale' was 0.75 and 0.85 respectively, based on a college student sample (Carver et al., 1989). This indicated high reliability for both sub-scales.

### **3.3.7 Demographics**

The questionnaire included collection of demographic data and consisted of age, gender, marital status and tenure in New Zealand. Employability questions were included and involved not only employability of the participant, but also employability of spouse or partner, if applicable. Other questions looked at issues concerning social support and being involved in social activities, whether the participant knew anyone upon arrival in New Zealand and whether they had any family members living in New Zealand. They were requested to indicate the distribution of friends they have in New Zealand via a percentage for each group of friends categorised as South Africans, New Zealanders or Other. They were asked to quantify where they live from a list of choices and also asked to indicate number of dependants in certain categories. The final question asked for them to rate their adaptability to life in New Zealand and their satisfaction with their lifestyle on a scale of one to five: one indicating 'very dissatisfied', five indicating 'very satisfied'.

## **CHAPTER FOUR**

### **4 Results**

The data was entered into an Excel spreadsheet and once preparation of the data was complete it was imported into SPSS (V10.0) software so that statistical analyses could take place. Before statistical analysis began, reverse scoring was applied to items in the different scales according to the scale scoring requirements. Then the data was checked for entry errors. This involved firstly, manually scrutinising the data for accuracy. This was performed for every tenth questionnaire of the data. Secondly, it was ascertained that the score for each scale fell into the expected range of minimum to maximum scores for that scale. Missing values were also considered to be erroneous and they were dealt with by first ascertaining whether the missing values exceeded 10% of the items for that scale. If they did then, for that participant that scale was considered unusable and deleted from further analysis. Where the missing values were less than 10% of the scale items, the mean for the existing items was calculated and assigned to the missing values.

#### **4.1 Descriptive Statistics**

The frequencies and percentages of the demographic variables are presented in Table 1, except for age, tenure, percentage of friends, and number of dependants, which are dealt with separately.

**Table 1 - Frequencies for Demographic Variables**

| Variable                                  |  | Frequency | Percentage |
|---|--|-----------|------------|
| Gender<br>(n=207)                         | Female                                     | 118       | 57         |
|   | Male                                       | 89        | 43         |
| Marital Status<br>(n=209)                 | Married / De facto                         | 179       | 86         |
|   | Single                                     | 15        | 7          |
|   | Divorced / Widowed                         | 15        | 7          |
| Employment<br>(n=209)                     | Currently employed                         | 148       | 71         |
|   | Currently unemployed                       | 61        | 29         |
| Qualifications / skills<br>(n=208)        | Qualifications/skills pertinent to job     | 124       | 60         |
|   | Qualifications/skills not pertinent to job | 84        | 40         |
| Spouse employment<br>(n=208)              | Spouse/Partner employed                    | 141       | 68         |
|   | Spouse/Partner not employed                | 67        | 32         |
| Unemployment<br>(n=202)                   | Periods of unemployment in NZ              | 104       | 52         |
|   | No periods of unemployment in NZ           | 98        | 49         |
| SANZ membership<br>(n=209)                | Member of SANZ                             | 99        | 47         |
|   | Not a member of SANZ                       | 110       | 53         |
| SANZ activities<br>(n=208)                | Attend SANZ activities                     | 49        | 24         |
|   | Do not attend SANZ activities              | 159       | 76         |
| Church attendance<br>(n=209)              | Attend church regularly                    | 95        | 46         |
|   | Do not attend church regularly             | 114       | 55         |
| Church activities<br>(n=209)              | Participate in church activities           | 71        | 34         |
|   | Do not participate in church activities    | 138       | 66         |
| Community activities<br>(n=207)           | Participate in community activities        | 107       | 52         |
|   | Do not participate in community activities | 100       | 48         |
| Family in NZ<br>(n=209)                   | Family members living in NZ                | 108       | 52         |
|   | No family members living in NZ             | 101       | 48         |
| Contact on arrival<br>(n=206)             | On arrival knew someone                    | 138       | 67         |
|   | On arrival did not know anyone             | 68        | 33         |
| Place where living<br>(n=206)             | Major city                                 | 172       | 84         |
|   | Town/Small town/Rural                      | 34        | 17         |
| Adaptation to life in NZ<br>(n=209)       | 1 - Very dissatisfied                      | 5         | 2          |
|   | 2 - Not satisfied                          | 8         | 4          |
|   | 3 - Mixed feelings                         | 38        | 18         |
|   | 4 - Satisfied                              | 77        | 37         |
|   | 5 - Very satisfied                         | 81        | 39         |
| Satisfaction with NZ lifestyle<br>(n=209) | 1 - Very dissatisfied                      | 10        | 5          |
|   | 2 - Not satisfied                          | 19        | 9          |
|   | 3 - Mixed feelings                         | 36        | 17         |
|   | 4 - Satisfied                              | 76        | 36         |
|   | 5 - Very satisfied                         | 68        | 33         |

\* Percentages may not add up to 100% due to rounding

The sample of South African immigrants consisted of 57% females and 43% males. Marital status was originally coded as: 1 - married, 2 - single, 3 - divorced, 4 - de facto, 5 - widowed. In addition there was a small percentage of de facto and

widowed persons, so the de facto category was merged with the married category and was recoded as a 1 and the widowed category was merged with the divorced category and was recoded as a 3. As a result, the sample consisted of 86% being married or living with a partner, 7% being single, and another 7% being divorced or widowed.

With respect to employment issues, at the time of the research 71% of the sample were employed. Sixty percent of the sample had pertinent skills or qualifications for their current job. Sixty percent of the sample had spouses or partners who were employed. Periods of unemployment in New Zealand had been experienced by 52% of the sample.

In terms of community and social support demographics, members of SANZ comprised 47% of the sample, but only 24% attended SANZ activities. Regular church attendees consisted of 46% of the sample with 34% participating in church activities. Fifty two percent participated in community activities. At the time of the research 52% had family members living in New Zealand and 67% knew someone when they first arrived in New Zealand. For 'place where living' the questionnaire required the participants to indicate whether they came from a major city, a town, a small town or rural area. The majority of the sample 83% came from a major city, so the other categories were merged into one category which represented 17% of participants living outside a major city. For 'adaptation to life in New Zealand', 76% of South Africans were satisfied with their adaptation whereas 24% were dissatisfied or had mixed feelings about their adaptation. In regards to 'satisfaction with lifestyle in New Zealand', 69% were satisfied with their lifestyle, whereas 31% were dissatisfied or had mixed feelings about their lifestyle in New Zealand.

Age was categorised into six discrete categories and coded as follows: (1) for 18 - 30 year olds, (2) for 31 - 40 year olds, (3) for 41 - 50 year olds, (4) for 51 - 60 year olds, (5) for 61 – 70 year olds and (6) for 71 plus year olds . Table 2 provides frequencies and percentages for the different age categories.

**Table 2 - Frequencies for Age Categories**

| Age Category (n = 207) | Frequency | Percentage |
|------------------------|-----------|------------|
| 18 – 30 year olds      | 26        | 13         |
| 31 – 40 year olds      | 86        | 42         |
| 41 – 50 year olds      | 64        | 31         |
| 51 – 60 year olds      | 13        | 6          |
| 61 – 70 year olds      | 11        | 5          |
| 71+ year olds          | 7         | 3          |

The greatest percentage of the sample fell in the 31 – 40 year olds category with 42%, followed by the 41 – 50 year olds category with 31%.

Tenure in New Zealand was categorised into three discrete categories and coded as : (1) for 0 - 24 months (0 - 2 years), (2) for 25 - 42 months (2 - 3.5 years) and (3) for 43 - 72 months (3.5 - 6 years). Table 3 presents the frequencies for each category of tenure in New Zealand.

**Table 3 - Frequencies for Tenure in New Zealand**

| Tenure Category (n = 207) | Frequency | Percentage |
|---------------------------|-----------|------------|
| 0 - 2 years               | 79        | 38         |
| 2 - 3.5 years             | 69        | 33         |
| 3.5 - 6 years             | 61        | 29         |

In regards to tenure, 38% of participants had lived in New Zealand for up to two years, whereas 33% had lived in New Zealand between 2 to 3.5 years and 29% had lived in New Zealand for more than 3.5 years and less than 6 years.

Dependants were categorised into 14 discrete categories of types of dependants, with their frequencies and percentages presented in Table 4.

**Table 4 - Frequencies and Percentages for Dependant Categories**

| Dependants category | Pre-school | Frequency | Percentage |
|---------------------|------------|-----------|------------|
| 0                   | N          | 61        | 29         |
| 1                   | Pre        | 23        | 11         |
| 2                   | Pre-P      | 27        | 13         |
| 3                   | P          | 24        | 12         |
| 4                   | P-S        | 17        | 8          |
| 5                   | S          | 11        | 5          |
| 6                   | Pre-P-S    | 3         | 1          |
| 7                   | P-S-A      | 6         | 3          |
| 8                   | P-A        | 2         | 1          |
| 9                   | S-A        | 11        | 5          |
| 10                  | A          | 16        | 8          |
| 11                  | E          | 1         | 1          |
| 12                  | S-E        | 2         | 1          |
| 13                  | S-A-E      | 1         | 1          |
| 14                  | P-S-E      | 4         | 1          |

N – No dependants

Pre – Pre- school children

P – Primary school children

S – Secondary school children

A – adults

E - elderly

\* Percentages may not add up to 100% due to rounding

The greatest number of participants (71%) had dependants, whereas only 29% had no dependants. Participants with dependant children consisted of 73% of the sample and out of this 12% also had adult dependants and 3% elderly dependants. Participants with only adult dependants consisted of 8% and those with only elderly dependants 1%.

The scales used to measure the outcome variables consisted of : the Revised UCLA Loneliness scale, the General Health Questionnaire (GHQ), the Beck's Depression Inventory (BDI), the State Trait Anxiety Inventory consisting of the Trait and State Anxiety scales. Note that high scores in the GHQ scale are indicative of low levels of well-being and low scores are indicative of high levels of well-being. Personality was measured using the NEO Five-factor Inventory (NEO-FFI) which measures neuroticism, extraversion, openness, agreeableness and conscientiousness. The coping scale used measured the usage of the following coping styles: instrumental social support, emotional social support, symptom reduction, devaluation, avoidance, accommodation and changing the situation.

Table 5 presents descriptive statistics of range, mean, standard deviation and Cronbach alpha for the various measurement scales and also includes range, mean and standard deviation for age and tenure. Tenure is measured and represented in number of months.

**Table 5 - Descriptive Statistics for Outcome Variables, Personality and Coping**

|                             | N   | Actual<br>Range | Mean | Standard<br>Deviation | Cronbach<br>Alpha |
|-----------------------------|-----|-----------------|------|-----------------------|-------------------|
| UCLA                        | 208 | 20 - 74         | 39.9 | 11.2                  | 0.93              |
| GHQ                         | 209 | 3 - 76          | 26.0 | 13.7                  | 0.94              |
| BDI                         | 207 | 0 - 33          | 6.6  | 6.2                   | 0.86              |
| State-Anxiety               | 207 | 20 - 80         | 36.0 | 13.2                  | 0.96              |
| Trait-Anxiety               | 210 | 20 - 71         | 37.2 | 11.1                  | 0.94              |
| NEO Neuroticism             | 207 | 1 - 48          | 18.4 | 8.5                   | 0.89              |
| NEO Extraversion            | 208 | 6 - 45          | 29.1 | 6.7                   | 0.82              |
| NEO Openness                | 208 | 12 - 44         | 27.6 | 6.1                   | 0.74              |
| NEO Agreeableness           | 209 | 13 - 46         | 31.6 | 5.3                   | 0.72              |
| NEO Conscientiousness       | 209 | 16 - 47         | 35.3 | 6.2                   | 0.84              |
| Instrumental social support | 188 | 0 -16           | 10.3 | 3.3                   | 0.77              |
| Emotional social support    | 188 | 0 - 16          | 10.5 | 3.2                   | 0.78              |
| Symptom reduction           | 181 | 0 - 15          | 8.6  | 2.7                   | 0.58              |
| Devaluation                 | 183 | 0 - 15          | 7.0  | 3.7                   | 0.82              |
| Avoidance                   | 188 | 0 - 13          | 5.8  | 3.3                   | 0.80              |
| Changing the situation      | 189 | 0 - 16          | 9.8  | 3.4                   | 0.81              |
| Accommodation               | 186 | 0 - 16          | 9.0  | 3.1                   | 0.70              |
| Age                         | 207 | 18-80           | 41.7 | 11.6                  |                   |
| Tenure                      | 209 | 1-72            | 32.9 | 18.8                  |                   |

For the Revised UCLA loneliness scale and the GHQ the means suggest a sample consisting of individuals who were not lonely and had well-being. For the BDI the mean indicated a sample low on depression. For the State-Anxiety and the Trait-Anxiety scales both means were in the lower range suggesting a sample low in state anxiety and trait anxiety. The Cronbach alphas for loneliness, well-being, depression, trait anxiety and state anxiety ranged from .86 to .96 indicating an acceptable reliability.

Out of the five personality domains, neuroticism had the lowest mean and conscientiousness the highest mean, indicating a sample with low levels of neuroticism and high levels of conscientiousness. The Cronbach alphas for the personality domains ranged from .72 to .89 indicating an acceptable reliability for the personality measures.

The mean scores for the various coping style measures are very similar, with the highest being 'seeking emotional social support' at 10.8 and the lowest being 'avoidance' at 5.8. The Cronbach alphas for the coping style measures were all acceptable and greater than or equal to .70, except for 'symptom reduction' which only reached a Cronbach alpha of .58. This indicates that the measure of 'symptom reduction' coping is not internally consistent. Therefore, less confidence can be placed on this measure or subscale.

The average age was 41.7 years, ranging from 18 years to 80 years. The average tenure in New Zealand was 3 years, ranging from 1 month to 6 years.

## **4.2 Factor Analysis**

The coping scale was composed of items taken from two different coping measures and consisted of six subscales which measured six different coping strategies. Factor analysis was performed on the coping scale to determine whether there were underlying factors for this scale which were more appropriate for measuring the coping strategies used by this particular sample. The Kaiser-Meyer-Olkin measure of sampling adequacy was .83, indicating that factor analysis was appropriate (Green et al., 1997). Principal component analysis (PCA) was performed on the 28 items of the coping scale and it showed that six factors had eigenvalues greater than 1 and the scree plot test indicated these factors to be adequate and sufficient. This six factor solution accounted for 63% of the variance (Refer to Table 6) and these six factors were initially retained for further analysis.

**Table 6 - Eigenvalues and Percentages of Variance for PCA**

| Factor | Eigenvalue | Percentage of Variance | Cumulative Percentage |
|--------|------------|------------------------|-----------------------|
| 1      | 6.743      | 24.080                 | 24.080                |
| 2      | 4.769      | 17.032                 | 41.113                |
| 3      | 1.936      | 6.913                  | 48.026                |
| 4      | 1.793      | 6.405                  | 54.431                |
| 5      | 1.315      | 4.698                  | 59.129                |
| 6      | 1.047      | 3.738                  | 62.867                |

Following the PCA, a varimax rotation procedure was performed which maximises the variance of the loadings within and across the factors. Using varimax rotations the items were analysed for a 4, 5 and 6 factor solution. At each rotation items that were cross loaded on items and had a difference between items of less than 0.2 were eliminated from further analysis. In total eight items were eliminated and a four factor model was found to provide the best solution. (Refer to Table 7).

The four factor model accounted for 62% of the variance and thus accounted for almost the same amount of variance as is explained by the six factor model, but the four factor model represents a more parsimonious solution as the four factors appear to have an identifiable cluster of variables.

Table 7 represents the four factors grouped according to the identified construct.

**Table 7 - Four Factors from PCA and Varimax Rotation Analysis**

| Items  | Factors |        |        |        |
|--|---------|--------|--------|--------|
|  | 1       | 2      | 3      | 4      |
| I talked to someone about how I felt                                       | .815    |        |        |        |
| I discussed my feelings with someone                                       | .734    |        |        |        |
| I asked people who had similar experiences                                 | .706    |        |        |        |
| I tried to get advice from someone about what to do                        | .669    |        |        |        |
| I talked to someone to find out more about the situation                   | .639    |        |        |        |
| I tried to get emotional support from friends or relatives                 | .601    |        |        |        |
| I got sympathy and understanding from someone                              | .556    |        |        |        |
| I tried to relieve my tension somehow                                      | .524    |        |        |        |
| I worked on changing the situation to get what I wanted                    |         | .862   |        |        |
| I tried to change the situation to get what I wanted                       |         | .690   |        |        |
| I focused my efforts on changing the situation                             |         | .689   |        |        |
| I tried to fix what was wrong with the situation                           |         | .625   |        |        |
| I tried to turn my attention away from the problem                         |         |        | .730   |        |
| I tried to avoid thinking about the problem                                |         |        | .706   |        |
| I refused to think about the problem                                       |         |        | .666   |        |
| I tried to keep myself from thinking about the problem                     |         |        | .609   |        |
| I tried to just let off steam  |         |        | .474   |        |
| I told myself the problem wasn't such a big deal after all                 |         |        |        | .959   |
| I told myself the problem wasn't so serious after all                      |         |        |        | .710   |
| I tried to convince myself that the way things were was in fact acceptable |         |        |        | .549   |
| Eigenvalue   | 5.314   | 3.632  | 1.816  | 1.578  |
| Percentage of Variance   | 26.571  | 18.161 | 9.079  | 7.888  |
| Cumulative Percentage  | 26.571  | 44.732 | 53.811 | 61.700 |

Factor 1 had most of its items related to seeking emotional and instrumental social support, except for one item 'I tried to relieve my tension somehow', which was from 'symptom reduction' coping, but which could be associated with seeking emotional support, thus factor 1 refers to seeking social support as a whole. This factor included items 12 (.815), 6 (.734), 9 (.706), 21 (.669), 3 (.639), 24 (.601), 18 (.556), 8 (.524) with 27% of the variance accounted for by factor 1. Factor 2 had all of its items related to 'changing the situation' coping. This factor included items 23

(.862), 10 (.690), 16 (.689), 27 (.625) with 18% of the variance accounted for by factor 2. Factor 3 had most of its items related to 'avoidance' coping, except for one item 'I tried to just let off steam', which was from 'symptom reduction' coping, but which could be related to 'avoidance' coping, thus factor 3 refers to 'avoidance' coping. This factor included items 7 (.730), 25 (.706), 14 (.666), 4 (.609), 1 (.474) with 9% of the variance accounted for by factor 3. Factor 4 had two items from 'devaluation' coping and one item 'I tried to convince myself that the way things were was in fact acceptable' from 'accommodation' coping, but this item could be interpreted as 'devaluation' coping, thus factor 4 refers to 'devaluation' coping. This factor included items 19 (.959), 11 (.710), 17 (.549) with 8% of the variance accounted for by factor 4.

From the four factor model we can see that for an adequate amount of total variance to be accounted for in coping, four factors are required. Factor analysis has reduced the number of items required for prediction of coping in this sample and suggests that the coping strategies used by South African immigrants in New Zealand can be assessed by the four factors presented by the factor analysis as:

- Factor 1 – 'Seeking social support' coping.
- Factor 2 – 'Changing the situation' coping.
- Factor 3 – 'Avoidance' coping.
- Factor 4 – 'Devaluation' coping.

### **4.3 Correlational Analyses**

Pearson Product-Moment correlations were performed to determine the relationships between the different variables (See Table 8).

**Table 8 - Correlations**

|                                | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8     | 9     | 10   | 11    | 12   | 13     | 14   | 15   | 16   | 17    | 18   |  |
|--------------------------------|--------|--------|--------|--------|--------|--------|--------|-------|-------|------|-------|------|--------|------|------|------|-------|------|--|
| 1 UCLA                         | 1.00   |        |        |        |        |        |        |       |       |      |       |      |        |      |      |      |       |      |  |
| 2 GHQ                          | .55**  | 1.00   |        |        |        |        |        |       |       |      |       |      |        |      |      |      |       |      |  |
| 3 BDI                          | .43**  | .76**  | 1.00   |        |        |        |        |       |       |      |       |      |        |      |      |      |       |      |  |
| 4 State-Anxiety                | .44**  | .76**  | .75**  | 1.00   |        |        |        |       |       |      |       |      |        |      |      |      |       |      |  |
| 5 Trait-Anxiety                | .53**  | .78**  | .81**  | .86**  | 1.00   |        |        |       |       |      |       |      |        |      |      |      |       |      |  |
| 6 NEO Neuroticism              | .52**  | .64**  | .70**  | .72**  | .84**  | 1.00   |        |       |       |      |       |      |        |      |      |      |       |      |  |
| 7 NEO Extraversion             | -.38** | -.38** | -.47** | -.41** | -.45** | -.48** | 1.00   |       |       |      |       |      |        |      |      |      |       |      |  |
| 8 NEO Openness                 | -.10   | -.04   | .02    | .03    | -.02   | .00    | .12    | 1.00  |       |      |       |      |        |      |      |      |       |      |  |
| 9 NEO Agreeableness            | -.26** | -.13   | -.17*  | -.14   | -.23** | -.23** | .19**  | -.08  | 1.00  |      |       |      |        |      |      |      |       |      |  |
| 10 NEO Conscientiousness       | -.10   | -.12   | -.21** | -.12   | -.24** | -.27** | .31**  | -.07  | .05   | 1.00 |       |      |        |      |      |      |       |      |  |
| 11 Seeking social support      | -.18*  | -.16*  | -.18*  | -.11   | -.12   | -.16*  | .25**  | .17*  | .24** | .17* | 1.00  |      |        |      |      |      |       |      |  |
| 12 Changing the Situation      | -.07   | -.14   | -.16*  | -.06   | -.13   | -.17*  | .21**  | .08   | -.07  | .12  | .44** | 1.00 |        |      |      |      |       |      |  |
| 13 Avoidance                   | .16*   | .14    | .18*   | .23**  | .27**  | .34**  | -.07   | .13   | -.02  | -.07 | .09   | .04  | 1.00   |      |      |      |       |      |  |
| 14 Devaluation                 | .01    | -.05   | .00    | -.05   | -.05   | .01    | -.02   | .02   | .10   | -.05 | .04   | .03  | .41**  | 1.00 |      |      |       |      |  |
| 15 Age                         | .04    | .05    | .09    | -.01   | -.01   | .02    | -.21** | -.14* | .05   | -.08 | -.12  | -.08 | -.02   | .14  | 1.00 |      |       |      |  |
| 16 Tenure                      | -.12   | -.11   | -.05   | -.04   | -.02   | .03    | -.004  | .03   | -.04  | -.10 | -.02  | .01  | .11    | .19* | .14* | 1.00 |       |      |  |
| 17 Adaptation to Life in NZ    | -.57** | -.56** | -.37** | -.44** | -.51** | -.44** | .21**  | .05   | .21** | .08  | .02   | -.02 | -.24** | .02  | -.02 | .06  | 1.00  |      |  |
| 18 Satisfaction with Lifestyle | -.43** | -.52** | -.44** | -.48** | -.50** | -.42** | .17*   | -.00  | .16*  | .12  | -.05  | -.11 | -.27** | -.01 | -.07 | -.02 | .74** | 1.00 |  |

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

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

The correlation table covers the correlations comprehensively, so only the correlations that are of interest are discussed below, of these are the correlations between the outcome variables, personality and coping styles.

For the outcome variables, highly significant ( $p < .01$ ) correlations were found between all the outcome variables.

- Between loneliness and well-being ( $r = .55$ ), loneliness and depression ( $r = .43$ ), loneliness and state anxiety ( $r = .44$ ), between loneliness and trait anxiety ( $r = .53$ ).
- Between well-being and depression ( $r = .76$ ), between well-being and state-anxiety ( $r = .76$ ), between well-being and trait-anxiety ( $r = .78$ ).
- Between depression and state-anxiety ( $r = .75$ ), between depression and trait-anxiety ( $r = .81$ ) and between state-anxiety and trait-anxiety ( $r = .86$ ).

Out of the personality domains, neuroticism was positively and highly significantly correlated ( $p < .01$ ) with loneliness ( $r = .52$ ), with well-being ( $r = .64$ ), with depression ( $r = .70$ ), with state anxiety ( $r = .72$ ) and with trait anxiety ( $r = .84$ ). Extraversion was negatively and highly significantly correlated ( $p < .01$ ) with loneliness ( $r = -.38$ ), with well-being ( $r = -.38$ ), with depression ( $r = -.47$ ), with state anxiety ( $r = -.41$ ) and with trait anxiety ( $r = -.45$ ).

For the coping factors, 'Seeking social support' was found to have negative significant ( $p < .05$ ) correlations with loneliness ( $r = -.18$ ), with well-being ( $r = -.16$ ) and with depression ( $r = -.18$ ). 'Changing the situation' was negatively and significantly ( $p < .05$ ) correlated with depression ( $r = -.16$ ). 'Avoidance' was found to have a positive significant ( $p < .05$ ) correlation with loneliness ( $r = .16$ ) and depression ( $r = .18$ ) and positive and highly significant ( $p < .01$ ) correlations with state anxiety ( $r = .23$ ) and trait anxiety ( $r = .27$ ).

Correlations between coping factors and personality domains were also administered. A negative and significant ( $p < .05$ ) correlation was found between neuroticism and 'seeking social support' ( $r = -.16$ ) and positive and significant correlations ( $p < .05$ ) were found between openness and 'seeking social support' and between conscientiousness and 'seeking social support' (both  $r = .17$ ). 'Seeking social support' also had a positive and highly significant ( $p < .01$ ) correlation with agreeableness. In regards to extraversion, positive and highly significant ( $p < .01$ ) correlations were found between extraversion and 'seeking

social support' ( $r = .25$ ) and between extraversion and 'changing the situation' ( $r = .21$ ). For neuroticism, a highly significant ( $p < .01$ ) correlation was found between neuroticism and 'avoidance' ( $r = .34$ ).

#### 4.4 Multiple Regression

A hierarchical regression analysis was performed with well-being as the dependent variable. The personality domains were entered at stage 1, the coping factors at stage 2, state anxiety, trait anxiety and depression at stage 3 and loneliness at stage 4. The order in which the independent variables were entered in the following regressions was based on findings discussed in the literature review, as follows.

Personality is thought to influence the process of coping by influencing the way in which a situation is appraised (Nakano, 1992; O'Brien & DeLongis, 1996). Depending on the way a situation is appraised, the person will use different coping strategies to deal with that situation. Coping can also be dependent on a person's capacities which will directly affect the individual's behaviour and these capacities are linked to his personality (Lazarus, 1966). Therefore personality would have an influence on coping and was included in stage 1 with coping included in stage 2.

Depression, trait anxiety and state anxiety were initially included together in the first regression because even though they are separate entities, they are highly correlated and often exist together (Christensen et al., 1999; De Beurs et al., 1999). Depression and anxiety were included after personality because extraversion and introversion were found to affect anxiety (Schmidt & Riniolo, 1999). Individuals with high levels of neuroticism tended to react to daily conflicts with depression (Bolger & Zuckerman, 1995). Thus personality has an influence on depression and anxiety. Certain coping behaviours such as 'avoidance' coping and 'emotion-focused' coping have been related to depression and anxiety (Smari et al., 1997) and thus have some influence over these behaviours and therefore depression and anxiety were included in the regression in stage 3, after coping.

Loneliness was included in the final stage of the regressions as it was considered to be influenced by personality, coping, anxiety and depression. Loneliness has been associated with anxiety, the greater the anxiety the greater the feelings of loneliness (Fees et al., 1999; Hojat, 1983). Loneliness is also

accompanied by depression (Hojat, 1982, 1983) and depressed people tend to suffer from loneliness (Hsu et al., 1987). So both anxiety and depression can increase an individual's feelings of loneliness. Coping strategies also have an effect on loneliness and can decrease the levels of loneliness (Peplau & Perlman, 1982; Rokach & Brock, 1998). In terms of personality, both extraversion and neuroticism are related to loneliness (Stokes, 1985). Extraverts tend to be less lonely (Hojat, 1982), whereas neurotics tend to be more lonely (Hojat, 1983; Stokes, 1985).

**Table 9 – Predictors of well-being**

| Variable           | Model 1  | Model 2  | Model 3  | Model 4  |
|--------------------|----------|----------|----------|----------|
|                    | Beta     | Beta     | Beta     | Beta     |
| Neuroticism        | .594**   | .619**   | -.062    | -.096*   |
| Extraversion       | -.121    | -.117    | .011     | .035     |
| Openness           | -.014    | .004     | .027     | .033     |
| Agreeableness      | .029     | .049     | .039     | .065     |
| Conscientiousness  | .080     | .084     | .037     | .031     |
| Social Support     |          | -.049    | -.042    | -.025    |
| Changing Situation |          | .017     | -.020    | -.034    |
| Avoidance          |          | -.059    | -.056    | -.061    |
| Devaluation        |          | -.032    | .004     | -.001    |
| Depression         |          |          | .322**   | .296**   |
| State anxiety      |          |          | .270*    | .292*    |
| Trait anxiety      |          |          | .361*    | .296*    |
| Loneliness         |          |          |          | .207**   |
| N                  | 171      | 171      | 171      | 171      |
| R                  | .632     | .638     | .815     | .832     |
| R Squared          | .399     | .406     | .664     | .691     |
| Adj R Squared      | .381     | .373     | .639     | .666     |
| R squared change   | .399     | .008     | .258     | .027     |
| F                  | 21.893** | 12.251** | 26.025** | 27.064** |

\* significant at the  $p < .05$  level

\*\* significant at the  $p < .001$  level

The hierarchical regression explains how much variance in well-being is explained at each stage of the regression. At stage 1, where only personality was included, the model explained 40% of the variation in well-being ( $R^2 = .40$ , adjusted  $R^2 = .38$ ,  $F(5,165) = 21.893$ ,  $p < .001$ ). In stage 2, with the

addition of the coping factors, the model did not explain any significant variation in well-being. Model 3 which had the addition of depression, state anxiety and trait anxiety, significantly explained an additional 26% of the variation in well-being ( $R$  squared = .66, adjusted  $R$  squared = .64,  $F(12,158) = 26.025$ ,  $p < .001$ ). In model 4 with the addition of loneliness a further 3% of variation in well-being was explained ( $R$  squared = .69, adjusted  $R$  squared = .67,  $F(13,157) = 27.064$ ,  $p < .001$ ).

From the above it is clear that coping did not contribute significantly to the variation in well-being. Hence in the following multiple regressions the coping factors were excluded. A hierarchical regression was conducted with each of the personality domains included one at a time per stage and likewise for state anxiety, trait anxiety, depression and loneliness, so that the predictive ability of each variable on well-being could be assessed.

**Table 10 – Predictors of well-being (addition of one variable per model)**

| Variable          | Model 1       | Model 2      | Model 3      | Model 4      | Model 5      | Model 6      | Model 7      | Model 8      | Model 9      |
|-------------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                   | Beta          | Beta         | Beta         | Beta         | Beta         | Beta         | Beta         | Beta         | Beta         |
| Neuroticism       | .637**        | .587**       | .588**       | .593**       | .605**       | .212*        | .064         | -.052        | -.094        |
| Extraversion      |               | -.106        | -.103        | -.106        | -.125        | -.009        | .003         | -.009        | .020         |
| Openness          |               |              | -.019        | -.017        | -.009        | -.028        | -.040        | -.026        | -.010        |
| Agreeableness     |               |              |              | .024         | .028         | .009         | -.002        | .020         | .047         |
| Conscientiousness |               |              |              |              | .075         | .063         | .024         | .045         | .028         |
| Depression        |               |              |              |              |              | .620**       | .428**       | .354**       | .342**       |
| State anxiety     |               |              |              |              |              |              | .388**       | .247*        | .268*        |
| Trait anxiety     |               |              |              |              |              |              |              | .329*        | .262         |
| Loneliness        |               |              |              |              |              |              |              |              | .206**       |
| N                 | 203           | 203          | 203          | 203          | 203          | 203          | 203          | 203          | 203          |
| R                 | .637          | .644         | .644         | .645         | .648         | .776         | .810         | .819         | .836         |
| R Squared         | .406          | .415         | .415         | .415         | .420         | .602         | .655         | .671         | .699         |
| Adj R Squared     | .403          | .409         | .406         | .404         | .406         | .589         | .643         | .657         | .685         |
| R squared change  | .406          | .009         | .000         | .001         | .005         | .181         | .054         | .015         | .028         |
| F                 | 137.32<br>7** | 70.821*<br>* | 47.046*<br>* | 35.183*<br>* | 28.576*<br>* | 49.343*<br>* | 52.988*<br>* | 49.436*<br>* | 49.770*<br>* |

\* significant at the  $p < .05$  level

\*\* significant at the  $p < .001$  level

Model 1, which included only neuroticism, explained 41% of the variation in well-being ( $R^2 = .62$ , adjusted  $R^2 = .41$ ,  $F(1, 201) = 137.327$ ,  $p < .001$ ). Models 2, 3, 4 and 5 which included the remaining personality domains did not explain any further significant variation in well-being. Model 6 had the addition of depression and significantly explained a further 18% in the variation of well-being ( $R^2 = .60$ , adjusted  $R^2 = .59$ ,  $F(6, 196) = 49.343$ ,  $p < .001$ ). Model 7 had the addition of state anxiety and significantly explained a further 3% of variation in well-being ( $R^2 = .66$ , adjusted  $R^2 = .66$ ,  $F(6, 196) = 52.988$ ,  $p < .001$ ). Model 8 added in trait anxiety and significantly explained a further 2% of variation in well-being ( $R^2 = .67$ , adjusted  $R^2 = .66$ ,  $F(8, 194) = 49.436$ ,  $p < .001$ ). In model 9 the addition of loneliness significantly explained a further 3% of variation in well-being ( $R^2 = .70$ , adjusted  $R^2 = .69$ ,  $F(9, 193) = 49.770$ ,  $p < .001$ ).

#### **4.4.1 Multiple regression for gender**

From the above it is demonstrated that out of all the personality domains, only neuroticism contributed significantly to the variation in well-being. The following multiple regressions excluded extraversion, conscientiousness, agreeableness and openness. These regressions were performed to assess the predictive ability of neuroticism, depression, state anxiety, trait anxiety and loneliness on well-being for females and males. Each stage of the regressions included one independent variable at a time.

**Table 11 – Predictors of well-being for females**

| Variable         | Model 1  | Model 2  | Model 3  | Model 4  | Model 5  |
|------------------|----------|----------|----------|----------|----------|
|                  | Beta     | Beta     | Beta     | Beta     | Beta     |
| Neuroticism      | .680**   | .263*    | .109     | -.036    | -.088    |
| Depression       |          | .570**   | .445**   | .363**   | .344     |
| State anxiety    |          |          | .321*    | .213*    | .223     |
| Trait anxiety    |          |          |          | .331*    | .308     |
| Loneliness       |          |          |          |          | .148     |
| N                | 116      | 116      | 116      | 116      | 116      |
| R                | .680     | .783     | .805     | .815     | .825     |
| R Squared        | .463     | .613     | .649     | .664     | .680     |
| Adj R Squared    | .458     | .607     | .639     | .652     | .665     |
| R squared change | .463     | .151     | .035     | .016     | .015     |
| F                | 98.111** | 89.636** | 68.953** | 54.961** | 46.733** |

\* significant at the  $p < .05$  level

\*\* significant at the  $p < .001$  level

Model 1, consisting of neuroticism, explained 46% of the variation in well-being ( $R^2 = .46$ , adjusted  $R^2 = .46$ ,  $F(1, 114) = 98.111$ ,  $p < .001$ ). Model 2, with the addition of depression, significantly explained a further 15% of the variation in well-being ( $R^2 = .61$ , adjusted  $R^2 = .61$ ,  $F(2, 113) = 89.636$ ,  $p < .001$ ). Model 3, with the addition of state anxiety, significantly explained a further 4% in the variation of well-being ( $R^2 = .65$ , adjusted  $R^2 = .64$ ,  $F(3, 112) = 68.953$ ,  $p < .001$ ). Model 4, with the addition of trait anxiety, significantly explained a further 2% of variance in well-being ( $R^2 = .66$ , adjusted  $R^2 = .64$ ,  $F(4, 111) = 54.961$ ,  $p < .001$ ). Model 5, with the addition of loneliness, significantly explained a further 2% of variation in well-being ( $R^2 = .68$ , adjusted  $R^2 = .67$ ,  $F(5, 110) = 46.733$ ,  $p < .001$ ).

**Table 12 – Predictors of well-being for males**

| Variable         | Model 1  | Model 2  | Model 3  | Model 4  | Model 5  |
|------------------|----------|----------|----------|----------|----------|
|                  | Beta     | Beta     | Beta     | Beta     | Beta     |
| Neuroticism      | .519**   | .115     | .008     | -.077    | -.134    |
| Depression       |          | .662**   | .357*    | .313*    | .295*    |
| State anxiety    |          |          | .487**   | .349*    | .427*    |
| Trait anxiety    |          |          |          | .262     | .078     |
| Loneliness       |          |          |          |          | .311**   |
| N                | 85       | 85       | 85       | 85       | 85       |
| R                | .519     | .738     | .798     | .806     | .844     |
| R Squared        | .269     | .545     | .637     | .649     | .713     |
| Adj R Squared    | .260     | .534     | .624     | .632     | .695     |
| R squared change | .269     | .276     | .093     | .012     | .064     |
| F                | 30.570** | 49.056** | 47.451** | 37.047** | 39.272** |

\* significant at the  $p < .05$  level

\*\* significant at the  $p < .001$  level

Model 1, consisting of neuroticism, explained 27% of the variation in well-being ( $R^2 = .27$ , adjusted  $R^2 = .26$ ,  $F(1, 83) = 30.570$ ,  $p < .001$ ). Model 2, with the addition of depression, significantly explained a further 28% of the variation in well-being ( $R^2 = .55$ , adjusted  $R^2 = .53$ ,  $F(2, 82) = 49.056$ ,  $p < .001$ ). Model 3, with the addition of state anxiety, significantly explained a further 9% of the variation in of well-being ( $R^2 = .64$ , adjusted  $R^2 = .62$ ,  $F(3, 81) = 47.451$ ,  $p < .001$ ). Model 4, with the addition of trait anxiety, significantly explained a further 1% of variation in well-being ( $R^2 = .65$ , adjusted  $R^2 = .63$ ,  $F(4, 80) = 37.047$ ,  $p < .001$ ). Model 5, with the addition of loneliness, significantly explained a further 6% of variation in well-being ( $R^2 = .72$ , adjusted  $R^2 = .70$ ,  $F(5, 79) = 39.272$ ,  $p < .001$ ).

## **CHAPTER FIVE**

### **5 Discussion and Conclusions**

The research findings of this study discussed in Chapter 4 provide insight into the significant differences found in the outcome variables, in personality and coping in terms of the demographic variables. The outcome variables refer to the constructs of loneliness, depression, well-being, state anxiety and trait anxiety. The study also provides information about correlations amongst and between each group where the groups of variables consist of outcome variables, personality traits, coping styles and certain demographics. Insight is gained into the predictive ability of personality, coping, depression, anxiety and loneliness on well-being.

#### **5.1 The demographics and measured variables**

The outcome variables in this research consisted of loneliness, depression, state anxiety, trait anxiety and well-being. According to the findings, the sample of South African immigrants in this study had low levels of depression, state anxiety, trait anxiety and loneliness, and high levels of well-being. This sample of South African immigrants seems to indicate that the demographics included in this research were not related to variances in the outcome variables, in personality or in the coping strategies used.

#### **5.2 Factor Structure of the Coping Scale**

The factor structure of the coping scale was analysed using factor analysis. The Principal Component Analysis (PCA) and Varimax rotation procedures were applied to the coping scale. Originally, it was thought that the scale had six underlying factors which accounted for 63% of the variance. However, after the PCA and Varimax rotations were applied, the scale was found to have four underlying factors which accounted for 62% of the variance; almost the same variance as explained by the six factor model. The four factor model represents a more parsimonious solution as the four factors appear to have an identifiable cluster of variables.

The first factor, 'social support', included statements about the social support that the individual seeks. Factor 2, 'changing the situation', included statements indicating whether the individual changed or attempted to change the situation. Factor 3, 'avoidance', included statements to ascertain whether the individual tried to avoid the situation. Factor 4, 'devaluation', included statements to ascertain whether the individual tried to devalue the situation. These four factors were used for further statistical analysis.

### **5.3 Correlations**

The following sections discuss significant correlations which were of interest and were found between the following groups: outcome variables, demographics, personality traits and coping factors.

Positive and highly significant correlations were found between each of the variables of loneliness, well-being, depression, state anxiety and trait anxiety. This echoes previous research which found anxiety to be associated with decreased well-being (De Beurs et al., 1999) and increased loneliness (Fees et al., 1999; Hojat, 1983). Loneliness was also associated with depression (Hojat, 1982, 1983; Hsu et al., 1987). Previous research has also found anxiety to be present with depression (Chrsitensen et al., 1999; De Beurs et al., 1999).

#### **5.3.1 Correlations Between Personality and Outcome Variables**

The following section discusses significant correlations which were found between personality and the outcome variables. In regards to the personality traits, high levels in neuroticism were associated with low levels of well-being and high levels of loneliness, depression, state anxiety and trait anxiety.

Neuroticism has in the literature been associated with lower levels of well-being (Cooper et al., 1995; McCrae & Costa, 1991; McLennan et al., 1988; Schmutte & Ryff, 1997), with depression (Bolger & Zuckerman, 1995) and with anxiety (Nadicht & Morrissey, 1976; Schmidt & Riniolo, 1999). Research on loneliness performed by Hojat (1983) and Stokes (1985) found neurotics to be lonely people, but the reasons for this loneliness were not clear as there was no direct link between neuroticism and quality or development of friendships. Rather it

may be the effect that neuroticism had on perception creating a negative perception of the person's social network that allowed loneliness to develop (Stokes, 1985).

High levels of extraversion were related to low levels of loneliness, depression, state anxiety and trait anxiety and to high levels of well-being. Extraverts have been found to have higher levels of well-being compared to neurotics (Cooper et al., 1995; McCrae & Costa, 1991; Schmutte & Ryff, 1997). They have also been found to be low on anxiety (Naditch & Morrissey, 1976) and suffer less from loneliness (Hojat, 1982).

When considering the other personality traits of agreeableness, conscientiousness and openness, little has been previously researched in terms of these traits. Previous research has tended to focus on neuroticism and extraversion as these two traits seem to have the highest significant correlations, whereas the other three traits have less significant correlations with other variables (Diener, 1998).

High levels of conscientiousness were related to low levels of depression and trait anxiety. No significant correlations were found for conscientiousness and loneliness, well-being or state anxiety. On the other hand, previous research has linked conscientiousness to higher levels of well-being (Diener, 1998).

### **5.3.2 Correlations Between Coping and Outcome Variables**

The following section discusses the significant correlations that were found between coping and the outcome variables. In regards to the coping factors, 'seeking social support' was found to be related to high levels of well-being and low levels of loneliness and depression. In terms of loneliness, this supports Rokach and Brock (1998) who found that one of the coping strategies people used to deal with loneliness was to make use of one's social support network. Nakano (1991) found that people who sought social support had lower levels of depression.

'Changing the situation' coping was related to moderate levels of depression. This is possibly due to the fact that when you change the situation you haven't necessarily resolved the issue that caused this type of coping to take place and this may lead to depression

'Avoidance' coping was found to be related to moderate levels of loneliness and depression and related to high levels of state anxiety and trait anxiety. In previous research correlations have been found between 'avoidance' coping and anxiety where 'avoidance' is linked to increased levels of anxiety (Smari et al., 1997), and those who did not use 'avoidance' suffered less from psychological distress (Kobasa, 1982).

### **5.3.3 Correlations Between Coping and Personality**

High levels of neuroticism were related to low usage of 'seeking social support' and to high usage of 'avoidance' coping. This supports previous research which found 'avoidance' use related to neuroticism (McCrae & Costa, 1986; O'Brien & DeLongis, 1986; Suls & David, 1996).

In regards to extraversion, high levels were related to high usage of 'seeking social support' which supports research done by Nakano (1992) and Watson and Hubbard (1996). Extraverts tend to spend more time with others anyway and would then normally make more use of social support. High levels of extraversion were also related to high usage of 'changing the situation'. Extraverts thrive on spending time with people and through friendship and companionship they may find ways of changing undesirable situations.

High levels of openness were related to high usage of 'seeking social support'. McCrae and Costa (1986) found that one of the coping strategies used by open individuals was seeking help and support. An open individual would possibly be more open to receiving social support from others and thus make more use of it.

High levels of agreeableness were associated with high usage of 'seeking social support'. This supports previous research which found that agreeable people seek social support as a means of coping (O'Brien & DeLongis, 1996; Suls & David, 1996).

High levels of conscientiousness were moderately related to increased usage of 'seeking social support'. It is thought that conscientious people make use of active coping strategies (Suls & David, 1996) and seeking social support is an active way of coping.

## 5.4 Multiple Regressions

Multiple regression analysis was undertaken to ascertain the predictive ability of personality, coping, loneliness and the combination of depression, state anxiety and trait anxiety on well-being. The linear combination of the personality domains was found to be the best predictor of well-being accounting for 40% of the variance in well-being, coping did not contribute significantly to the variance in well-being over and above personality. The linear combination of depression, state anxiety and trait anxiety contributed 26% to the variance in well-being, over and above personality, whereas loneliness only contributed 3% to the variance in well-being over and above personality, depression, state anxiety and trait anxiety.

Once the significant contributors to well-being were entered individually into the regression analysis it became apparent, that out of all the personality domains, neuroticism was the only personality domain that significantly explained variance in well-being, explaining 41% of this variance. Neuroticism has previously emerged as a strong predictor of psychological well-being, whereby individuals with high levels of neuroticism have lower levels of well-being (Cooper et al., 1995; McCrae & Costa, 1991; McLennan et al., 1988; Schmutte & Ryff, 1997). Out of the outcome variables, depression significantly explained an additional 18% of the variance in well-being over and above personality. Whereas state anxiety only 3%, trait anxiety only 2% and loneliness only 3% over and above personality and depression. Suffering from anxiety, depression and loneliness have all been associated with decreased well-being (De Beurs et al., 1999; Fees et al., 1999; Hojat, 1983).

The same multiple regression was applied to females only and found that neuroticism explained 46% of the variance of well-being and depression explained 15% over and above personality, with state anxiety contributing 4%, trait anxiety 2% and loneliness 2% over and above personality and depression. When applied to males only, neuroticism explained 27% of the variance of well-being and depression explained 28% over and above personality, with state anxiety contributing 9%, trait anxiety 1% and loneliness 6% over and above personality and depression. This indicates a difference for females and males in the predictive ability of neuroticism, depression, state anxiety, trait anxiety and loneliness on well-being. For females the best predictor was neuroticism, followed by

depression, whereas for males, both neuroticism and depression were equally predictive.

## **5.5 Implications**

The key investigation of this research is the exploration of personality and coping in terms of immigration and particularly South African immigrants living in New Zealand. The personality of immigrants has not been previously researched and future research in immigration should incorporate and explore personality and its influence in immigration issues by investigating the personality profiles of immigrants.

Previous research on personality has concentrated on neuroticism and extraversion (Bolger & Zuckerman, 1995; Cooper et al., 1995; McCrae & Costa, 1991; McLennan et al, 1988; Naditch & Morrissey, 1976; Schmutte & Ryff, 1997; Stokes, 1985). Even though neuroticism has in this research been the best predictor of well-being, the impact of the other personality traits should not be disregarded and further research should also incorporate the other personality traits.

In regards to coping, the indication from this research is that coping is not a major predictor of well-being. However, the coping scale used was problematic in that many participants partially completed it or left all the items unanswered. Some participants put their viewpoint across and the impression received was that the coping scale items were not relevant to their experience of immigration and therefore they were unable to relate to the statements and provide an answer. The original coping scale consisted of six underlying factors, however after performing factor analysis four underlying factors emerged. Future research in coping and immigration will need to select an appropriate and relevant coping scale to measure coping amongst immigrants.

## **5.6 Limitations**

The current research is limited by the sample, measures, analyses and the research design used. The sample constitutes of South Africans living in New Zealand. The results obtained from this research may not be applicable to

immigrants from other countries or even to South African immigrants living in other countries and further research would have to be performed to ascertain this. Most of the participants (84%) in this research came from a major city and the results are not necessarily representative of South African immigrants living in towns or rural areas.

The data available for research was not complete for all variables and missing values had to be dealt with. This implies that the results and analyses of the data may have been affected by the process of catering for missing values. Thus, results that are not representative of the population in question may have been presented.

Even though the response rate of 42% was considered to be very good, some participants may have decided against completing the questionnaire. The questionnaire was fairly lengthy and some prospective participants may have decided against completing it after assessing the amount of time they would have to spend on it, this in itself poses a limitation to the research. Another problem encountered with the questionnaire was the coping scale used, in that many participants partially completed it or left all items unanswered; this poses a problem in that coping could not be adequately assessed.

## **5.7 Recommendations**

The recommendations to come out of this research are important for future research and may also have an impact on organisations involved with immigrants and on the immigrants themselves, South African or otherwise.

The key recommendation is that this research should be repeated. Future research should look into repeating this research on other samples of South African immigrants living in New Zealand. This would enable us to ascertain whether the results can be replicated and thus confirm whether these results apply to most South African immigrants living in New Zealand. By performing this research on samples of immigrants from other countries it would establish whether these results apply to other immigrants from other countries. An interesting area to research would be to replicate this research on South African immigrants living in other countries so it can be ascertained whether these results pertain to South African immigrants in general or whether it is particular to South Africans living in

New Zealand.

Further research should be performed on South African immigrants to assess issues that affect their well-being and cause psychological symptoms and also evaluate the impact of personality and coping on these issues, but using differing methods to this research and using a different way of measuring coping. This recommendation is made because of the fact that this sample of immigrants did not appear to have the same problems and issues as other immigrants have been found to have in previous research. Including open-ended questions, performing qualitative research and using different research methods, it may be possible to discover what are the actual issues that affect South African immigrants in New Zealand.

With regard to personality, future research needs to investigate how personality dimensions influence coping and the immigration process, as there is a lack of research in the literature in regards to personality and immigration.

The underlying factor structure of the coping scale requires further investigation. This research outlines specific underlying factors which are pertinent for this sample of immigrants. It is recommended that further research investigates the relevance of the coping scale derived from the factor analysis and the generalisability of the scale across other immigrant populations. Further studies should investigate the composition and use of coping strategies by immigrants and investigate whether these coping strategies occur one at a time or whether they are used in parallel.

For organisations like SANZ and other government organisations involved in the settling process of immigrants, it is recommended that they become more involved in integrating immigrants into their new society. Immigrants should be encouraged to become involved in their local community and in their new society and relevant organisations should, where possible, facilitate this process. Community organisations, schools, local governments and social groups can help immigrants adapt to their new culture by making available the opportunity for immigrants to participate in and make use of the communication channels of the host society (Shah, 1991).

By following the recommendations outlined here, a richer and more knowledgeable insight into immigration will be presented, particularly in regards to personality and coping and the role they play in immigration. The

recommendations also have implications for organisations involved with immigrants which will enable them to become more effective in the aid and support they provide in the resettlement process of immigrants.

## **5.8 Conclusion**

This study covers the pertinent area of the effects of immigration and the role personality and coping pose for the individual in the immigration process. Immigration is an important and relevant part of the New Zealand culture and economy. New Zealand is expected to benefit from South African immigration because South African immigrants tend to be highly skilled and highly educated (Polonsky, Scott, & Suchard, 1988) and therefore will be an asset to the country. By being more informed about the issues and problems which arise during immigration, New Zealand society and organisations involved with immigrants will be able to facilitate the immigration process and to aid in acculturation and the settling process.

A key finding of this research is that South African immigrants in this study do not seem to suffer from any major psychological trauma due to their immigration. The sample of South African immigrants in this study had low levels of depression, state anxiety, trait anxiety and loneliness, and high levels of well-being. Also, the demographics explored seemed to have no influence over loneliness, depression, anxiety or well-being.

The key findings in this research indicate that the best predictors of well-being in South African immigrants were neuroticism and depression, with neuroticism being the best predictor in females, followed by depression. Whereas for males, both neuroticism and depression were equal in their predictive ability of well-being. Coping did not significantly predict well-being. Neuroticism was associated with low levels of well-being and high levels of loneliness, depression, state anxiety and trait anxiety. Depression, as expected, was associated with low levels in well-being and high levels of anxiety and loneliness.

The main implication for future research is that personality within immigration needs to be researched further due to the lack of research in this area. The limitations of this study have been discussed and future research needs to take these limitations into account so that some of the pitfalls can be avoided allowing

for improved research methods. Recommendations have also been presented which will be helpful for future dealings with immigrants. This research has confirmed and contributed to the existing literature and knowledge on immigration, but at the same time it has contributed new ideas and concepts to the body of knowledge related to the role of personality and coping on the well-being of South African immigrants.

## BIBLIOGRAPHY

- Abbott, M. W., Wong, S., Williams, M., Au, M., & Young, W. (1999). Chinese migrants' mental health and adjustment to life in New Zealand. *Australian and New Zealand Journal of Psychiatry*, 33(1), 13-21.
- Aldwin, C. M., & Revenson, T. A. (1987). Does coping help? A reexamination of the relation between coping and mental health. *Journal of Personality and Social Psychology*, 53(2), 337-348.
- Andrews, F. M., & Withey, S. B. (1976). *Social indicators of well-being: America's perception of life quality*. New York: Plenum Press.
- Anson, O., Pilpel, D., & Rolnik, V. (1996). Physical and psychological well-being among immigrant referrals to colonoscopy. *Social Science and Medicine*, 43(9), 1309-1316.
- Aycan, Z., & Berry, J. W. (1996). Impact of unemployment-related experiences on immigrants' psychological well-being and adaptation to Canada. *Canadian Journal of Behavioural Science*, 28(3), 240-251.
- Baum, S. K. (1982). Loneliness in elderly persons: A preliminary study. *Psychological Reports*, 50(3 pt 2), 1317-1318.
- Beck, Aaron, T., & Steer, Robert, A. (1987). *Beck Depression Inventory Manual*. San Antonio: The Psychological Corporation Harcourt Brace Jovanovich, Inc.
- Beiser, M. (1990). Mental health of refugees in resettlement countries. In Holtzman, W., & Bornemann, T. (Eds.), *Mental health of immigrants and refugees* (pp. 51-65). Austin, TX, US: Hogg Foundation for Mental Health.
- Bellenir, K (Ed.) (2000). *Mental health disorders sourcebook*. Detroit, USA: Omnigraphics, Inc.
- Bennett, H., Rigby, C., & Boshoff, A. (1997). The relationship between tenure, stress and coping strategies of South African immigrants to New Zealand. *South African Journal of Psychology*, 27(3), 160-165.

- Berry, J. W. (1990). Acculturation and adaptation: A general framework. In Holtzman, W., & Bornemann, T. (Eds.), *Mental health of immigrants and refugees* (pp. 90-102). Austin, TX, US: Hogg Foundation for Mental Health.
- Berry, J. W. (1998). Acculturation and health: Theory and research. In Kazarian, S. S., & Evans, D. R. (Eds.), *Cultural clinical psychology. Theory, research and practice* (pp. 39-57). New York: Oxford University Press, Inc.
- Berry, J. W., Kim, U., Minde, T., & Mok, D. (1987). Comparative studies of acculturative stress. *International Migration Review*, 21, 491-511.
- Berry, J. W., & Sam, D. L. (1995). Acculturative stress among young immigrants in Norway. *Scandinavian Journal of Psychology*, 36(1), 10-24.
- Biernacki, P., & Waldorf, D. (1981). Snowball sampling: problems and techniques of chain referral sampling. *Sociological Methods and Research*, 10, 141-163.
- Blanchard-Fields, F. (1986). Reasoning on social dilemmas varying in emotional saliency: An adult developmental perspective. *Psychology and Aging*, 1, 325-333.
- Boey, K. W. (1998). Coping and family relationships in stress resistance: a study of job satisfaction of nurses in Singapore. *International Journal of Nursing Studies*, 35(6), 353-361.
- Bolger, N., & Eckenrode, J. (1991). Social relationships, personality, and anxiety during major stressful event. *Journal of Personality and Social Psychology*, 61(3), 440-449.
- Bolger, N., & Zuckerman, A. (1995). A framework for studying personality in the stress process. *Journal of Personality and Social Psychology*, 69(5), 890-902.
- Brenner, S. O., & Bartell, R. (1983). The psychological impact of unemployment: A structural analysis of cross-sectional data. *Journal of Occupational Psychology*, 56, 129-136.

- Bruder-Mattson, S. F., & Hovanitz, C. A. (1990). Coping and attributional styles as predictors of depression. *Journal of Clinical Psychology, 46*(5), 557-565.
- Bryant, F. B., & Marquez, J. T. (1986). Educational status and the structure of well-being in men and women. *Social Psychology Quarterly, 49*, 142-153.
- Campbell, A. (1976). Subjective measures of well-being. *American Psychologist, 31*, 117-124.
- Carp, F. M., & Carp A. (1982). Test of a model of domain satisfactions and well-being: Equity considerations. *Research on Aging, 4*, 503-522.
- Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology, 56*(2), 267-283.
- Chappell, N. L., & Badger, M. (1989). Social isolation and well-being. *Journal of Gerontology: Social Sciences, 44*(5), S169-S176.
- Chou, K. (1999). Social support and subjective well-being among Hong Kong Chinese young adults. *The Journal of Genetic Psychology, 160*(3), 319-331.
- Christensen, H., Jorm, A. F., Mackinnon, A. J., Korten, A. E., Jacomb, P. A., Henderson, A. S., & Rodgers, B. (1999). Age differences in depression and anxiety symptoms: a structural equation modelling analysis of data from a general population sample. *Psychological Medicine, 29*(2), 325-339.
- Cohen, S., & Syme, S. L. (1985). Issues in the study and application of social support. In Cohen, S., & Syme, S. L. (Eds.), *Social support and health* (pp. 3-22). Orlando, Florida: Academic Press, Inc.
- Cooper, H, Okamura, L., & McNeil, P. (1995). Situation and personality correlates of psychological well-being: Social activity and personal control. *Journal of Research in Personality, 29*(4), 395-417.
- Costa, P. T., & McCrae, R. R. (1985). *The NEO Personality Inventory Manual*. Odessa, Florida: Psychological Assessment Resources, Inc.

- Costa, P. T. & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO PI-R) and Neo Five-Factor Inventory (NEO-FFI)*. Odessa, Florida: Psychological Assessment Resources, Inc.
- Cronkite, R. C., & Moos, R.H. (1995). Life context, coping processes, and depression. In Beckham, E. E., & Leber, W. R. (Eds.), *Psychological and social contexts* (pp. 569-587). New York: The Guildford Press.
- De Beurs, E., Beekman, A. T. F., Van Balkom, A. J. L. M., Deeg, D. J. H., Van Dyck, & Van Tilburg, W. (1999). Consequences of anxiety in older persons: its effect on disability, well-being and use of health services. *Psychological Medicine*, 29(3), 583-593.
- De Jong-Gierveld, J. (1987). Developing and testing a model of loneliness. *Journal of Personality and Social Psychology*, 53, 119-128.
- De Man, A. F., & Efrain, D. P. (1987). Selected personality correlates of social participation in university students. *The Journal of Social Psychology*, 128(2), 265-267.
- Diehl, M., Coyle, N., & Labouvie-Vief, G. (1996). Age and sex differences in strategies of coping and defense across the life span. *Psychology and Aging*, 11(1), 127-139.
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, 95(3), 542-575.
- Diener, E. (1998). Subjective well-being and personality. In Barone, D. F., Hersen, M., & Van Hasselt, V. B. (Eds.), *Advanced personality. The plenum series in social/clinical psychology*. New York: Plenum Press.
- Doctor, R. M., & Kahn, A. P. (1989). *The encyclopedia of phobias, fears, and anxieties*. New York: Facts on File, Inc.
- Dunkel-Schetter, C., & Bennett, T. L. (1990). Differentiating the cognitive and behavioral aspects of social support. In Saranson, B. R., Sarason, I. G., & Pierce G. R. (Eds.), *Social support: An interactional view* (pp. 267-296). New York: John Wiley & Sons, Inc.

- Edwards, J. R. & Baglioni, A. J. (1993). The measurement of coping with stress: construct validity of the Ways of Coping Checklist and the Cybernetic Coping Scale. *Work & Stress, 7*(1), 17-31.
- Endler, N. S., & Parker, J. D. A. (1990a). Multidimensional assessment of coping: A critical evaluation. *Journal of Personality and Social Psychology, 58*(5), 844-854.
- Endler, N. S., & Parker, J. D. A. (1990b). State and trait anxiety, depression and coping styles. *Australian Journal of Psychology, 42*(2), 207-220.
- Essex, M. J., & Nam, S. (1987). Marital status and loneliness among older women: The differential importance of close family and friends. *Journal of Marriage and the Family, 49*(1), 93-106.
- Farmer, R. F. (1998). Depressive symptoms as a function of trait anxiety and impulsivity. *Journal of Clinical Psychology, 54*(2), 129-135.
- Fees, B. S., Martin, P., & Poon, L. W. (1999). A model of loneliness in older adults. *Journal of Gerontology: Psychological Sciences, 54B*(4), 231-239.
- Feist, G. J., Bodner, T. E., Jacobs, J. F., Miles, M. Tan, V. (1995). Integrating, top-down and bottom-up structural models of subjective well-being: A longitudinal investigation. *Journal of Personality and Social Psychology, 68*(1), 138-150.
- Folkman, S., & Lazarus, R. S. (1980). An analysis of coping in a middle-aged community sample. *Journal of Health and Social Behavior, 21*(3), 219-239.
- Folkman, S., & Lazarus, R. S. (1986). Stress processes and depressive symptomatology. *Journal of Abnormal Psychology, 95*(2), 107-113.
- Folkman, S., Lazarus, R. S., Dunkel-Schetter, C., DeLongis, A., & Gruen, R. J. (1986a). Dynamics of a stressful encounter: cognitive appraisal, coping, and encounter outcomes. *Journal of Personality and Social Psychology, 50*(5), 992-1003.

- Folkman, S., Lazarus, R. S., Gruen, R. J., & DeLongis, A. (1986b). Appraisal, coping, health status, and psychological symptoms. *Journal of personality and Social Psychology*, *50*(3), 571-579.
- Folkman, S., Lazarus, R. S., Pimley, S., & Novacek, J. (1987). Age differences in stress and coping processes. *Psychology and Aging*, *2*(2), 171-184.
- Fischman, J. (1986). A journey of hearts and minds. *Psychology Today*, *20*(7), 42-47.
- Francis, L. J., & Bolger, J. (1997). Religion and psychological well-being in later life. *Psychological Reports*, *80*(3 pt 1), 1050.
- Furnham, A. (1990). Expatriate stress: the problems of living abroad. In Fisher, S., & Cooper, C. L. (Eds.), *On the move: the psychology of change* (pp. 275-301). West Sussex, England: John Wiley & Sons.
- Ghaffarian, S. (1987). The acculturation of Iranians in the United States. *The Journal of Social Psychology*, *127*(6), 565 - 571.
- Goldberg, David, & Williams, Paul (1988). *A user's guide to the General Health Questionnaire GHQ*. Nfer-Nelson Publishing Company Ltd.
- Gotlib, I. H., & Hammen, C. L. (1992). Psychological theories of depression. In Gotlib, I. H., & Hammen, C. L. (Eds.), *Psychological aspects of depression. Toward a cognitive - interpersonal integration* (pp. 67 - 89). Chichester, England: John Wiley & Sons, Ltd..
- Gove, W. R., Hughes, M. & Style, C. B. (1983). Does marriage have positive effects on the psychological well-being of the individual? *Journal of Health and Social Behavior*, *24*(2), 122-131.
- Green, S. B., Salking, N. J., & Akey, T. M. (1997). *Using SPSS for windows*. Upper Saddle River, New Jersey: Prentice Hall.
- Gunthert, K. C., Cohen, L. H., & Armeli, S. (1999). The role of neuroticism in daily stress and coping. *Journal of Personality and Social Psychology*, *77*(5), 1087-1100.

- Hall-Elston, C., & Mullins, L. C. (1999). Social relationships, emotional closeness, and loneliness among older meal program participants. *Social Behavior and Personality, 27*(5), 503-518.
- Henderson, A. S., Jorm, A. F., Korten, A. E., Jacomb, P., Christensen, H., & Rodgers, B. (1998). Symptoms of depression and anxiety during adult life: evidence for a decline in prevalence with age. *Psychological Medicine, 28*(6), 1321-1328.
- Hewitt, P. L., & Flett, G. L. (1996). Personality traits and the coping process. In Zeidner, M., & Endler, N. S. (Eds.), *Handbook of coping. Theory, research and applications* (pp. 410 - 433). New York: John Wiley & Sons, Inc.
- Himmelfarb, S. (1984). Age and sex differences in the mental health of older persons. *Journal of Consulting and Clinical Psychology, 52*(5), 844-856.
- Hobfoll, S. E., Donahoo, C. L., Ben-Porath, Y., & Monnier, J. (1994). Gender and coping: The dual-axis model of coping. *American Journal of Community Psychology, 22*(1), 49-82.
- Holahan, C. K., & Holahan, C. J. (1987). Self-efficacy, social support, and depression in aging: A longitudinal analysis. *Journal of Gerontology, 42*(1), 65-68.
- Holahan, C. J., & Moos, R. H. (1986). Personality, coping, and family resources in stress resistance: A longitudinal analysis. *Journal of Personality and Social Psychology, 51*(2), 389-395.
- Holahan, C. J., & Moos, R. H. (1987). Personal and contextual determinants of coping strategies. *Journal of Personality and Social Psychology, 52*(5), 946-955.
- Holahan, C. J., & Moos, R. H. (1994). Life stressors and mental health: Advances in conceptualizing stress resistance. In Avison, W. R., & Gotlib, I. H. (Eds.), *Stress and mental health. Contemporary issues and prospects for the future* (pp. 213-238). New York: Plenum Press.

- Holahan, C. J., Moos, R. H., & Schaefer, J. A. (1996). Coping, stress resistance, and growth: Conceptualizing adaptive functioning. In Zeidner, M., & Endler, N. S. (Eds.), *Handbook of coping. Theory, research and applications* (pp. 24 - 33). New York: John Wiley & Sons, Inc.
- Hojat, M. (1982). Loneliness as a function of selected personality variables. *Journal of clinical psychology, 38(1)*, 137-141.
- Hojat, M. (1983). Comparison of transitory and chronic loners on selected personality variables. *British Journal of Psychology, 74(2)*, 199-202.
- Horwitz, A. V., White, H. R., & Howell-White, S. (1996). Becoming married and mental health: A longitudinal study of a cohort of young adults. *Journal of Marriage and the Family, 58(4)*, 895-907.
- Hotard, S. R., McFatter, R. M., McWhirter, R. M., & Stegall, M. E. (1989). Interactive effects of extraversion, neuroticism, and social relationships on subjective well-being. *Journal of Personality and Social Psychology, 57(2)*, 321-331.
- Hsu, L. R., Hailey, B. J., & Range, L. M. (1987). Cultural and emotional components of loneliness and depression. *The Journal of Psychology, 12(1)*, 61-70.
- Irion, J. C., & Blanchard-Fields, F. (1987). A cross-sectional comparison of adaptive coping in adulthood. *Journal of Gerontology, 42(5)*, 502-504.
- Jackson, P. R., Stafford, E. M., Banks, M. H., & Warr, P. B. (1983). Unemployment and psychological distress in young people: The moderating role of employment commitment. *Journal of Applied Psychology, 68*, 525-535.
- Joiner, T., & Coyne, J. C. (1999). *The interactional nature of depression*. Washington, DC: American Psychological Association.
- Jones, W. H., & Moore, T. L. (1989). Loneliness and social support. In Hojat, M., & Crandall, R. (Eds.), *Loneliness theory, research, and applications* (pp. 145 - 156). Newbury Park, California: Select press.

- Kessler, R. C., Turner, J. B., & House, J. S. (1988). Effects of unemployment on health in a community survey: main, modifying, and mediating effects. *Journal of Social Issues, 44(4)*, 69-85.
- Kim, O. (1999). Mediation effect of social support between ethnic attachment and loneliness in older Korean immigrants. *Research in Nursing & Health, 22(2)*, 169-175.
- Kobasa, S. C. (1982). Commitment and coping in stress resistance among lawyers. *Journal of Personality and Social Psychology, 42(4)*, 707-717.
- Korpeckyj-Cox, T. (1998). Loneliness and depression in middle age: Are the childless more vulnerable? *Journal of Gerontology, 53B(6)*, S303-S312.
- Kraus, L. A., Davis, M. H., Bazzini, D., Church, M., & Kirchman, C. M. (1993). Personal and social influences on loneliness: The mediating effect of social provisions. *Social Psychology Quarterly, 56(1)*, 37-53.
- Krause, N. (1986). Stress and sex differences in depressive symptoms among older adults. *Journal of Gerontology, 41(6)*, 727-731.
- Krause, N., Liang, J., & Keith, V. (1990). Personality, social support, and psychological distress in later life. *Psychology and Aging, 5(3)*, 315-326.
- Kunz, E. F. (1973). The refugee in flight: Kinetic models and forms of displacement. *International Migration Review, 7(2)*, 125-146.
- Lazarus, R. (1966). *Psychological stress and the coping process*. USA: McGraw-Hill, Inc.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal and coping*. New York: Springer, Publishing.
- Lay, C., & Nguyen, T. (1998). The role of acculturation-related and acculturation non-specific daily hassles: Vietnamese-Canadian students and psychological distress. *Canadian Journal of behavioral Science, 30(3)*, 172-181.

- Lee, M. S., Crittenden, K. S., & Yu, E. (1996). Social support and depression among elderly Korean immigrants in the United States. *International Journal of Aging and Human Development*, 42(4), 313-327.
- Lubin, B., Zuckerman, M., Breytspraak, L. M., Bull, N. C., Gumbhir, A. K., & Rinck, C. M. (1988). Aspects, demographic variables, and health. *Journal of Clinical Psychology*, 44(2), 131-141.
- Lunt, P. K. (1991). The perceived causal structure of loneliness. *Journal of Personality and Social Psychology*, 61(1), 26-34.
- Lynn, R., & Martin, T. (1997). Gender differences in extraversion, neuroticism, and psychoticism in 37 nations. *The Journal of Social Psychology*, 137(3), 369-373.
- Marks, N. F. (1996). Flying solo at midlife: gender, marital status, and psychological well-being. *Journal of Marriage and the Family*, 58(4), 917-932.
- McCrae, R. R. (1982). Age differences in the use of coping mechanisms. *Journal of Gerontology*, 37(4), 454-460.
- McCrae, R. R. (1989). Age differences and changes in the use of coping mechanisms. *Journal of Gerontology: Psychological Sciences*, 44(6), 161-169.
- McCrae, R. R., & Costa, P. T. (Jr.) (1986). Personality, coping, and coping effectiveness in an adult sample. *Journal of Personality*, 54(2), 385-405.
- McCrae, R. R., & Costa, P. T. (Jr.) (1991). The full five-factor model and well-being. *Personality and Social Psychology Bulletin*, 17(2), 227-232.
- McDonald, R., Vechi, C., Dowman, J., & Sanson-Fisher, R. (1996). Mental health status of a Latin American community in New South Wales. *Australian and New Zealand Journal of Psychiatry*, 30(4), 457-462.
- McLennan, J., Gotts, G. H., & Omodei, M. M. (1988). Personality and relationship dispositions as determinants of subjective well-being. *Human Relations*, 41(8), 593-602.

- McWhirter, B. T. (1997). Loneliness, learned resourcefulness, and self-esteem in college students. *Journal of Counseling and Development, 75*(6), 460-469.
- Mehta, S. (1998). Relationship between acculturation and mental health of Asian Indian immigrants in the United States. *Genetic, Social, and General Psychology Monographs, 124*(1), 61-78.
- Michalos, A. C. (1980). Satisfaction and happiness. *Social Indicators Research, 8*, 385-422
- Mookherjee, H. N. (1994). Effects of religiosity and selected variables on the perception of well-being. *The Journal of Social Psychology, 134*(3), 403-405.
- Mookherjee, H. N. (1997). Marital status, gender, and perception of well-being. *The Journal of Social Psychology, 137*(1), 95-105.
- Mullins, L. C., Elston, C. H., & Gutkowski, S. M. (1996). Social determinants of loneliness among older Americans. *Genetic, Social and General Psychology Monographs, 122*(4), 453-473.
- Murphy, G. C., & Athanasou, J. A. (1999). The effect of unemployment on mental health. *Journal of Occupational and Organizational Psychology, 72*(1), 83-99.
- Naditch, M. P., & Morrissey, R. F. (1976). Role stress, personality, and psychopathology in a group of immigrant adolescents. *Journal of Abnormal Psychology, 85*(1), 113-118.
- Nakano, K. (1991). The role of coping strategies on psychological and physical well-being. *Japanese Psychological Research, 33*(4), 160-167.
- Nakano, K. (1992). Role of personality characteristics in coping behaviors. *Psychological Reports, 71*(3 pt 1), 687-690.
- Nakazato, K., & Shimonaka, Y. (1989). The Japanese state-trait anxiety inventory: Age and sex differences. *Perceptual and Motor Skills, 69*(2), 611-617.
- O'Connell, H. (1994). *Women and the family*. London, UK: Zed Books Ltd.

- O'Brien, T. B., & DeLongis, A. (1996). The interactional context of problem-, emotion-, and relationship-focused coping: The role of the big five personality factors. *Journal of Personality, 64*(4), 775-813.
- Olstad, R., Sexton, H., & Sjøgaard, A. J. (1999). The Finnmark study. Social support, social network and mental distress in a prospective population study. *Social Psychiatry and Psychiatric Epidemiology, 34*(10), 519 - 525.
- Padilla, A. M., Cervantes, R. C., Maldonado, M., & Garcia, R. E. (1988). Coping responses to psychosocial stressors among Mexican and Central American immigrants. *Journal of Community Psychology, 16*(4), 418-427.
- Page, R. M., & Cole, G. E. (1991). Demographic predictors of self-reported loneliness in adults. *Psychological Reports, 68*(3 pt 1), 939-945.
- Palmore, E., & Luikart, C. (1972). Health and social factors related to life satisfaction. *Journal of Health and Social Behavior, 13*(1), 68-80.
- Pearlin, L. I., & Johnson, J. S. (1977). Marital status, life-strains and depression. *American Sociological Review, 42*(5), 704-705.
- Peplau, L. A., & Perlman, D. (1982). Perspectives on loneliness. In Peplau, L. A., & Perlman, D. (Eds.), *Loneliness: A sourcebook of current theory, research and therapy* (pp. 1 - 20). NY, USA: John Wiley & Sons, Inc.
- Pernice, R., & Brock, J. (1996). Refugee's and immigrant's mental health: association of demographic and post immigration factors. *The Journal of Social Psychology, 136*(4), 511-519.
- Peters, A., & Liefbroer, A. C. (1997). Beyond marital status: Partner history and well-being in old age. *Journal of Marriage and the Family, 59*(3), 687-699.
- Pettys, G. L. (1998). Multigenerational conflicts and new immigrants: An Indo-American experience. *Families in Society, 79*(4), 410-423.
- Polonsky, M. J., Scott, D. R., & Suchard, H. T. (1988). Motivation of South African emigrants. *Applied Economics, 20*(10), 1293-1315.

- Ptacek, J. T., Smith, R. E., & Dodge, K. L. (1994). Gender differences in coping with stress: When stressor and appraisals do not differ. *Personality and Social Psychology Bulletin*, 20(4), 421-430.
- Ptacek, J. T., Smith, R. E., Zanas, J. (1992). Gender, appraisal, and coping: A longitudinal analysis. *Journal of Personality*, 60(4), 747-770.
- Revenson, T. A., & Johnson, J. L. (1984). Social and demographic correlates of loneliness in late life. *American Journal of Community Psychology*, 12(1), 71-85.
- Rokach, A., & Brock, H. (1997). Loneliness and the effects of life changes. *The Journal of Psychology*, 13(3), 284-298.
- Rokach, A., & Brock, H. (1998). Coping with loneliness. *The Journal of Psychology*, 132(1), 107-127.
- Rogler, L. H., Cortes, D. E., & Malgady, R. G. (1991). Acculturation and mental health status among Hispanics. *American psychologist*, 46(6), 585-597.
- Russell, D., Peplau, L. A., & Cutrona, C. E. (1980). The revised UCLA loneliness scale: concurrent and discriminant validity evidence. *Journal of Personality and Social Psychology*, (39(3), 472-480.
- Ryff, C. (1989). Happiness is everything, or is it? *Journal of Personality and Social Psychology*, 6, 1069-1081).
- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, 69, 719-727.
- Schmidt, L. A., & Riniolo, T. C. (1999). The role of neuroticism in test and social anxiety. *The Journal of Social Psychology*, 139(3), 394-395.
- Schmutte, P. S., & Ryff, C. D. (1997). Personality and well-being: Reexamining methods and meanings. *Journal of Personality and Social Psychology*, 73(3), 549-559.

- Schwartz, A., & Schwartz, R. M. (1993). *Depression theories and treatments. Psychological, biological, and social perspectives*. New York: Columbia University Press.
- Schwarzer, R., Hahn, A., & Fuchs, R. (1994). Unemployment, social resources and mental and physical health: A three-wave study on men and women in a stressful life transition. In Keita, G. P., & Hurrell, J. J. (Eds.), *Job stress in a changing work force. Investigating gender, diversity and family issues* (pp. 75 - 87). Washington, DC: American Psychological Association.
- Schweigert, W. A. (1998). *Research methods in Psychology: A Handbook*. Pacific Grove, Ca, USA: Brooks/Cole Publishing Company.
- Shah, H. (1991). Communication and cross-cultural adaptation patterns among Asian Indians. *International Journal of Intercultural Relations*, 15(3), 311-321.
- Shamir, B. (1986). Self-esteem and the psychological impact of unemployment. *Social psychology Quarterly*, 49(1), 61-72.
- Shewchuck, R. M., Elliott, T. R., MacNair-Semands, R. R., & Harkins, S. (1999). Trait influences on stress appraisal and coping: An evaluation of alternative frameworks. *Journal of Applied Social Psychology*, 29(4), 685-704.
- Smari, J., Aranson, E., Hafsteinsson, H., & Ingimarsson, S. (1997). Unemployment, coping and psychological distress. *Scandinavian Journal of Psychology*, 38(2), 151-156.
- Spielberger, Charles, D., Gorsuch, Richard, L., & Lushene, Robert, E. (1970). *STAI Manual for the State-Trait Anxiety Inventory*. Palo Alto, California: Consulting Psychologists Press Inc.
- Stephan, E., Fath, M., & Lamm, H. (1988). Loneliness as related to various personality and environmental measures: research with the German adaptation of the UCLA loneliness scale. *Social Behaviour and Personality*, 16(2), 169-174.

- Stokes, J. P. (1985). The relation of social network and individual difference variables to loneliness. *Journal of Personality and Social Psychology*, 48(4), 981-990.
- Stoner, S. B., & Spencer, W. B. (1986). Age and sex differences on the state trait personality inventory. *Psychological Reports*, 59(3), 1315-1319.
- Suls, J., & David, J. P. (1996). Coping and personality: Third time's the charm? *Journal of Personality*, 64(4), 993-1005.
- Suls, J., Green, P., & Hillis, S. (1998). Emotional reactivity to everyday problems, affective inertia, and neuroticism. *Personality and Social Psychology Bulletin*, 24(2), 127-136.
- Vaux, A. (1988). Social and emotional loneliness: The role of social and personal characteristics. *Personality and Social Psychology Bulletin*, 14(4), 722-734.
- Vega, W. A., Kolody, B., & Valle, J. R. (1986). The relationship of marital status, confidant support, and depression among Mexican immigrant women. *Journal of Marriage and the Family*, 48(3), 597-605.
- Wann, D. L., & Hamlet, M. A. (1994). The joiners scale: validation of a measure of social complexity. *Psychological Reports*, 74(3 pt 1), 1027-1034.
- Wann, D. L., & Hamlet, M. A. (1996). Being a "joiner" and psychological well-being. *Psychological Reports*, 79, 1186.
- Watson, D., & Hubbard, B. (1996). Adaptational style and dispositional structure: Coping in the context of the five-factor model. *Journal of Personality*, 64(4), 737-744.
- Watson, D., Clark, L. A., McIntyre, C. W., & Hamaker, S. (1992). Affect, personality, and social activity. *Journal of Personality and Social Psychology*, 63(6), 1011-1025.
- Weider, G., & Collins, R. L. (1993). Gender, coping, and health. In Krohne, H. W. (Ed.), *Attention and avoidance. Strategies in coping with aversiveness* (pp. 241 - 265). Gottingen, Germany: Hogrefe & Huber Publishers. .

- Weiss, R. S. (1973). *Loneliness: The experience of emotional and social isolation*. Cambridge, Massachusetts: The MIT Press.
- Weiss, R. S. (1974). The provisions of social relationships. In Rubin, R. (Ed.), *Doing unto others* (pp. 17-26). Englewood Cliffs, NJ: Prentice-Hall.
- Wheeler, L., Reis, H., & Nezleck, J. (1983). Loneliness, social interaction, and sex roles. *Journal of Personality and Social Psychology*, 45(4), 943-953.
- Wisemna, H., Gutfreund, D. G., & Lurie, I. (1995). Gender differences in loneliness and depression of university students seeking counselling. *British Journal of Guidance and Counselling*, 23(2), 231-243.
- Wood, W., Rhodes, N., & Whelan, M. (1989). Sex differences in positive well-being: a consideration of emotional style and marital status. *Psychological Bulletin*, 106(2), 249-264.
- Wu, X., & DeMaris, A. (1996). Gender and marital status differences in depression: The effects of chronic strains. *Sex Roles*, 34(5-6), 299-319.
- Yang, J., McCrae, R. R., & Costa, P. T. (Jr.) (1998). Adult age differences in personality traits in the United States and the People's Republic of China. *Journal of Gerontology: Psychological Sciences*, 53B(6), P375-P383.

# APPENDICES

# Appendix A



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## THE WELL-BEING OF SOUTH AFRICAN IMMIGRANTS

### RESEARCH INFORMATION SHEET

#### RESEARCHER

My name is Clara Pietersen and I am currently doing a research project towards a Masters thesis in Psychology at Massey University, Albany. The topic of my research is to investigate how different coping styles and personal attributes aid or hinder the immigration process and the well-being of the immigrant.

Contact details:

Telephone: (09) 410 1923

E-mail: [research4clara@yahoo.com](mailto:research4clara@yahoo.com)

or you may write to me at the School of Psychology at the above address.

My supervisor, Dr. Hillary Bennett, of the School of Psychology, Albany campus may be contacted on (09) 443-9799 ext. 9864.

#### BACKGROUND

New Zealand has a large proportion of South African immigrants that take up permanent residence each year. According to Statistics New Zealand, in the last year ending and including August 1999, 2381 South African immigrants arrived in New Zealand to take up permanent residence or for a long-term stay. This is about 4% of the total population of permanent and long-term arrivals. Immigration is a process which at times can be filled with despair, frustration and uncertainty, but can also be a process filled with hope, challenges and future prospects. Circumstances and a person's own attributes often determine the adaptation and adjustment process. Insight into these personal attributes and how they affect well-being in the immigration situation will improve the understanding of how the settling process can be helped and dealt with. I will also be looking at gender differences that occur in adjusting and adapting to living in a new country. You are invited to take part in this research project.

#### WHAT YOUR INVOLVEMENT WILL BE

The participants in my research will consist of South African men and women who have lived in New Zealand for a period of six years or less. You will be posted two questionnaires and both you and your spouse/partner are invited to fill in a questionnaire. This will take about 45 minutes to fill in. You are then requested to post the questionnaire back to Massey University in the pre-paid envelope within two weeks of receiving it. If you decide not to take part in this study, could you please return the blank questionnaire in the pre-paid envelope, so that it can be passed on to another participant.

#### CONFIDENTIALITY AND CONSENT

Complete confidentiality will be kept at all times. The questionnaire will be anonymous as no names or addresses will be filled in. All the information gathered will be stored under lock and key and will be destroyed upon completion of the research project. Completion of this questionnaire is taken as informed consent on your part.

#### QUERIES

If you have any questions regarding this research, please do not hesitate to contact either myself or my supervisor ( see contact details above).

#### SUMMARY OF RESULTS

A summary of the results will be published in the SANZ magazine. If you would like to receive a summary of the results of my research, please contact me (see contact details above).

Thank-you for participating in this research and for providing some of your time to make this study possible.

Te Kunenga ki Pūrehuroa

Inception to Infinity: Massey University's commitment to learning as a life-long journey



## SECTION 1

### Directions:

Indicate how often you feel the way described in each of the following statements. Circle one number for each.

|   | Never | Rarely | Sometimes | Often |
|---|-------|--------|-----------|-------|
| 1. I feel in tune with the people around me.                | 1     | 2      | 3         | 4     |
| 2. I lack companionship                                     | 1     | 2      | 3         | 4     |
| 3. There is no one I can turn to                            | 1     | 2      | 3         | 4     |
| 4. I do not feel alone                                      | 1     | 2      | 3         | 4     |
| 5. I feel part of a group of friends                        | 1     | 2      | 3         | 4     |
| 6. I have a lot in common with the people around me         | 1     | 2      | 3         | 4     |
| 7. I am no longer close to anyone                           | 1     | 2      | 3         | 4     |
| 8. My interests and ideas are not shared by those around me | 1     | 2      | 3         | 4     |
| 9. I am an outgoing person                                  | 1     | 2      | 3         | 4     |
| 10. There are people I feel close to                        | 1     | 2      | 3         | 4     |
| 11. I feel left out   | 1     | 2      | 3         | 4     |
| 12. My social relationships are superficial                 | 1     | 2      | 3         | 4     |
| 13. No one really knows me well                             | 1     | 2      | 3         | 4     |
| 14. I feel isolated from others                             | 1     | 2      | 3         | 4     |
| 15. I can find companionships when I want it                | 1     | 2      | 3         | 4     |
| 16. There are people who really understand me               | 1     | 2      | 3         | 4     |
| 17. I am unhappy being so withdrawn                         | 1     | 2      | 3         | 4     |
| 18. People are around me but not with me                    | 1     | 2      | 3         | 4     |
| 19. There are people I can talk to                          | 1     | 2      | 3         | 4     |
| 20. There are people I can turn to                          | 1     | 2      | 3         | 4     |

### Directions:

We should like to know if you have had any medical complaints, and how your health has been in general, over the past few weeks. Please answer ALL the questions on the following pages simply by underlining the answer which you think most nearly applies to you. Remember that we want to know about present and recent complaints, not those you had in the past. It is important that you try and answer ALL the questions.

#### HAVE YOU RECENTLY:

|  |                    |                    |                        |                      |
|--|--------------------|--------------------|------------------------|----------------------|
| 1 - been able to concentrate on whatever you're doing? | Better than usual  | Same as usual      | Less than usual        | Much less than usual |
| 2 - lost much sleep over worry?                        | Not at all         | No more than usual | Rather more than usual | Much more than usual |
| 3 - been having restless, disturbed nights?            | Not at all         | No more than usual | Rather more than usual | Much more than usual |
| 4 - been managing to keep yourself busy and occupied?  | More so than usual | Same as usual      | Rather less than usual | Much less than usual |
| 5 - been getting out of the house as much as usual?    | More so than usual | Same as usual      | Less than usual        | Much less than usual |

|  |                      |                     |                           |                      |
|--|----------------------|---------------------|---------------------------|----------------------|
| 6 - been managing as well as most people would be in your shoes?               | Better than most     | About the same      | Rather less well          | Much less well       |
| 7 - felt on the whole you were doing things well?                              | Better than usual    | About the same      | Less well than usual      | Much less well       |
| 8 - been satisfied with the way you've carried out your task?                  | More satisfied       | About same as usual | Less satisfied than usual | Much less satisfied  |
| 9 - been able to feel warmth and affection for those near to you?              | Better than usual    | About same as usual | Less well than usual      | Much less well       |
| 10 - been finding it easy to get on with other people?                         | Better than usual    | About same as usual | Less well than usual      | Much less well       |
| 11 - spent much time chatting with people?                                     | More time than usual | About same as usual | Less time than usual      | Much less than usual |
| 12 - felt that you are playing a useful part in things?                        | More so than usual   | Same as usual       | Less useful than usual    | Much less useful     |
| 13 - felt capable of making decisions about things?                            | More so than usual   | Same as usual       | Less so than usual        | Much less capable    |
| 14 - felt constantly under strain?   | Not at all           | No more than usual  | Rather more than usual    | Much more than usual |
| 15 - felt you couldn't overcome your difficulties?                             | Not at all           | No more than usual  | Rather more than usual    | Much more than usual |
| 16 - been finding life a struggle all the time?                                | Not at all           | No more than usual  | Rather more than usual    | Much more than usual |
| 17 - been able to enjoy your normal day-to-day activities?                     | More so than usual   | Same as usual       | Less so than usual        | Much less than usual |
| 18 - been taking things hard?  | Not at all           | No more than usual  | Rather more than usual    | Much more than usual |
| 19 - been getting scared or panicky for no good reason?                        | Not at all           | No more than usual  | Rather more than usual    | Much more than usual |
| 20 - been able to face up to your problems?                                    | More so than usual   | Same as usual       | Less able than usual      | Much less able       |
| 21 - found everything getting on top of you?                                   | Not at all           | No more than usual  | Rather more than usual    | Much more than usual |
| 22 - been feeling unhappy and depressed?                                       | Not at all           | No more than usual  | Rather more than usual    | Much more than usual |
| 23 - been losing confidence in yourself?                                       | Not at all           | No more than usual  | Rather more than usual    | Much more than usual |
| 24 - been thinking of yourself as a worthless person?                          | Not at all           | No more than usual  | Rather more than usual    | Much more than usual |
| 25 - felt that life is entirely hopeless?                                      | Not at all           | No more than usual  | Rather more than usual    | Much more than usual |
| 26 - been feeling hopeful about your own future?                               | More so than usual   | About same as usual | Less so than usual        | Much less hopeful    |
| 27 - been feeling reasonably happy, all things considered?                     | More so than usual   | About same as usual | Less so than usual        | Much less than usual |
| 28 - been feeling nervous and strung-up all the time?                          | Not at all           | No more than usual  | Rather more than usual    | Much more than usual |
| 29 - felt that life isn't worth living?  | Not at all           | No more than usual  | Rather more than usual    | Much more than usual |
| 30 - found at times you couldn't do anything because your nerves were too bad? | Not at all           | No more than usual  | Rather more than usual    | Much more than usual |

**Directions:**

Read each statement carefully. For each statement circle the response that best represents your opinion. Fill in only one response for each statement. Respond to all of the statements.

|   |                   |          |         |       |                |
|---|-------------------|----------|---------|-------|----------------|
| 1. I am not a worrier.  | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 2. I like to have a lot of people around me.  | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 3. I don't like to waste my time daydreaming.   | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 4. I try to be courteous to everyone I meet.  | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 5. I keep my belongings clean and neat.   | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 6. I often feel inferior to others.   | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 7. I laugh easily.  | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 8. Once I find the right way to do something, I stick to it.                                  | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 9. I often get into arguments with my family and co-workers.                                  | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 10. I'm pretty good about pacing myself so as to get things done on time.                     | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 11. When I'm under a great deal of stress, sometimes I feel like I am going to pieces.        | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 12. I don't consider myself especially light hearted.   | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 13. I am intrigued by the patterns I find in art and nature.                                  | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 14. Some people think I am selfish and egotistical.   | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 15. I am not a very methodical person.  | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 16. I rarely feel lonely or blue.   | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 17. I really enjoy talking to people.   | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 18. I believe letting students hear controversial speakers can only confuse and mislead them. | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 19. I would rather cooperate with others than compete with them.                              | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 20. I try to perform all the tasks assigned to me conscientiously.                            | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 21. I often feel tense and jittery.   | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 22. I like to be where the action is.   | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 23. Poetry has little or no effect on me.   | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 24. I tend to be cynical and sceptical of others' intentions.                                 | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 25. I have a clear set of goals and work toward them in an orderly fashion.                   | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 26. Sometimes I feel completely worthless.  | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |

|   |                   |          |         |       |                |
|---|-------------------|----------|---------|-------|----------------|
| 27. I usually prefer to do things alone.  | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 28. I often try new and foreign foods.  | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 29. I believe that most people will take advantage of you if you let them.                                | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 30. I waste a lot of time before settling down to work.   | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 31. I rarely feel fearful or anxious.   | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 32. I often feel as if I am bursting with energy.   | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 33. I seldom notice the moods or feelings that different environments produce.                            | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 34. Most people I know like me.   | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 35. I work hard to accomplish my goals.   | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 36. I often get angry at the way people treat me.   | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 37. I am a cheerful, high spirited person.  | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 38. I believe we should look to our religious authorities for decisions and moral issues.                 | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 39. Some people think of me as cold and calculating.  | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 40. When I make a commitment, I can always be counted on to follow through.                               | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 41. Too often, when things go wrong, I get discouraged and feel like giving up.                           | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 42. I am not a cheerful optimist.   | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 43. Sometimes when I am reading poetry or looking at a work of art, I feel a chill or wave of excitement. | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 44. I'm hard-headed and tough-minded in my attitudes.   | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 45. Sometimes I am not as dependable or as reliable as I should be.                                       | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 46. I am seldom sad or depressed.   | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 47. My life is fast-paced.  | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 48. I have little interest in speculating on the nature of the universe or the human condition.           | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 49. I generally try to be thoughtful and considerate.   | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 50. I am a productive person who always gets the job done.  | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 51. I often feel helpless and want someone else to solve my problems.                                     | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 52. I am a very active person.  | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 53. I have a lot of intellectual curiosity.   | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 54. If I don't like people, I let them know it.   | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 55. I never seem to be able to get organised.   | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |

|   |                   |          |         |       |                |
|---|-------------------|----------|---------|-------|----------------|
| 56. At times I have been so ashamed I just want to hide.                | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 57. I would rather go my own way than be the leader of others.          | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 58. I often enjoy playing with theories or abstract ideas.              | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 59. If necessary, I am willing to manipulate people to get what I want. | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 60. I strive for excellence in everything I do.                         | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |

**Directions:**

This section consists of 21 groups of statements. After reading each group of statements carefully, circle the number (0, 1, 2 or 3) next to the one statement in each group which **best** describes the way you have been feeling the **past week, including today**. If several statements within a group seem to apply equally well, circle each one. **Be sure to read all the statements in each group before making your choice.**

|    |  |   |   |  |
|----|--|---|---|--|
| 1  | 0 I do not feel sad.                                     | 1 I feel sad.   | 2 I am sad all the time and I can't snap out of it.             | 3 I am so sad or unhappy that I can't stand it.                      |
| 2  | 0 I am not particularly discouraged about the future.    | 1 I feel discouraged about the future.                  | 2 I feel I have nothing to look forward to.                     | 3 I feel that the future is hopeless and that things cannot improve. |
| 3  | 0 I don't feel particularly guilty.                      | 1 I feel guilty a good part of the time.                | 2 I feel quite guilty most of the time.                         | 3 I feel guilty all of the time.                                     |
| 4  | I don't feel I am being punished.                        | I feel I may be punished.                               | I expect to be punished.  | I feel I am being punished.  |
| 5  | I don't feel disappointed in myself.                     | I am disappointed in myself.                            | I am disgusted in myself.                                       | I hate myself.   |
| 6  | 0 I do not feel like a failure.                          | 1 I feel I have failed more than the average person.    | 2 As I look back on my life all I can see is a lot of failures. | 3 I feel I am a complete failure as a person.                        |
| 7  | 0 I get as much satisfaction out of things as I used to. | 1 I don't enjoy things the way I used to.               | 2 I don't get real satisfaction out of anything anymore.        | 3 I am dissatisfied or bored with everything.                        |
| 8  | I am no more irritated now than I ever am.               | I get annoyed or irritated more easily than I used to.  | I feel irritated all the time now.                              | I don't get irritated at all by the things that used to irritate me. |
| 9  | I have not lost interest in other people.                | I am less interested in other people than I used to be. | I have lost most of my interest in other people.                | I have lost all of my interest in other people.                      |
| 10 | I make decisions about as well as I ever could.          | I put off making decisions more than I used to.         | I have greater difficulty in making decisions than before.      | I can't make decisions at all anymore.                               |

|   |   |
|---|---|
| <p>11 I don't feel I am any worse than anybody else.<br/>I am critical of myself for my weaknesses or mistakes<br/>I blame myself all the time for my faults.<br/><br/>I blame myself for everything bad that happens.</p>                                | <p>17 I don't feel I look any worse than I used to.<br/><br/>I am worried that I am looking old or unattractive.<br/><br/>I feel that there are permanent changes in my appearance that make me look unattractive.<br/>I believe that I look ugly.</p>  |
| <p>12 I don't have any thoughts of killing myself.<br/><br/>I have thoughts of killing myself, but I would not carry them out.<br/>I would like to kill myself.<br/><br/>I would kill myself if I had the chance.</p>                                     | <p>18 I can work about as well as before.<br/><br/>It takes an extra effort to get started at doing something.<br/>I have to push myself very hard to do anything.<br/><br/>I can't do any work at all.</p>   |
| <p>13 I don't cry any more than usual<br/><br/>I cry more now than I used to.<br/><br/>I cry all the time now.<br/><br/>I used to be able to cry, but now I can't cry even though I want to.</p>  | <p>19 I can sleep as well as usual.<br/><br/>I don't sleep as well as I used to.<br/><br/>I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.<br/>I wake up several hours earlier than I used to and cannot get back to sleep.</p>  |
| <p>14 I don't get more tired than usual.<br/><br/>I get tired more easily than I used to.<br/><br/>I get tired from doing almost anything.<br/><br/>I am too tired to do anything.</p>  | <p>20 I am no more worried about my health than usual.<br/><br/>I am worried about physical problems such as aches and pains; or upset stomach; or constipation.<br/>I am very worried about physical problems and it's hard to think of much else.<br/>I am so worried about my physical problems that I cannot think about anything else.</p> |
| <p>15 My appetite is no worse than usual.<br/><br/>My appetite is not as good as it used to be.<br/>My appetite is much worse now.<br/>I have no appetite at all anymore.</p>   | <p>21 I have not noticed any recent change in my interest in sex.<br/><br/>I am less interested in sex than I used to be.<br/>I am much less interested in sex now.<br/>I have lost interest in sex completely.</p>   |
| <p>16 I haven't lost much weight, if any, lately.<br/><br/>I have lost more than 5 pounds.<br/>I have lost more than 10 pounds.<br/>I have lost more than 15 pounds.<br/><br/>I am purposely trying to lose weight by eating less. Yes _____ No _____</p> |   |

**Directions:**

A number of statements which people have used to describe themselves are given below. Read each statement and then circle the appropriate value to the right of the statement to indicate how you **feel right now**, that is, **at this moment**. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe your present feelings best.

|   | Not at all | Somewhat | Moderately<br>so | Very<br>much so |
|---|------------|----------|------------------|-----------------|
| 1. I feel calm.                                       | 1          | 2        | 3                | 4               |
| 2. I feel secure.                                     | 1          | 2        | 3                | 4               |
| 3. I am tense.  | 1          | 2        | 3                | 4               |
| 4. I feel strained.                                   | 1          | 2        | 3                | 4               |
| 5. I feel at ease.                                    | 1          | 2        | 3                | 4               |
| 6. I feel upset.                                      | 1          | 2        | 3                | 4               |
| 7. I am presently worrying over possible misfortunes. | 1          | 2        | 3                | 4               |
| 8. I feel satisfied.                                  | 1          | 2        | 3                | 4               |
| 9. I feel frightened.                                 | 1          | 2        | 3                | 4               |
| 10. I feel comfortable.                               | 1          | 2        | 3                | 4               |
| 11. I feel self-confident.                            | 1          | 2        | 3                | 4               |
| 12. I feel nervous.                                   | 1          | 2        | 3                | 4               |
| 13. I am jittery.                                     | 1          | 2        | 3                | 4               |
| 14. I feel indecisive.                                | 1          | 2        | 3                | 4               |
| 15. I am relaxed.                                     | 1          | 2        | 3                | 4               |
| 16. I feel content.                                   | 1          | 2        | 3                | 4               |
| 17. I am worried.                                     | 1          | 2        | 3                | 4               |
| 18. I feel confused.                                  | 1          | 2        | 3                | 4               |
| 19. I feel steady.                                    | 1          | 2        | 3                | 4               |
| 20. I feel pleasant.                                  | 1          | 2        | 3                | 4               |

**Directions:**

A number of statements which people have used to describe themselves are given below. Read each statement and then circle the appropriate value to the right of the statement to indicate how you **generally feel**. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe how you **generally feel**.

|  | Almost<br>Never | Sometimes | Often | Almost<br>Always |
|--|-----------------|-----------|-------|------------------|
| 21. I feel pleasant.   | 1               | 2         | 3     | 4                |
| 22. I feel nervous and restless.   | 1               | 2         | 3     | 4                |
| 23. I feel satisfied with myself.  | 1               | 2         | 3     | 4                |
| 24. I wish I could be as happy as others seem to be.   | 1               | 2         | 3     | 4                |
| 25. I feel like a failure.   | 1               | 2         | 3     | 4                |
| 26. I feel rested.   | 1               | 2         | 3     | 4                |
| 27. I am "calm, cool and collected".   | 1               | 2         | 3     | 4                |
| 28. I feel that difficulties are piling up so that I cannot overcome them.                   | 1               | 2         | 3     | 4                |
| 29. I worry too much over something that really doesn't matter.                              | 1               | 2         | 3     | 4                |
| 30. I am happy   | 1               | 2         | 3     | 4                |
| 31. I have disturbing thoughts.  | 1               | 2         | 3     | 4                |
| 32. I lack self-confidence.  | 1               | 2         | 3     | 4                |
| 33. I feel secure.   | 1               | 2         | 3     | 4                |
| 34. I make decisions easily.   | 1               | 2         | 3     | 4                |
| 35. I feel inadequate.   | 1               | 2         | 3     | 4                |
| 36. I am content.  | 1               | 2         | 3     | 4                |
| 37. Some unimportant thought runs through my mind and bothers me.                            | 1               | 2         | 3     | 4                |
| 38. I take disappointments so keenly that I can't put them out of my mind.                   | 1               | 2         | 3     | 4                |
| 39. I am a steady person.  | 1               | 2         | 3     | 4                |
| 40. I get in a state of tension or turmoil as I think over my recent concerns and interests. | 1               | 2         | 3     | 4                |

### **Directions:**

In relation to your immigration to New Zealand, please indicate the extent to which you agree or disagree with the statements below by circling the appropriate value to the right of the statement.

|  | Strongly disagree | Disagree | Mixed feelings | Agree | Strongly agree |
|--|-------------------|----------|----------------|-------|----------------|
| 1. I tried to just let off steam   | 0                 | 1        | 2              | 3     | 4              |
| 2. I tried to convince myself that the problem was not very important after all. | 0                 | 1        | 2              | 3     | 4              |
| 3. I talked to someone to find out more about the situation.                     | 0                 | 1        | 2              | 3     | 4              |
| 4. I tried to keep myself from thinking about the problem.                       | 0                 | 1        | 2              | 3     | 4              |
| 5. I told myself the problem was unimportant.                                    | 0                 | 1        | 2              | 3     | 4              |
| 6. I discussed my feelings with someone.   | 0                 | 1        | 2              | 3     | 4              |
| 7. I tried to turn my attention away from the problem.                           | 0                 | 1        | 2              | 3     | 4              |
| 8. I tried to relieve my tension somehow.  | 0                 | 1        | 2              | 3     | 4              |
| 9. I asked people who had similar experiences.                                   | 0                 | 1        | 2              | 3     | 4              |
| 10. I tried to change the situation to get what I wanted.                        | 0                 | 1        | 2              | 3     | 4              |
| 11. I told myself the problem wasn't so serious after all.                       | 0                 | 1        | 2              | 3     | 4              |
| 12. I talked to someone about how I felt.  | 0                 | 1        | 2              | 3     | 4              |
| 13. I made an effort to change my expectation.                                   | 0                 | 1        | 2              | 3     | 4              |
| 14. I refused to think about the problem.  | 0                 | 1        | 2              | 3     | 4              |
| 15. I talked to someone who could do something concrete about the problem.       | 0                 | 1        | 2              | 3     | 4              |
| 16. I focused my efforts on changing the situation.                              | 0                 | 1        | 2              | 3     | 4              |
| 17. I tried to convince myself that the way things were was in fact acceptable.  | 0                 | 1        | 2              | 3     | 4              |
| 18. I got sympathy and understanding from someone.                               | 0                 | 1        | 2              | 3     | 4              |
| 19. I told myself the problem wasn't such a big deal after all.                  | 0                 | 1        | 2              | 3     | 4              |
| 20. I tried to just get it off my chest.   | 0                 | 1        | 2              | 3     | 4              |
| 21. I tried to get advice from someone about what to do.                         | 0                 | 1        | 2              | 3     | 4              |
| 22. I tried to adjust my expectations to meet the situation.                     | 0                 | 1        | 2              | 3     | 4              |
| 23. I worked on changing the situation to get what I wanted.                     | 0                 | 1        | 2              | 3     | 4              |
| 24. I tried to get emotional support from friends or relatives.                  | 0                 | 1        | 2              | 3     | 4              |
| 25. I tried to avoid thinking about the problem.                                 | 0                 | 1        | 2              | 3     | 4              |
| 26. I just tried to relax.   | 0                 | 1        | 2              | 3     | 4              |
| 27. I tried to fix what was wrong with the situation.                            | 0                 | 1        | 2              | 3     | 4              |
| 28. I tried to adjust my own standards.  | 0                 | 1        | 2              | 3     | 4              |

## SECTION 2

1. Age \_\_\_\_\_ Years
2. For how long have you lived in New Zealand? Years \_\_\_\_\_ Months \_\_\_\_\_

**Please fill in or circle the appropriate answer in the questions below:**

3. Gender Female Male
4. Marital Status Married Single Divorced De facto
5. Are you currently employed? Yes No
6. If yes, are your skills and qualifications pertinent to your current job?  
Yes No
7. If you have a spouse/partner, is he/ she employed? Yes No
8. Have you experienced any periods of unemployment in New Zealand?  
Yes No
9. Are you a member of SANZ? Yes No
10. If yes, do you attend SANZ social activities? Yes No
11. Do you attend church regularly? Yes No
12. If yes, do you participate in church activities? Yes No
13. Do you participate in community activities, e.g. sports, voluntary work, clubs etc. ?  
Yes No
14. Do you have family members living in NZ? Yes No
15. On arrival did you know anyone? Yes No
16. Please indicate percentage of friends in New Zealand? South Africa \_\_\_\_\_ %  
New Zealand \_\_\_\_\_ %  
Other \_\_\_\_\_ %
17. Where do you live? Major City ( 100 000 + )  
Town (50 000 – 100 000 )  
Small town (less than 50000)  
Rural

18. Do you have dependents in New Zealand? Fill in number of dependents per category.

Pre school children \_\_\_\_\_  
Primary school children \_\_\_\_\_  
Secondary school children \_\_\_\_\_  
Adult children \_\_\_\_\_  
Elders \_\_\_\_\_

19. On a scale of 1-5, 1 = very dissatisfied, 2 = not satisfied, 3 = mixed feelings, 4 = satisfied, 5 = very satisfied, indicate how you feel in the following statements:

How do you feel about the extent in which you have adapted to life in New Zealand? \_\_\_\_\_

How satisfied are you with your lifestyle in New Zealand? \_\_\_\_\_