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PERSONALITY AS A MODIFIER OF THE RELATIONSHIP

BETWEEN STRESSORS AND SUBJECTIVE WELL-BEING

A thesis presented in partial fulfilment of
the requirements for the degree of
Master of Arts in Psychology
at Massey University

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1984

This thesis is dedicated to the memory of my son

Kurtis Richard Zika

1976 - 1977

ABSTRACT

An investigation was undertaken to explore the function of locus of control, meaning in life and assertiveness as moderating variables between chronic daily stressors and subjective well-being. Subjects were 120 adults drawn from randomly selected areas of the community and 161 extramural students. Respondents completed a questionnaire containing measures of well-being, personality, stressors, and social desirability, as well as demographic information. The hypotheses predicted that each of the personality variables (locus of control, meaning in life, assertiveness) would interact with stressors, to moderate between stressors and well-being; and that the combined personality variables would explain a greater proportion of the variance of well-being than any single personality variable. The results of the analyses revealed that stressors failed to consistently interact with any of the personality variables to effect subjective well-being. However, the main effects of personality and stressors showed substantial independent relationships to well-being. The personality variables jointly accounted for a greater proportion of the variance in well-being than any single variable, as predicted, although meaning in life was found to have the strongest relationship to well-being. The findings indicated that locus of control, meaning in life, and assertiveness each have an additive rather than interactive relationship with stressors in moderating well-being. Evidence suggests that the three personality variables constitute a personality style which predisposes an individual towards a sense of well-being. Support was found for the view that positive and negative factors independently contribute to the structure of well-being, and the implications for this were discussed.

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ACKNOWLEDGEMENTS

I am very grateful to my supervisor, Kerry Chamberlain, for his guidance and helpful suggestions in the preparation of this thesis. His own enthusiasm for the topic served as an inspiration throughout the various stages of the study.

I also want to express my appreciation to other staff members, in both the Psychology and Business Studies Departments, for their assistance. In particular, I would like to extend my thanks to Dr Ken McFarland, Dr John Spicer and Phillip Dewe.

I am thankful to Lyn Barrow for her careful typing of this manuscript.

Final thanks go to my husband, Bill, for his love and support, and my daughters, Shari and Danielle, for their patience and understanding.

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CHAPTER I

INTRODUCTION

The history relating to the study of subjective well-being (SWB), also referred to as life satisfaction and happiness, is long and complex. Although people have been interested in what contributes to personal happiness and satisfaction for hundreds of years, the investigation of subjective well-being as a science is relatively recent. The results of the scientific study of happiness from the earliest research is comprehensively presented by Fellows (1966) in an attempt to encourage further thought and experimentation in this area.

The more recent pioneering studies of Campbell, Converse & Rodgers (1976); Andrews & Withey (1976); and Cantril (1965) were concerned mainly with the quality of life in the United States, while the research of Bradburn & Caplovitz (1965) attempted to establish national norms for mental health-related behaviours. Each of these studies contributed to the conceptual groundwork for the study of SWB and provided an array of measurement instruments from which to assess this phenomenon.

The quest to determine what makes people happy has led to investigations in a number of diverse areas. Objective life circumstances such as family, income, city size, religion and sex were found, with the marginal exception of unemployment and marital status, to be inconsequential predictors of well-being (Campbell, 1976; Andrews & Withey, 1976; Kammann, 1983). The relationship of social contact and active involvement to happiness has not been firmly established. The controversial evidence from these studies may indicate the complexity of these interactions (Diener, 1983). Life events have shown only a modest relationship to SWB (Kammann, 1982) although evidence suggests that a person's sense of control over the event may be an important factor (Reich & Zautra, 1981).

Since demographic and other external variables have been shown to account for only a small percentage of the variance of SWB, researchers began to contemplate the role of personality in determining happiness. Many variables including self-esteem, extroversion, neuroticism, intelligence, androgyny, and perceived control have gained attention (Diener, 1983).

The consideration of personality might explain why two individuals given similar life circumstances, stressors and demographics show differing levels of well-being. It is possible that personality moderates the effects of life experiences. In this context, SWB can be viewed as a positive adaptational outcome of perceiving, reacting to, and coping with life experiences.

Kammann (1983) argued for the development of a model of life satisfaction which does not depend on objective life circumstances to explain well-being. He believes there is an intervening psychological process which bridges the gap between objective life circumstances and well-being.

Several recent studies, originating from a number of related fields, lend support to this type of model. Antonovsky (1979) proposed that coping with stressors effectively is the key to maintaining good health. He believes that the underlying personality dimension "sense of coherence" is vital to this process. Kobasa and her colleagues (Kobasa, 1979; Kobasa, Maddi & Courington, 1981; Kobasa, Maddi & Kahn, 1982; Kobasa & Puccetti, 1983) utilised a similar model in studies focusing on the relationship between stress and physical health. The results of these studies suggest that the personality dimension "hardiness" moderates the effect of stressful life events, leading to a low incidence of illness. Johnson & Sarason (1977) and Lefcourt, Miller, Ware & Sherk (1981) have adopted this approach in their studies on locus of control. They view locus of control as modifying the relationship between stressors and moods. Moum (1983) uses a similar, but more complex model to investigate the effect "resignation", a personality dimension, has in the relationship between socio-demographic factors and overall quality of life.

In these studies the personality variables which are most often viewed as having an influential effect on well-being and health may be grouped into two general categories. These are perceived control and sense of purpose or meaning in life. The importance of perceived control and locus of control is further substantiated by a number of studies focusing on the relationship of these factors to well-being of the elderly (Kuyper, 1971; Palmore & Luikart, 1972; Wolk & Kurtz, 1975; Langer & Rodin, 1976; Schulz, 1976; Wolk, 1976; Reid, Haas & Hawkings, 1977; Rodin & Langer, 1977; Schultz & Hanusa, 1978; Reid & Ziegler, 1980).

'Meaning in life' gains support from the existential theory of Frankl (1955, 1959, 1967) and the subsequent research of Kotchen (1960). In a recent article Lazarus and DeLongis (1983) argued that patterns of commitment and belief about self and world give meaning to life changes and stressors. These meanings influence the way encounters of living are appraised and managed, effecting the outcome of well-being.

The studies to date have been impressive, but additional evidence is clearly needed to determine the factors associated with well-being. A synthesis of the research in this area suggests a direction which merits further investigation. In line with this direction, the purpose of the present study is to explore the relationship between chronic daily stressors (Hassles) and well-being and the moderating effects of locus of control, assertiveness and meaning in life on this relationship.

Since life event schedules have demonstrated only a modest relationship to well-being, chronic daily stressors were selected as an alternative. A recent article by Fried (1982) presents an argument for the consideration of "endemic stress" rather than acute stress in research which seeks to determine the relationship between stress and adaptational success. Additional supportive evidence is provided by Kanner, Coyne, Schaefer and Lazarus (1980) who found that the Hassles Scale was a better predictor of psychological symptoms than a life events scale, and DeLongis, Coyne, Dakof, Folkman & Lazarus (1982) who reported that Hassles scores were more strongly associated with somatic health than life events scores.

Assertion was included as a personality variable because it was viewed as a behavioural extension of perceived control. Implicit in the definition of assertiveness is the concept of mastery of the environment (Dawley & Wenrich 1976). The positive relationship between internal locus of control and assertiveness has been demonstrated (Hartwig, Dickson & Anderson, 1980; Replogle, O'Bannon McCullough & Cashion, 1980). Assertiveness has been shown to mitigate the effects of job stress (Petrie & Ratheram, 1982). Finally, assertiveness has been found to be negatively correlated to depression (Langone, 1979; Sanchez & Lewinsohn, 1980; Lea & Paquin, 1981) which suggests a positive relationship to SWB.

In summary, the present study is an attempt to elaborate and extend a psychological model of well-being by investigating the effects of locus of control, assertiveness and meaning in life as intervening processes between chronic stressors and a positive adaptational outcome.

CHAPTER II

PERSONALITY AND WELL-BEING

To clarify the issues involved in the present study, a review of the relevant research and literature will be undertaken. This chapter will focus on the personality variables, locus of control, meaning in life, and assertiveness. Consideration will be given briefly to defining these concepts as they have historically evolved and their relationship to well-being will be explored.

Locus of Control

The concept of locus of control takes root in the research of several related areas of psychology. Lefcourt states,

...the perception of control is not a provincial concern. Learning theorists with interest in the investigation of fear and stress, social psychologists who experiment with attribution processes, and clinical psychologists attempting to cope with their patients' helplessness and lack of confidence have all contributed to the growing literature dealing with the perception of control (1976, p 26).

It is beyond the scope of this thesis to systematically consider each of the early contributions towards the development of the locus of control concept although their importance is recognised. A comprehensive review of the pioneering studies in this area is reported by Rotter (1966).

The social learning theory of Julian Rotter (1966) has been extremely influential in contributing to the body of empirical data about perceived control. Social learning theory is based upon the hypothesis that

a reinforcement acts to strengthen an expectancy that a particular behaviour or event will be followed by that reinforcement in the future (Rotter, 1966, p 2).

Rotter proposed that individuals who believe that reinforcements are not entirely contingent upon their actions, and view the consequent event as luck, chance or fate, hold a belief in external control. On the other hand, individuals who perceive an event as being contingent upon their

own behaviour, hold a belief in internal control. Rotter suggested that these external and internal orientations, which exist on a continuum, reflect individual differences in people, influencing their behaviour.

These theories led to the development of internal-external control scales to measure individual differences in general expectancy. The first scale was developed by Phares (1957) and later revised by James (1957, cited by Rotter, 1966). In an effort to broaden the scale, Liverant, Rotter and Seeman developed a new instrument, which after several revisions, became the Internal-External Control of Reinforcement (I-E) Scale, on which the data of many subsequent studies have been based (Rotter, 1966).

The I-E Scale has been criticised from many sources because of the inherent limitations in the design of the scale. These criticisms, as reported by Joe (1971) include: scores reflect sex differences (Feather, 1967), the scale is not free from the effects of social desirability (Feather, 1967; Talor & Jalowiec, 1968), the scale has limited item content, which suggests that all major aspects of personal control are not tapped (Coan, 1968), the factor structure of the scale doesn't distinguish between individuals whose perceptions are indicative of a personality trait and individuals whose perceptions are indicative of societal norms (Gurin, Gurin, Lao and Beattie, 1969; Lao, 1970; Mirels, 1970; Thomas, 1970). Rotter (1975) addresses the criticisms about the concept of locus of control and the I-E scale in an article which suggests that a new measurement method may be needed but warns that

...the mere development of instruments without theoretical or practical justification based on the factor structure of old ones does not seem promising (p 66).

Antonovsky (1979), in a recent publication, suggests that the concepts of internal locus of control and personal control are limited because they make the assumption that "I am in control." He views this interpretation as reflecting an excessive cultural bias and proposes that the crucial issue is not whether the power to determine outcomes lies in ones own hands, but that the location of power is where it legitimately should be. Antonovsky states

This may be within oneself, it may be in the hands of the head of the family, patriarchs, leaders, formal authorities, the party, history, or a deity (p 128).

Although several locus of control scales have been developed since the I-E scale, none reported in the literature take into account this alternative conceptualisation of control.

Locus of Control and Well-Being

By the time Rotter (1976) had written his article addressing the criticisms about the I-E scale, over 600 studies had already been published dealing with issues about locus of control. Many of these focused on the personality traits and behaviour which seemed to distinguish those individuals who had an internal orientation from those who had an external orientation. The research presented here is limited to the investigations of personal control as it relates to well-being and associated constructs.

A study exploring the relationship between perceived locus of control and personal adjustment was undertaken by Warhime and Foulds (1971). It was hypothesised that subjects with an internal locus of control would demonstrate better personal adjustment. A group of 55 male and 55 female college students completed the I-E Scale and the Personal Orientation Inventory (POI), a measure of personal adjustment. The results showed that for the females the POI subscale, Internal Support, was significantly related to internal locus of control, while for males this relationship was not found. It was also found that more subscales of the POI were significantly related to the I-E Scale in the predicted direction for females than males. Thus the hypothesis was supported more strongly for females than for males. The authors suggested that, the POI may be measuring a type of personal adjustment more highly valued by females than males, thus making an interpretation of the results difficult.

Several recent studies have focused on the relationship between personal control and well-being in the aged. Palmore and Luikart (1972) using an abbreviated form of the I-E Scale, found greater life satisfaction among elderly internal individuals than external individuals. Kuypers (1971) found that elderly non-institutionalised individuals with a stronger sense of personal control had greater differentiation, complexity, adaptability and were more active. Wolk and Kurtz (1975) reported that the degree of internal control for elderly individuals (based upon the I-E scale) related positively to active involvement, developmental

adjustment, and emotional adaptation. Wolk (1976) replicated these relationships, finding adjustment, satisfaction, positive self concept and maintenance of activity to be associated with internal locus of control. In two studies with elderly subjects, Reid, Haas and Hawkings (1977) employing a situationally specific locus of control measure, found that internal locus of desired control was positively correlated with self-concept, contentment and happiness. More recently, Reid and Ziegler (1980) in four studies, found that desired locus of control was an important variable in determining life satisfaction and positive self concept among the elderly.

A field experiment conducted by Langer and Rodin (1976) gave further support to the importance of personal control for the elderly. In a nursing home 8 males and 39 females randomly selected by their living arrangement (floor) were assigned to the experimental group. The comparison group was comprised of 9 males and 35 females living on a different floor. Residents in the experimental group were given a communication which stressed their responsibility for themselves, while residents in the comparison group were given a communication which emphasised the staff's responsibility for them. In addition, the experimental group was given the freedom to make choices and care for a plant. The comparison group had their decisions made and their plant cared for by staff members. The residents' behaviour was measured in three ways. A questionnaire dealing with how much control the residents felt over general events in their life and how happy and active they felt was administered one week prior to and three weeks after the communication. A second questionnaire was completed by the nurses who were unaware of the experimental treatment. This questionnaire contained items which rated the residents on happiness, alertness, dependency, sociability and activity level. It also rated their eating and sleeping habits and evaluated the proportion of weekly time the residents spent engaging in a variety of activities. Lastly, behavioural measures were kept by the occupational therapist on the residents active participation in various activities. The results, based upon these measures showed that the experimental group significantly improved over the comparison group on alertness, active participation, and a general sense of well-being.

In a follow-up study, 18 months later, Rodin and Langer (1977)

found that the experimental treatment group, measured by nurses' ratings, health and mortality indicators, had sustained beneficial effects. However, the interpretation of these results should be viewed with caution due to the presence of uncontrolled factors that may have confounded the experiment.

Another field experiment conducted by Schulz (1976) provided further evidence suggesting that predictable and controllable positive events have a strong positive impact upon the well-being of the institutionalized aged. In a retirement home, 36 women and 6 men served as subjects. The complex method employed four conditions, each of which involved visits to residents by college undergraduates under varying contingencies. In the first condition (control), subjects could determine the frequency and duration of visits they received. Under the second condition, (predict) subjects were informed about the visits but had no control over when they would occur and how long the visitor would stay. In the third condition subjects were visited on a random schedule. The subjects in the fourth condition were not visited, serving as a baseline comparison group. Four questionnaires were administered to the residents: Activities, Usual Day, Future Diary, and the Wohlford Hope Scale, prior to the manipulation phase of the experiment.

The effects of the manipulations, were assessed two months later. The results of the study demonstrated that the control and predict groups were significantly superior on measures of physical and psychological status as well as activity level. However, significant differences were not found between the predict and control group, suggesting that predictability may be the most important factor in control.

Schulz and Hanusa (1978) did a follow-up study of this field experiment, collecting data at 24, 30, and 42 month intervals. They found that the groups that had initially benefited from the experimental interventions showed decline after the study was terminated. The authors suggested that this decline could be explained in two related ways. Firstly, that the feelings of control were dependent upon an external agent and did not persist after the agent was removed. Secondly, the subjects' expectations for predictable and controllable environments were violated when the study was terminated. These results, which strongly contrast with the follow-up results of Rodin and Langer (1977) bring into focus the issue of attribution in personal control. A more enduring and

stable change may take place when individuals believe they are responsible for controlling their lives rather than being given permission to control an aspect of their lives temporarily.

To summarise, the literature suggests that a sense of personal control is an important variable in determining psychological adjustment, life satisfaction, and well-being. The research has some limitations. Since the vast majority of the studies used elderly subjects, it is difficult to generalise these results to the general population. In addition, subject numbers were often small, particularly in the field experiments. The field experiments, due to the nature of the studies, lacked precise control over such factors as the influence of staff attention, changed routine, and residents talking to one another about the study, which could have confounded the results of the studies. However, taking these limitations into account, a strong pattern emerges from the results of the studies which indicates that further investigations into the relationship of personal control and well-being is warranted.

Meaning in Life

The concept of "Meaning in Life" emerged out of the European existential philosophy of the 1840's. The earliest contributions in existential philosophy came from Schelling, Kierkegaard, Marx and others, while more contemporary contributions arose out of the work of such noted philosophers as Nietzsche, Heidegger and Jaspers. Although existential philosophers differed somewhat in their views, they were all commonly concerned with human existence and the human situation as experienced by the individual (Pervin, 1960).

In time, the ideas generated by the existential philosophers had a profound influence on psychological theory. The integration of existential thought and psychology gave rise to the existential schools of psychology and psychiatry. The effects of this merger was experienced strongly in the clinical areas, where new types of psychotherapeutic techniques emerged (Carkhuff & Berenson, 1977).

Victor Frankl (1955, 1959, 1967) developed the logotherapy (therapy of meaning) school of existential psychiatry and was instrumental in developing the concept "meaning in life". However, many other theorists also contributed to the development of this concept in their writings.

As Maslow (1966) noted when commenting on Frankl's work,

...I agree entirely with Frankl that man's primary concern ... is will to meaning. But this may be ultimately not very different from phrasings by Buhler (1962) for instance or Goldstein or Rodgers or others, who may use instead such words as 'values' or 'purposes' or 'ends' or 'a philosophy of life' or 'mystical fusion' (p 108).

May (1953) commented about the "emptiness" in people which stems from an inability to know what they feel or want, and leads ultimately to a meaningless existence. Fromm (1941) espoused a belief in the individual's need to find freedom, meaning, and self-realisation.

While it is beyond the scope of this thesis to consider individually the contributions of every theorist to the development of the meaning in life concept, an elaboration of Frankl's theories will be undertaken.

Frankl's proposal of logotherapy arose out of his experiences as a prisoner in German concentration camps during World War II. Even under the most horrific circumstance, Frankl asserts individuals can make greater sense out of their apparently senseless suffering and find meaning in the suffering (Frankl, 1959).

According to Fabry (1968) who interpreted Frankl's work for the Western world, logotherapy is based on three tenets. These are:

life has meaning under all conditions; man has the will to reach out for meaning and feels frustrated or empty if this will is not applied; and man has the freedom, within obvious limitations, to fulfill the meaning of his life (p 37).

Frankl believes life can attain meaning through the materialisation of three kinds of values: achievement values, experience and suffering (Weisskoff & Joelsen, 1955). Happiness and well-being are by-products of the realisation of these values.

According to Frankl, (1959) to achieve mental health a person must have a certain amount of tension, which is necessary for the attainment of meaning and values.

What man actually needs is not a tensionless state but rather the striving and struggling for some goal worthy of him (p 107).

Frankl (1955, 1959, 1967) asserts that when an individual's search for meaning is blocked, existential frustration results, which can ultimately lead to a pathological condition. Frankl labelled this condition

"noögenic neurosis" because it indicates a disturbance in the noö, the dimension of an individual which is exclusively human.

Meaning in Life and Well-Being

Research into the area of life-meaning has been limited, probably because the subjective nature of the concept makes scientific investigation difficult. The studies that have been undertaken largely emphasize mental illness and mental health rather than well-being.

An early study by Kotchen (1960) produced some support for the relationship between the existential concept of meaning and mental health. Kotchen defined "meaning" in terms of seven components he derived from existential philosophy and psychology: uniqueness, responsibility, self-affirmation, courage, transcendence, faith-commitment, and world view. He used these components to devise items for a questionnaire, which was given verbally to five sample groups of 30 males each. These groups were comprised of locked-ward mental patients, parole mental patients, chronic physical patients, the man-in-the-street, and college undergraduate students. The results of the study supported the hypothesis, in that subjects in the unhealthiest groups showed the lowest meaning in life, while those in the healthy groups demonstrated the highest meaning in life, with a consistent increase from locked-ward mental patients to undergraduates. While the results of the study lend support to the relationship between "meaning" and mental health, the small size of the sample and the exclusively male subjects make the results difficult to generalize.

Maddi (1967) developed a model for existential neurosis in an effort to encourage further research on the topic. The model proposed a cognitive, affective and actional component for the neurosis.

The existential neurosis is characterized by the belief that one's life is meaningless, by the affective tone of apathy and boredom, and by the absence of selectivity in actions (Maddi, 1967, p 313).

Maddi suggested that existential neurosis occurred when an individual with a "premorbid personality" was subjected to particular types of powerful stresses.

Although Maddi did not apparently undertake immediate research

in support of his model, his later studies and those of colleagues incorporated aspects of the existential concept "meaning in life", expanded upon the concept, and developed the term "hardiness" to describe a personality style. In several studies (Kobasa, 1979; Kobasa, Maddi, Courington, 1981; Kobasa, Maddi, & Kahn, 1982; Kobasa & Puccetti, 1983) hardiness has been shown to moderate the effects of stressful life events on illness onset. These studies will be discussed in greater detail later in the chapter.

Lazarus and DeLongis (1983), in an article dealing with stress and coping in aging, proposed that personal beliefs, values and commitments shape the appraisal of stress and the coping process, which ultimately affects somatic health. According to Lazarus and DeLongis, every person makes a cognitive appraisal or construes the significance of an encounter for his or her well-being. This appraisal is given meaning and personal significance by somewhat stable features of personality. Lazarus and DeLongis believe these personality variables to be

patterns of commitment and beliefs about self and the world
(p 250).

They state,

...the absence of commitments probably underlies a pervasive sense of meaninglessness, the existential malaise that can be found in any period of adulthood and especially in later life (p 251).

In summary, for many decades, a great deal of interest has been focused upon the existential concept "meaning in life". The early existential philosophies integrated with psychological theories which resulted in new psychotherapeutic techniques and the development of existential models to explain mental health. Rigorous scientific investigations have been slow to develop, but a recent group of studies, utilizing aspects of this concept look promising. The philosophical and psychological theories, together with limited studies lend support to the theory that a sense of meaning, purpose and commitment in life is a necessary precursor of well-being, although considerable research is still needed to provide evidence for this relationship.

Assertiveness

Many definitions have been proposed for the construct "assertiveness" ranging from vague and general statements to precise operational definitions. Heimberg, Montgomery, Madsen and Heimberg (1977) conceptualise assertiveness simply as

effective social problem solving (p 954).

Rich and Schroeder (1976) provide a more complex definition:

Assertive behavior is the skill to seek, maintain, or enhance reinforcement in an interpersonal situation through an expression of feelings or wants when such expression risks loss of reinforcement or even punishment (p 1082).

Dawley and Wenrich (1976) describe assertiveness in terms of adaptive behaviour,

Assertiveness is standing up for one's own rights, without infringing upon the rights of others. It is adaptive behaviour because it is functional in a given context, is self-enhancing, generates positive feelings towards oneself and others, and leads to smooth interpersonal relationships (p 15).

Assertiveness as a construct does not exist independently from assertiveness training, the therapeutic technique which brought the concept into focus. Assertiveness training evolved from the school of behaviour therapy and has been strongly influenced by the work of Salter (1949), Wolpe (1958) and Lazarus (1973) (Cited by Dawley & Wenrich, 1976). An in depth review of the assertiveness training literature is provided by Heimberg et.al. (1977).

Assertiveness training was originally developed as a treatment for individuals with inappropriately passive and inhibited behaviour in interpersonal situations, but has since been employed in the treatment of clinical disorders such as sexual deviation, depression, and marital conflict (Eisler, Hersen, Miller & Blanchard, 1975).

There has been some disagreement among theorists as to whether assertiveness is a generalised response tendency or trait or whether it is a situationally specific response. While Salter (1949), Cattell (1965) and Wolpe (1969) conceptualised assertiveness as a trait, the empirical evidence provided from the factor analysis of various assertiveness

inventories (Lawrence, 1970; Bates & Zimmerman, 1971; Gambrill & Richey, 1975) does not support this point of view according to Rich & Schroeder (1976). Additional evidence comes from an experiment conducted by Eisler, Hersen, Miller & Blanchard (1975). In this study, hospitalised psychiatric patients were required to role play various assertive situations in different situational contexts. The results of their research supported the position that an individual's assertive behaviour is functionally related to the social context of the situation.

Another strong area of interest in relation to assertiveness has been the identification of the verbal and nonverbal components of assertive responses. This issue is discussed at length by Rich and Schroeder (1976) and will be briefly touched on here. A key study in this area was conducted by Eisler, Miller & Hersen (1973). Inpatients of a psychiatric hospital participated in a series of interpersonal encounters simulating real life situations. In addition they were given an assertiveness inventory and personality schedule. On the basis of a clinical evaluation drawn from the combined measures, subjects were divided into low and high assertiveness groups. The results failed to show differences between assertive and non-assertive individuals in the areas of length of verbal responses, duration of looking at the interpersonal partner, speech fluency, or smiling. However, the results did show that individuals who were perceived as assertive, had a tendency to respond to interpersonal problems quickly, in a strong audible voice with marked intonation. In addition, assertive individuals were unlikely to yield to the demands of others and were likely to request that the behaviour of the interpersonal partner be changed. These results indicate that both non-verbal and verbal components of assertiveness may be important factors in the consideration of this construct.

Assertiveness and Well-Being

Although there is an absence in the literature of research focusing on the relationship of assertiveness and well-being directly, there are studies which investigate the relationship of assertiveness to depression, which can be considered as the absence of well-being. These studies gain theoretical support from learning theories of Seligman (1974) and Lewinsohn (1974) (Cited in Davison & Neale, 1978). Lewinsohn asserts

that depression is elicited when individuals reduce their activity level because of a lack of positive reinforcement. Seligman developed the model "learned helplessness", which is based on the premise that under stressful situations an individual initially becomes anxious, however this anxiety is replaced by depression if the person comes to believe that control is unattainable (Davison & Neale, 1978). Thus these models suggest that an assertive individual, actively in control of his social environment, should not become depressed.

A study by Langone (1979), tested the hypothesis that assertiveness and depression would have an inverse relationship. The subjects, 45 university students, completed the Beck Depression Inventory and the College Self-Expression Scale (for assertion). The results of the study showed a moderate negative correlation between depression and assertiveness, thus confirming the hypothesis.

Sanchez and Lewinsohn (1980) conducted an experiment which lends further evidence to the inverse relationship of assertiveness and depression. At a psychiatric clinic, 12 moderately to severely depressed outpatients received assertion training for five weeks. Throughout the treatment period, daily level of depression and rate of assertive behaviour were monitored via self-report measures. The daily percentage of actual emissions of assertive behaviour were then correlated with the ratings of depression. The results showed a substantial negative correlation between assertive behaviour and depression, indicating that on days in which assertive behaviour was more frequent, depression was less pronounced.

In a recent study, Lea and Paquin (1981) assessed the relationship between assertiveness and depression on 62 individuals. The subjects were drawn from two populations; 26 subjects were outpatients at a day hospital programme while the remaining 36 subjects were psychology students from a community college. Each of the subjects completed two assertiveness inventories and two depression surveys. The results showed moderate negative correlations between the assertiveness measures and the depression measures, supporting previous studies that depression is inversely correlated with assertiveness.

In summary, assertiveness training and the construct of assertiveness arose out of theories generated by the school of behaviour therapy. Assertiveness has been defined in many ways, but each definition

implies the need for an individual to behave effectively in interpersonal situations. Research indicates that the assertive response is situationally specific to some extent, and involves a range of verbal and nonverbal components. Although there has not apparently been any research undertaken on the relationship of assertiveness to well-being specifically, several studies have focused on the relationship of assertiveness to depression. Evidence from these studies indicates there is an inverse relationship between assertiveness and depression, which suggests assertiveness has a positive relationship to well-being. Further investigations are needed to establish this relationship.

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CHAPTER III

PERSONALITY AS A MODERATING VARIABLE

The previous chapter presented a discussion of three personality constructs (locus of control, meaning in life, and assertiveness) in an attempt to define them and investigate their relationship to well-being.

While research has not been exhaustive in these areas, the results of the investigations which have been conducted give adequate evidence to indicate an important relationship between each of these personality variables and well-being.

This chapter will present a number of models which seek to explain the nature of this relationship. Investigations will be considered which view personality as a moderator variable between life circumstances and positive adaptational outcomes. The beginning of the chapter will focus on how personality intervenes with stressors and socio-demographic variables to affect well-being. This will be followed by a discussion of the way personality impinges on the stress-illness relationship.

Well-Being

The issue of why individuals react differently to similar situations or under the same circumstances has been of interest to many theorists. Lefcourt (1980) describes this idiosyncratic response;

When life events seem to be overwhelming, we can sometimes reassure ourselves by recalling examples of certain rare persons who have not only survived equally tumultuous events, but have done so with grace. While some individuals appear ready to succumb to the slightest of life's challenges, there are others who display great fortitude in encounters with tragic and horrifying circumstances (p 201).

Lefcourt (1980) believes that those individuals who display courage, hope and self-reliance during extremely stressful situations possess an internal locus of control which allows them to attribute the outcome of events at least in part, to their own actions. According to Lefcourt, locus of control moderates the effect of stressors by effecting

the cognitive process of the individual, thus altering the way in which stressors are perceived and experienced. Therefore, an individual with an internal locus of control is more likely to believe that choices are available and personal actions can somehow alter the ultimate outcome of an event.

To explore the role of locus of control, as a moderating variable of life stress, Johnson & Sarason (1978) conducted an experiment which examined the relationship between indices of life change and measures of depression and anxiety, as a function of locus of control orientation. From an undergraduate psychology course, 124 student volunteers were drawn to act as subjects in the study. The subjects completed four measurement instruments, the Life Experience Survey, the Locus of Control Scale, the State-Trait Anxiety Inventory, and the Beck Depression Scale, in a group setting. Scoring on the Life Experience Survey yielded both a positive and negative score. The subjects were separated into an internal or external group based upon their score on the Locus of Control Scale. The results failed to show a significant relationship between measures of positive life change and either depression or anxiety for internal or external subjects. However, negative change was found to be significantly correlated with depression and trait anxiety for the external group, but not for the internal group. These results supported the hypothesis of the study, that the locus of control orientation functions as a moderator variable in the relationship between negative life change (viewed as stressors) and depression and anxiety.

Johnson & Sarason's (1978) study was later criticised by Toves, Schill and Ramanaiah (1981) for not analysing for sex differences. Toves et.al. conducted a similar study using 91 male and 79 female psychology students as subjects. The results of their investigation showed that internality acted as a moderator variable of negative life experiences for males only. In addition, the relationship between life events and locus of control has not been consistently supported by other research (Lefcourt, Miller, Ware, and Sherk, 1981).

In an effort to strengthen the evidence that locus of control functions as a moderator of negative life events, Lefcourt, Miller, Ware and Sherk (1981) undertook a more complex investigation of the topic in three studies. Volunteer subjects in the first study were drawn from two 3rd year psychology courses. Subjects completed a life events measure and two locus of control scales. In addition subjects completed a survey

of mood states each week, during four consecutive weeks. Lefcourt et.al. hypothesised that locus of control would moderate the effect of life events as reflected by the composite mood scores derived from the repeated administrations. Internal individuals were expected to exhibit less mood disturbance than externals, despite the occurrence of negative life events. The results showed external individuals possessed the strongest relationship between negative life events and mood disturbance scores, supporting the hypothesis.

The second study involved 102 volunteer psychology students. The subjects completed a life events measure and a locus of control scale. As in the first study, a survey of mood states was completed during four consecutive weeks. The hypothesis remained the same as for the first study. The results indicated that when negative life events were minimal, external subjects reported high mood disturbances, while internal subjects reported low mood disturbance. However, when the incidence of negative life events was high, both external and internal subjects reported high mood disturbance. The results of this study failed to support the hypothesis.

Concerned that the results of the second study were inconsistent with their first study as well as with other studies in the area, Lefcourt et.al. undertook a third study. The subjects were 55 3rd year psychology students who completed a life events measure and two locus of control scales. In addition, a survey of mood states was completed for seven consecutive weeks. The results showed, as in the second study, internal subjects exhibited greater mood disturbance following negative life events than in their absence, while external subjects showed a high level of mood disturbance regardless of their life experiences.

A supplementary analysis was run of the data of study three, substituting a different measure of life events. The results of this analysis produced a similar pattern of results as in the first study, confirming the hypothesis.

Lefcourt et.al. concluded that in the first study and supplementary analysis of the third study locus of control acted as a moderator of life events as predicted. However, in the second and third studies, locus of control did not function as a buffer against stress but served as a predictor of moods in the absence of stressors. According to Lefcourt et.al., the differences in the results of the

studies were probably due to the focus of the measurement instruments. When the measures reflected immediate negative life events, such as the Life Experience Scale, locus of control failed to function as a moderator variable. However, when the measures were a reflection of more remote negative life events, such as Coddingtons Life Events Measure or Cantrils Self-Anchoring Striving Scale, locus of control moderated their effects, resulting in a lower disturbance of moods.

Interest has also been focused on the exploration of socio-demographic factors and their effects on well-being. In a recent article, Mowm (1983) recognised the difficulties inherent in previous models attempting to find a relationship between sociodemographic variables and well-being. Since life circumstances have not been demonstrated empirically to have a simple and direct relationship with happiness, Mowm suggested the necessity of developing a model which takes into account the interplay between personality and environment. He asserted that the complex model developed by Powell, Royce and Voorhees (1983) might be a valuable point from which to begin research. In this model

personality is viewed as being composed of six interacting 'complex, hierarchical information-processing systems' (p 4).

These six personality systems, (sensory, motor, cognition, affect, value and style), form a hierarchical system composed of a controlled process layer, a clearing-adaptive layer, and an integrative self-organising layer. Based upon an appraisal of this model, Mowm concluded that researchers need to explore

the overreaching function of personality factors such as value systems and style (p 7).

Influenced by this model, Mowm originated a personality dimension he termed "resignation", which he conceptualised as operating at the self-organising or integrative layer of personality. The function of this personality construct is to regulate the internal dynamics of cognition and affect, thereby producing realistic expectations and levels of aspiration and maintaining optimal levels of affective arousal. Two resignation items were designed by Mowm to measure this factor.

To find empirical evidence in support of the resignation factor and model, Mowm collected data from eight separate population groups residing in Oslo, Norway. Subjects were either interviewed or mailed

questionnaires. The samples covered a variety of respondents: general population, middle-aged females, students, long term psychiatric out-patients, and the catchment population residing next to the psychiatric clinic.

The study investigated the relationship of resignation to socio-demographic variables, well-being and mental health. In addition it explored the extent to which resignation impinged upon the relationship between socio-demographic variables and life quality (well-being).

The results showed that females, older respondents and individuals low in socio-economic status had high levels of resignation. A weak relationship was found between resignation and well-being, while there was no relationship established between resignation and mental health. Controlling for resignation nearly doubled the predictive power of sex, age and socio-economic status considered together, on subjective well-being. However, with respect to mental health this improvement was not found. These results indicate that resignation may be an important factor in moderating the influences of socio-demographic variables on well-being.

Health and Illness

The aforementioned studies were concerned primarily with the effects of personality as a moderator variable between stressors and mood disturbances, which can be considered as an indication of well-being. A number of investigations have also focused on the role of personality as it moderates between stressors and illness.

Rabkin and Struening (1976) in a critical review of early studies focusing on the relationship of life events and stress to the onset of illness, considered the merits of models which viewed personality and other individual characteristics as mediating factors between stress and illness. They comment that although a general critical appraisal is unsuitable because of the range of studies, in general,

the results are...cumulatively persuasive, and open a variety of areas for future exploration (p 1019).

Thus Rabin and Struening believe that the moderating affect of individual differences should be considered when investigating the stress-illness relationship.

In a recent publication, Antonovsky (1979) was interested in exploring the reasons why some people managed to stay healthy when confronted by stressful situations while others became ill. He theorised that certain individuals possessed a personality structure which insulated them from the potential harm of stressors. This structure was conceptualised as a "sense of coherence", and defined as

a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that one's internal and external environments are predictable and that there is a high probability that things will work out as well as can reasonably be expected (p 123).

According to Antonovsky, a strong sense of coherence mobilises the psychological, genetic and constitutional resources available to an individual, giving protection from stressors, and ultimately procuring good health. This "Salutogenic Model" functions within the framework of the individual's socio-cultural and historical context.

Concerned with a similar issue, Kobasa (1979) wanted to understand how highly stressed individuals who remained healthy differed from those who developed illness. She believed, as did Antonovsky, that stressors were moderated by a personality structure. Thus individuals who experience stress without becoming ill have a different personality structure from persons who become sick under stress. According to Kobasa, this personality structure, "hardiness", describes individuals who possess three characteristics:

the belief that they can control or influence the events of their experience, an ability to feel deeply involved in or committed to the activities of their lives, and the anticipation of change as an exciting challenge to further development (p 3).

Kobasa (1979) devised a study in an attempt to gain support for three hypotheses which were derived from her model. These were

- (1) Among persons under stress, those who have a greater sense of control over what occurs in their lives will remain healthier than those who feel powerless in the face of external forces
- (2) Among persons under stress, those who feel committed to the various areas of their lives will remain healthier than those who are alienated
- (3) Among persons under stress, those who view change as a challenge will remain healthier than those who view it as a threat (p 4).

The subjects of the study, 200 middle-aged males were drawn from the middle and upper level executive employees of a large public utility company to provide equal numbers for a high stress/low illness group and a high stress/high illness group. The subjects completed a questionnaire covering a three year period. Modified versions of The Schedule of Recent Life Events and the Social Readjustment Rating Scale were used to provide a measure of stress. Illness was measured by the Seriousness of Illness Survey, a self-report checklist of common physical and mental symptoms. In addition, each of the subjects completed a variety of inventories to measure hardiness, and questions providing demographic information.

The results of the study found that while subjects in the two groups did not differ significantly on demographics, several of the personality variables yielded significant differences. The variables which were most substantial discriminators between the groups were commitment, vigorousness, meaningfulness, and internal locus of control, giving support to Kobasa's hypotheses.

A prospective study was conducted by Kobasa, Maddi, and Courington (1981) to further explore the role of hardiness as a moderator variable between stressful life events and illness and to consider the effects of constitutional predisposition on the stress-illness relationship. The subjects, 259 male, middle and upper level management personnel of a large utility company, filled out questionnaires covering a five year period. Measures were obtained on stress and illness as in the previous study. In addition, subjects completed the six scales which were used to measure the components of hardiness, a standard medical history, and questions regarding demographic information.

The results of the study showed that five personality measures (external locus of control, powerlessness, security, alienation from self, alienation from work) produced highly significant intercorrelations in the expected direction, supporting the assumption that commitment, control and challenge are interrelated components of hardiness. The findings indicated that stressful life events and constitutional predisposition increase illness, while hardiness decreases illness. Even with the effect of prior illness controlled, the main effects of hardiness and constitutional predisposition continued to show significance. Thus, the view that an individual's disposition towards hardiness functions as a

resistance resource against stressors was supported. Kobasa et.al. concluded that hardiness, constitutional predisposition, and stressful events have an additive effect in regard to illness rather than an interactive effect.

In an alternative analysis of the same data, Kobasa, Maddi and Kahn (1982) attempted to gain additional support for the hypothesis that hardiness functions to decrease the effect of stressful life events in producing illness. Health status and hardiness were evaluated as in the previous analysis, but constitutional factors were not included. The results showed that when constitutional factors were removed, stress and hardiness interacted, suggesting that when experiencing stressful life events it is important to be hardy. Stressful life events were significantly related to illness when measured concurrently but failed to show significance when measured prospectively. Kobasa et.al. suggested stressful life events may have a time limited effect on health status. Hardiness, on the other hand, was found to have a significant relationship to illness when measured prospectively, indicating that it may be the more important casual influence on health status.

A principle-components factor analysis on the six scales employed in the measurement of hardiness, revealed a first factor which accounted for 46.5% of the variance, and was interpreted as "general hardiness". This provided additional evidence in support of the hardiness personality construct.

In a recent study, Kobasa, and Puccetti (1983) expanded this model to examine the role of personality, social assets, and perceived social support as moderating variables between stressful life events and illness. The subjects were 204 male business executives randomly selected from the middle and upper level management of a large utility company. The questionnaire they completed covered a three year period.

Stressful life events and illness symptoms were measured as in previous studies. Hardiness was measured by five scales representative of the components, commitment, control and challenge. Social resources were assessed through the Environment Scale and the Social Assets Scale, and social demographic information was collected. The two hypotheses tested were,

- (1) Among executives under high stress, those who are both high in hardiness and high in social resources will be healthier than other executives (p 842);

- (2) Executives high in hardiness but low in social resources will report significantly less illness than executives high in social resources but low in hardiness (p 843).

The results showed, in line with previous studies, that stressful life events had a direct effect on the increase of illness symptomatology while hardiness had a direct effect on the decrease of reported illness. Although boss support did not have a direct effect on illness, it interacted significantly with stressful life events to impact on illness. Social assets had no influence on illness scores, and family support only had an influence for subjects low on hardiness, but in the opposite direction to that which was predicted. Overall, family support functioned as a buffer against stressful life events when hardiness was high, but actually had a detrimental effect when hardiness was low. These findings gave only partial support to both hypotheses. This study highlights the importance of personality as a buffer between stressors and illness beyond the consideration of external factors such as social resources. It also exemplifies the complexity of the stress-health relationship.

Summary

In summary, this chapter considered a number of theories and studies which view personality as having a moderating effect between life circumstances (stressful life events, stressors, socio-demographic factors) and an adaptational outcome (well-being, mood disturbance, illness, quality of life, mental health).

There are several limitations in the research which need to be considered. Lefcourt et.al. (1981) show many inconsistencies in the results of their investigations which may be a reflection of the life events measures employed. In some studies (Kobasa, 1979; Kobasa et.al., 1981; Kobasa et.al., 1982; Kobasa et.al., 1983) the samples are unrepresentative of the general population and exclusively male, making generalisations difficult. Moum (1982) introduces a concept which is interesting, but difficult to understand in terms of his extremely complex model of personality. "Resignation" appears to be similar to an absence of assertiveness and lack of purpose in life. It also surprisingly has a different relationship to well-being than it does to mental health. Further refinement is needed on this concept before the effects of resignation on socio-demographic factors and quality of life can be fully explored.

Given these limitations, a strong case can still be made for the importance of personality as a moderating variable. It is impressive that many theories of personality are focusing on similar types of variables. Locus of control, coherence, hardiness, and resignation each have common characteristics which lend validity to the concept of a healthful personality structure. Inconsistencies in the research may be a reflection of missing pieces in the models rather than weaknesses in the models. Further investigations are clearly warranted in this area to strengthen and expand these models.

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CHAPTER IV

MODEL AND HYPOTHESES

The line of argument arising from the literature supports two basic premises. Firstly, certain types of personality constructs, usually incorporating a sense of control and meaning in life, have an important relationship to well-being. Presumably individuals who possess these types of personality styles are predisposed towards a sense of well-being. Secondly, the nature of the relationship of personality to well-being and/or health appears to be indirect. That is, personality buffers the effects of life circumstances, lessening their impact, which consequently leads to more healthful outcomes. A refinement of these ideas led to the creation of the model used in the present study.

The model calls for an examination of the relationship between chronic stressors and subjective well-being. Although it is beyond the scope of this thesis to consider the vast array of research on stress and stressors, it is necessary to define the concept as it is used in the model.

According to Kanner, Coyne, Schaefer and Lazarus (1981) most stress research has been preoccupied with dramatic, severely taxing situations. An example of this approach to stress is demonstrated by the stressful life events research and the subsequent development of the Social Readjustment Rating Scale. A recent shift in emphasis can be found in the investigations of Lazarus and his colleagues who have published a number of theoretical articles emphasizing

the immense adaptational significance of the relatively minor stresses and pleasures that characterize everyday life (p 2, 1981).

Kanner et.al. label these types of stressors as "hassles" and describe them as

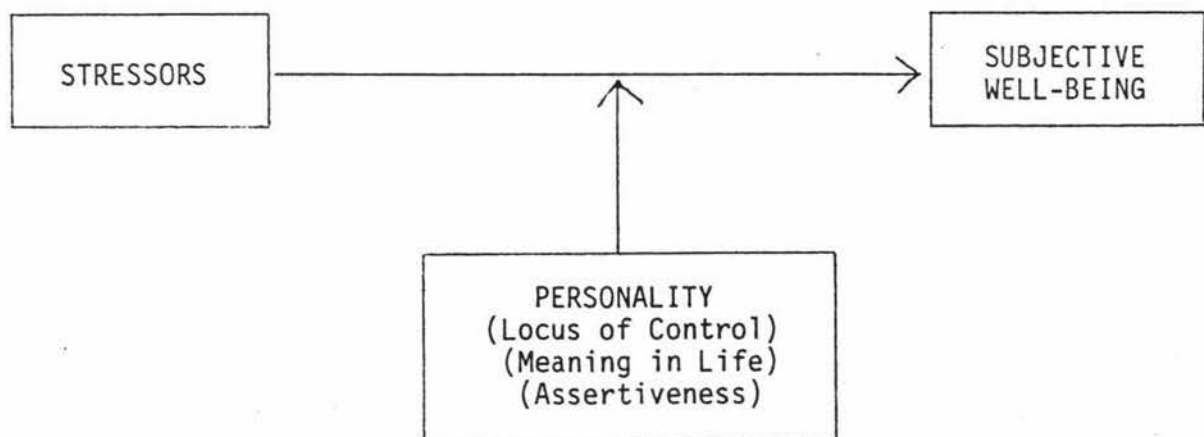
the irritating, frustrating, distressing demands that to some degree characterize everyday transactions with the environment (p 3).

According to Kanner et.al., it is very improbable for any individual to lead a hassle-free life.

This view of stressors was instrumental in the development of the Hassles Scale, a check-list inventory of everyday stressors (this instrument is described in more detail in chapter five). Research utilizing this scale, has focused on hassles as a predictor of adaptational outcomes such as morale, psychological symptoms and somatic illness. As noted in chapter one, the results of these studies indicate that the Hassles Scale is a better predictor of these outcomes than a life events scale (Kanner et.al., 1981; DeLongis, Coyne, Dakoh, Folkman, & Lazarus, 1982).

The present model employs the "hassles" concept of stressors. In the model, personality (locus of control, purpose in life, and assertiveness) is viewed as moderating the effects of stressors, thereby producing a sense of well-being. A diagrammatic representation of the model is presented in Figure 1.

FIGURE 1: DIAGRAMATIC REPRESENTATION OF THE MODEL



To explore this model, two hypotheses will be tested in the present study. In the first instance, the hypothesis will examine the effects of personality function as a buffer of stressors in producing well-being.

Hypothesis 1 - Each of the personality variables (locus of control, meaning in life, assertiveness) will interact with stressors, to moderate between stressors and well-being.

This hypothesis suggests individuals who possess an internal locus of control, or strong meaning in life or are assertive, will have a high sense of well-being regardless of the level of their stressors. In contrast, individuals with an external locus of control, or weak meaning in life or who are unassertive, will have a low sense of well-being when their stressors level is high.

In the second instance, the hypothesis will explore whether the personality variables function together, constituting a personality type, which may predispose an individual towards a sense of well-being. The view that several related variables constitute a personality style is supported by the work on coherence (Antonovsky, 1979) and hardiness (Kobasa, 1979; Kobasa, Maddi, & Courington, 1981; Kobasa, Maddi & Kahn, 1982; Kobasa & Puccetti, 1983).

Hypothesis 2 - The combined personality variables (locus of control, meaning in life, assertiveness) will explain a greater proportion of the variance of well-being than any single personality variable.

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CHAPTER V

METHOD

The Sample

Subjects were drawn from two separate samples and were classified as (1) the Community sample and (2) the Student sample.

The Community sample was comprised of 120 adults drawn from 26 randomly pre-selected areas of Palmerston North. This number was obtained by approaching 162 individuals of whom 130 agreed to participate in the study. This refusal rate of 19% includes individuals who declined because of illness and physical handicaps as well as those who were simply uninterested. Of the remaining 130 subjects a further 10 were eliminated because 5 questionnaires were returned blank, 4 questionnaires contained vast incomplete data, and 1 respondent could not be located.

The Student sample incorporated 134 extramural students enrolled in a second year business study paper and 27 extramural students enrolled in a first year rehabilitation paper offered through the Psychology Department. Both groups were taking part in an on-campus course during August at Massey University. Subjects participated voluntarily and completed their questionnaires in either of two groups, at a pre-arranged time during their course. Of the 164 students who were given the opportunity to participate in the study, 3 refused, and the remaining 161 respondents returned completed questionnaires.

Demographic Information

In the Community sample, respondents ranged in age from 18 to 74, with a mean age of 39. The extramural student sample was a slightly younger group ranging in age from 18 to 69, with a mean age of 32. Demographic information is presented in detail in Table 1. Age discrepancies between the two samples are evident at the younger and older extremes, while the age distribution of the two groups is reasonably similar in the middle ranges. The student group has a greater percentage of males than females by a small margin, in contrast to the Community

TABLE 1 : AGE, SEX, MARITAL STATUS, AND SOCIO-ECONOMIC STATUS FOR COMMUNITY AND STUDENT SAMPLES

	<u>COMMUNITY SAMPLE</u>		<u>STUDENT SAMPLE</u>	
	N	%	N	%
AGE GROUP				
18 and 19	1	0.8	9	5.6
20 - 29	40	34.0	61	37.8
30 - 39	28	23.4	58	36.2
40 - 49	19	15.8	20	12.3
50 - 64	24	19.7	9	5.6
65 and over	8	6.5	2	1.2
(missing)	0	0	2	1.2
SEX				
Males	47	39.2	86	53.4
Females	73	60.8	74	46.0
(missing)	0	0	1	0.6
MARITAL STATUS				
Married	84	70.0	105	65.2
Widowed	3	2.5	1	0.6
Divorced	7	5.8	4	2.5
Separated	8	6.7	10	6.2
Single	18	15.0	40	24.8
(missing)	0	0	1	0.6
SOCIO-ECONOMIC STATUS				
Upper-middle class	18	15.0	30	18.6
Middle class	61	50.8	114	70.8
Working class	35	29.2	11	6.8
Other	6	5.0	0	0
(missing)	0	0	6	3.7

sample which has a 3:2 ratio of females to males. The distribution of marital status is similar although the student sample has a greater percentage of single subjects. Socio-economic status is noticeably different with the community sample having a substantial number of subjects in the working class category which by comparison, is nearly absent from the student sample.

Procedure

Different procedures were followed, as some variation was necessary to accommodate the two sample groups. These will be outlined in turn:

Summary of Procedures - Community Sample

1. Respondents were obtained from the community using a clustered sampling procedure. Within the Palmerston North City boundary, 26 residential addresses were drawn randomly from the telephone directory to serve as starting points for the survey.
2. The interviewer began at the house to the immediate left of the selected address to eliminate any bias that unlisted phone numbers or lack of telephone service might create. Every third house to the left was approached. This process continued until five individuals within five households had agreed to complete a "Life Assessment Survey" in any given area.
3. Households were approached during day time hours on weekends. At each household, the purpose of the survey was explained and a questionnaire was left for completion. To randomize the selection of respondents within households, the person presently at home, with the next birthday over the age of seventeen was requested. Instructions were given to the respondents and they were given an opportunity to ask questions. A letter (see Appendix A) containing a contact phone number, stressing the confidential nature of the survey, and expressing appreciation for participation was handed to each respondent. An envelope was provided in which to seal the questionnaire after completion to ensure privacy from other household members. A date and time were arranged to pick up the questionnaire within two to four days.

4. When the questionnaire was collected the respondent was again given an opportunity to ask questions and if interest was shown details of the study were explained more fully.

Summary of Procedures - Extramural Student Sample

1. Students met as a group in a lecture room during a pre-arranged time. The experimenter explained the purpose of the survey and asked students to volunteer an hour of their time to complete the questionnaire. The confidential nature of the survey was discussed.
2. Instructions were given to the group and respondents were advised that they could ask questions at any time should the need arise.
3. On completion of the questionnaire, respondents were debriefed about the nature and purpose of the research.

Survey Content

The questionnaire was designed to obtain measures in four categories: (1) well-being, (2) stressors, (3) personality variables and (4) social desirability.

Instructions for completing the "Life Assessment Survey" were printed on the front page. The 22 page booklet was arranged with the Hassles scale first, followed by the measures Happiness, Life 1, Purpose in Life, Assertiveness Anxiety, Assertiveness Behaviour, Locus of Control, Affectometer 2, Life 2, Social Desirability, Depression and Faces. The last page requested demographic information and left a space for the respondents to comment about the questionnaire if they desired. (The questionnaire is presented in Appendix B).

The rationale for each of the scales contained in the questionnaire will be given below.

1. Well-Being Measures

Andrews and Withey's (1976) global measures were selected because of their cognitive emphasis and ability to tap a number of different qualities which represent life-as-a-whole. In addition

evidence suggests that these measures are appropriate for a New Zealand population (Chamberlain, 1982). Specific life concerns were not viewed as being relevant to the present study, and thus measures of this type were not included. Five global items, all of which measure well-being from an absolute perspective, were selected.

Three items (Life 1, Life 2, Happiness) asked respondents to make a whole life rating on a seven point scale ranging from "terrible" to "delighted". One item (faces), asked respondents to rate their life-as-a-whole on a graphic scale of seven facial expressions. One measure (Life 3) was a composite (mean score) of Life 1 and Life 2. Andrews and Withey (1976) profess that the

...Life 3 index should provide a more reliable and valid indicator of respondents true feelings about life-as-a-whole than either of its constituents parts (p 80).

The reliability of single life-as-a-whole items measured by the Delighted - Terrible Scale estimate at .70 (p 192).

The scales used in this study, the Delighted - Terrible and Faces scales, are those found by Andrews and Withey to have the highest rankings in validity, distribution form, category labelling and ease of use (p 212). Both of these measurement methods, based upon single questionnaire items, produce high validity correlations of approximately .80 (p 177).

Affectometer 2 (Kammann & Flett 1983) an abbreviated form of Affectometer 1 (Kammann, 1979, cited Kammann et.al. 1983), was included to measure the affective component of well-being. The 40 item scale can be completed in a short time period (mean - five minutes) and this was an important consideration in the instrument's suitability for the questionnaire.

Affectometer 2 measures well-being as conceptualized by feelings, both positive and negative. Respondents are asked to decide how often a feeling occurs, and rate this on a five-point graded response scale (not at all/occasionally/some of the time/often/all the time). The instrument is comprised of 20 single adjective items and 20 sentence items. Positive and Negative Affect are measured by separate sets of items, 20 positive and 20 negative.

The following psychometric data, relating to the instrument, has been reported by Kammann & Flett (1983). The scale demonstrates high

reliability ($r = .95$) and has been shown to have a high negative correlation with standard depression and anxiety scales as well as with an ad hoc list of somatic complaints ($r = -.62$). A principle components analysis of the instrument revealed a strong general well-being factor which accounted for 53% of the variance. The scale was found to be highly correlated with several leading alternative scales and to be slightly contaminated by the effects of mood ($r = .27$) and social desirability ($r = .33$).

Depression, viewed in the present study as the absence of well-being, was measured by a modified form of the Welsh Depression Subscale of the Minnesota Multiphasic Personality Inventory (Dahlstrom and Welsh, 1960). This abbreviated version of the subscale utilizes 15 of the 24 items and has been found to be a useful measure of depression in several studies (Rodder, Miller, and Bruh, 1971; Thiel, Parker, and Bruce, 1972; Spicer, McLeod, O'Brien and Scott, 1980). The brevity of the scale along with its simple yes/no format made it an appropriate instrument for this questionnaire.

2. Stressors Measure

The Hassles Scale (Kanner, Coyne, Schaefer & Lazarus 1981) was selected as a measure of chronic, relatively minor stressors. The scale is an inventory check-list which lists 117 potential hassles and allows the respondent to list an additional two items if any relevant hassles have been missed. Subjects rate each item on a three-point scale as either "somewhat", "moderately", or "extremely" severe. The items on the scale cover a variety of everyday concerns: work, family, health, friends, the environment, practical considerations and chance occurrences.

Kanner et.al. (1981) suggest that the scale can be scored to generate three measures: (1) "cumulated severity", the sum of the three-point severity ratings (2) "intensity", cumulated severity divided by the frequency, and (3) "frequency", a count of the number of items checked (p 9). The instrument demonstrates a high test-retest reliability between adjacent months for hassles frequency ($r = .79$) and moderate test-retest reliability for hassles intensity ($r = .48$) (DeLongis, 1982). This is not unexpected, as the conceptual nature of daily hassles would appear to make them susceptible to frequent changes in intensity. Validity has not yet been well established, although the check-list format lends face validity to this scale.

3. Personality Measures

Assertiveness

The 40 item Assertion Inventory (Gambrill & Ritchey 1975) was selected to collect information about an individual's behaviour in interpersonal situations. The instrument makes a distinction between discomfort and behaviour, conceptualizing assertiveness as a measure of both, each represented by a separate score. For each item the respondent rates the degree of their discomfort or anxiety in relation to a specific situation (on a five-point scale ranging from "none" to "very much"), and the judged likelihood of engaging in a particular behaviour (on a five-point scale ranging from "always do it" to "never do it").

The 40 items reflect a variety of behaviour which can be categorized as: turning down requests, expressing personal limitations, initiating social contacts, expressing positive feelings, handling criticism, differing with others, assertion in service situations and giving negative feedback.

The Inventory demonstrates high reliability for discomfort ($r = .87$) and likelihood of engaging in a particular behaviour ($r = .81$) (Gambrill & Ritchey, 1975). Although some items reflect sex difference, probably due to different social expectations, total scores appear to be free from sex bias. An analysis of data from undergraduate students showed that mean discomfort and response probability scores were similar for men and women (Gambrill & Ritchey, 1975). Validity of this scale has been established in a number of ways and is reported by Gambrill & Ritchey (1975). The inventory successfully differentiated between a clinical group and a normal population as well as reflecting significant differences within a clinical group before and after training. In a study which assessed the effectiveness of increasing social interactions, discomfort scores were found to decrease more in the experimental group than in the attention-placebo group or waiting list group. In addition, blind observers rated audiotapes of role plays collected before and after training. A significant correlation was found between observer ratings and inventory scores in regard to discomfort during this activity (Spearman rank correlation = .465, $p < .05$).

Locus of Control

A locus of control scale was included to assess an individual's sense of personal control. Although none of the locus of control scales presently in use measure precisely this concept, James' Internal-External Locus of Control Scale (1957, cited in Robinson and Shaver, 1973) seems to hold the most advantages. It measures internal-external locus of control as described by Rotter (1966), has a simple factor structure and a significant number of items in common to both sexes (Robinson & Shaver, 1973). The James scale was also suitable because of its Likert-type response format and its easily readable and comprehensible items.

On the recommendation of Robinson & Shaver (1973) the filler items were removed. The respondents rated the 30 remaining statements on a four point scale ranging from strongly agree to strongly disagree.

The scale is reported to have a high split-half reliability ($r = .84$ to $r = .96$) as well as high test-retest reliability ($r = .71$ to $r = .86$) (Robinson & Shaver, 1973). Validity is not well established, although a study by MacDonald (1971, cited in Robinson & Shaver, 1973) suggests a correlation of .64 between the Rotter (1966) and James scale.

Meaning in Life

The Purpose-in-Life Test (Crumbaugh, 1968), a 20 item attitude scale, was included to measure the degree to which an individual experiences a sense of meaning and purpose in life. It was devised as an outgrowth of the existential theories developed by Victor Frankl (1967).

The respondents were asked to rate each item from 1 (low purpose) to 7 (high purpose). An example of a typical item is: "In life, I have no goals or aims at all - very clear aims and goals".

The scale has demonstrated high split-half reliability ($r = .85$) (Robinson & Shaver, 1973) but test-retest reliability has not been established. Validity has been supported by

Crumbaugh (1968) in a study which demonstrates the instrument's ability to distinguish between certain types of psychiatric patients (neurotics, alcoholics, and psychotics) and normal populations. This supports Frankl's theory that an absence of meaning in life leads to existential frustration, ultimately resulting in psychiatric disorders. However, this should be regarded with caution since the sample was unrepresentative and the instrument failed to distinguish between a schizophrenic group and a normal population. The correlations between therapist's ratings and patient's PIL scores were low ($r = .27$ and $r = .38$) although a moderate correlation was found with ministers ratings of their parishioners. (Robinson & Shaver, 1973).

4. Social Desirability Measure

The Crown and Marlowe Social Desirability Scale (1964 cited in Robinson & Shaver, 1973) was chosen to measure the tendency of respondents to answer the questionnaire items in a socially approved manner. This 33 item scale, answered with a simple true/false response, contains statements that appeared suitable for the sample groups. Internal consistency and test-retest reliability over a one month period have both been reported at $r = .88$ (Robinson & Shaver, 1973). Although the instrument has been criticized for low inter-item correlations (Buchanan et.al., 1967, cited in Robinson & Shaver, 1973) and for its theoretical foundation (French, Lollibridge, cited in Robinson & Shaver, 1973), the evidence is controversial and positive results have been reported by Wiggins (1967, reported in Robinson & Shaver, 1973).

CHAPTER VI

RESULTS

The first part of this chapter will describe the scoring of the research scales, the criteria and treatment for missing data, and the selection of variables. Following that, the correlation matrix of the variables will be described and a comparison of the samples will be made. To complete the chapter, the analysis procedures used to test the hypotheses will be discussed, and the results will be presented.

Scoring

The scores used in the present analysis were established by calculating a total score for each scale. An exception to this was Life 3 which was a composite score of Life 1 and Life 2. The Hassles Scale was scored to provide a "cumulated severity score" (Kanner et.al., 1981). Affectometer 2 was scored to provide two measures, positive affect and negative affect. These were treated separately rather than as a single "balance" measure recommended by the instrument's authors (Kammann & Flett, 1983). The Assertion Inventory (Gambrill & Ritchey, 1975) was scored to provide an anxiety measure and a behaviour measure, as described in Chapter Five.

Missing Data

Criteria were established for the treatment of missing data, and list-wise deletion of missing cases was used in the analyses. Consequently, subject numbers vary slightly in each analysis. The Hassles Scale was eliminated from the analysis when ten or more items were missing. If a respondent had nine or fewer missing items, these were scored as 0, indicating that these hassles were not relevant to them. On all other scales one or two missing items were allowed, not exceeding 5% of the total scale. The one or two missing items on the scales were assigned a prorated value by adding the mean score for the valid items in place of each missing item. Respondents that had more than the acceptable number of missing items were dropped from the analysis involving those scales.

Selection of Variables

Although a variety of variables were measured in the questionnaire, to contain the scope of the present thesis not all of these variables were analysed. The stressors and personality measures were included, and social desirability was used to remove the effects of respondents answering items in a socially approved manner from the well-being measures. Demographic information was not analysed.

Not all of the dependent variables were included. A decision was made to use two measures that were a positive reflection of well-being and two measures which were, in essence, the absence of well-being. The "negative" measures of well-being, Negative Affect and Depression, were included in the analyses. Since Life 1, Life 2, Life 3, Happiness, and Faces were all global, life-as-a-whole, cognitive oriented measures, it was decided that one measure could be representative of this group. Accordingly, Life 3 was selected because it had high reliability (based upon a composite score) and a satisfactory distribution form. Positive Affect was retained as a measure of well-being from an affective perspective.

The means and standard deviations for each of the measures obtained in the questionnaire are presented in Appendix C.

Interrelationship of Measures

Table 2 presents the intercorrelations of the variables for the Community (COM) and Student (STU) samples. Hassles was found to have low to moderate correlations with all personality and well-being measures in both samples, with the exception of Negative Affect in the Community sample, which correlated highly ($r = .67$).

Turning to the interrelationship of the personality variables and the well-being measures, Purpose in Life shows a high correlation with Positive Affect (COM: $r = .70$; STU: $r = .66$) and Life 3 (COM: $r = .66$; STU: $r = .63$) and a high negative correlation with Negative Affect (COM: $r = -.77$; STU: $r = -.64$) and Depression (COM: $r = -.75$; STU: $r = -.64$). The other personality variables, Locus of Control, Assertiveness Anxiety and Assertiveness Behaviour have a low to moderate correlation with each of the well-being measures. Overall, the personality variables intercorrelate with each other at low to moderate levels. An exception to this is Assertiveness Anxiety and Assertiveness Behaviour, which correlate highly ($r = .64$) in the Student sample, but moderately in the Community group ($r = .50$).

An examination of the interrelationships of the well-being measures, reveals a high negative correlation between Positive Affect and Negative Affect (COM: $r = -.65$; STU: $r = -.66$) and between Positive Affect and Depression in the Community group ($r = -.64$). Life 3 correlates highly with Positive Affect ($r = .70$) in the Student sample but moderately in the Community group ($r = .54$). A high negative correlation was found between Life 3 and Negative Affect (COM: $r = -.64$; STU: $r = -.65$), while depression and Negative Affect were found to be highly correlated (COM: $r = .78$; STU: $r = .70$).

Social Desirability correlates moderately with Positive Affect (COM: $r = .26$; STU: $r = .34$) and Life 3 (COM: $r = .23$; STU: $r = .33$) and has a moderate negative correlation with Negative Affect (COM: $r = -.33$; STU: $r = -.35$) and Depression (COM: $r = -.24$; STU: $r = -.31$).

In general, all variables intercorrelate in the direction and magnitude that would be expected based upon the conceptual framework arising from the literature.

TABLE 2: PEARSON CORRELATION MATRIX OF MEASURES:
 COMMUNITY SAMPLE ABOVE DIAGONAL, STUDENT
 SAMPLE BELOW DIAGONAL

	<u>COMMUNITY SAMPLE</u>									
	HASSLES	PURPOSE IN LIFE	ASSERTIVE- NESS ANXIETY	ASSERTIVE- NESS BEHAVIOUR	LOCUS OF CONTROL	POSITIVE AFFECT	NEGATIVE AFFECT	LIFE 3	DEPRESSION	SOCIAL DESIR- ABILITY
HASSLES		-.50	.49	.19	-.20	-.38	.67	-.48	.57	-.26
PURPOSE IN LIFE	-.33		-.36	-.34	.30	.70	-.78	.66	-.75	.29
ASSERTIVENESS ANXIETY	.31	-.32		.50	.06	-.36	.45	-.32	.33	-.28
ASSERTIVENESS BEHAVIOUR	.08	-.28	.64		-.03	-.36	.30	-.12	.28	-.27
LOCUS OF CONTROL	-.15	.48	-.22	-.31		.18	-.33	.15	-.31	-.13
POSITIVE AFFECT	-.27	.66	-.40	-.39	.41		-.65	.54	-.64	.26
NEGATIVE AFFECT	.55	-.64	.39	.34	-.45	-.66		-.64	.78	-.33
LIFE 3	-.35	.63	-.32	-.28	.36	.70	-.65		-.56	.23
DEPRESSION	.41	-.64	.35	.32	-.38	-.57	.70	-.55		-.24
SOCIAL DESIRABILITY	-.22	.29	-.24	-.19	.04	.34	-.35	.33	-.31	
	<u>STUDENT SAMPLE</u>									

Comparison of Samples

Two samples were available from which to collect data for the present study. It was expected that the data obtained from the two groups would be parallel and could therefore be combined for use in the analyses. However, a comparison of the intercorrelations of the variables revealed differences between the Community and Student samples (Refer to the correlation matrix in Table 2).

To establish whether these differences were significant, two tail t-tests were obtained on the means of the variable scores for the two groups. Table 3 presents the summary data on the t-tests. The number of cases, means, t-value, degrees of freedom and significance level are given for each variable.

Table 3 shows that significant differences can be found between the samples in relation to two personality variables, Locus of Control ($t = -6.32$, $df = 275$, $p < .01$) and Purpose in Life ($t = -3.07$, $df = 276$, $p < .05$) as well as two well-being measures, Negative Affect ($t = 2.12$, $df = 279$, $p < .05$) and Depression ($t = 2.33$, $df = 273$, $p < .05$).

These results indicated that there were sufficient differences between the samples to warrant separate treatment of their data in the analyses. Accordingly, every subsequent analysis is run on each group separately.

TABLE 3: COMPARISON OF VARIABLE SCORES FOR COMMUNITY
AND STUDENT SAMPLES

<u>VARIABLE</u>	<u>N</u>	<u>MEAN</u>	<u>t-VALUE</u>	<u>df</u>	<u>PROBABILITY</u>
HASSLES					
COMMUNITY	118	66.66	0.78	275	n.s.
STUDENT	159	63.16			
LOCUS OF CONTROL					
COMMUNITY	114	74.58	-6.32	270	<.01
STUDENT	158	82.00			
PURPOSE IN LIFE					
COMMUNITY	120	101.64	-3.07	276	<.05
STUDENT	158	107.15			
ASSERTIVENESS ANXIETY					
COMMUNITY	115	86.92	-0.59	272	n.s.
STUDENT	159	88.50			
ASSERTIVENESS BEHAVIOUR					
COMMUNITY	113	109.07	0.22	270	n.s.
STUDENT	159	108.57			
LIFE 3					
COMMUNITY	118	4.95	-0.86	277	n.s.
STUDENT	161	5.03			
POSITIVE AFFECT					
COMMUNITY	120	49.50	-1.86	278	n.s.
STUDENT	160	51.97			
NEGATIVE AFFECT					
COMMUNITY	120	21.94	2.12	279	<.05
STUDENT	161	18.98			
DEPRESSION					
COMMUNITY	117	3.98	2.33	273	<.05
STUDENT	158	3.13			
SOCIAL DESIRABILITY					
COMMUNITY	116	15.87	1.02	270	n.s.
STUDENT	156	15.21			

Analysis Procedures I

Hypothesis 1 predicted that locus of control, meaning in life, and assertiveness would each have a moderating effect on the relationship between chronic stressors (Hassles) and subjective well-being. In line with this hypothesis, it was necessary to test for the interactive effect of the personality variables on stressors, and multiple regression analysis seemed best suited to this purpose. In order to test for the interactions each personality variable was multiplied with Hassles to form a new variable as described by Kerlinger & Pedhazur (1973, p 181).

An initial series of hierarchically arranged multiple regression analyses, using raw scores, revealed very high correlations between the interaction terms and Hassles making an interpretation of the analyses misleading. To correct for this each independent variable was standardised. The new correlations were free from the problem of collinearity (intercorrelations before and after standardisation are presented in appendix D).

As can be noted in Table 2, Social Desirability was found to be moderately correlated with the dependent variables. This might exert a confounding effect on the analysis, thus a decision was made to remove the effect of Social Desirability from the dependent variables. A series of multiple regression analyses were run to partial out the effects of social desirability on each of the well-being measures. The residuals from these analyses were then used for the subsequent analyses.

The major analyses consisted of a series of hierarchically arranged multiple regression analyses. The interaction term was entered first since the emphasis of the hypothesis is on personality as a moderator of chronic stress. Personality was the second variable entered and Hassles was entered last. This order gains support from the literature which indicates a relationship between personality and subjective well-being, whereas, the relationship between life events, a related measure to Hassles, and subjective well-being is unsubstantiated (Diener, 1983). In total, sixteen multiple regression analyses were run on each sample. Each analysis entered an interaction term, the related personality variable and Hassles to predict to each of the four well-being measures. Examination of the plots of the residuals revealed that there were no marked departures from linearity.

Results I

This section will discuss the results of these analyses by considering them according to the personality variable, for both the Community and Student samples.

Locus of Control

Table 4 presents the summary data for the Community (COM) and Student (STU) samples on the multiple regression analyses where the interaction term, Locus of Control, and Hassles were entered into the equation. The multiple correlation squared (R^2), beta weights, their t-values and significance are given for each independent variable as they are added into the equation. The results of the Student sample show that Locus of Control and Hassles interacted significantly to predict all well-being measures (Life 3: $t=3.57$, $df=151$, $p<.01$; Positive Affect: $t=2.12$, $df=151$, $p<.05$; Negative Affect: $t=-4.65$, $df=151$, $p<.01$; Depression: $t=-4.96$, $df=149$, $p<.01$). In contrast, the results of the Community sample failed to show any significant relationship between the interaction term and the dependent variables.

In both samples, Locus of Control demonstrated a significant relationship to all of the well-being measures after the effect of the interaction term had been removed (COM: Life 3; $t=2.16$, $df=104$, $p<.05$; Positive Affect: $t=2.72$, $df=104$, $p<.01$; Negative Affect: $t=-4.27$, $df=104$, $p<.01$; Depression: $t=-4.30$, $df=103$, $p<.01$) (STU: Life 3: $t=4.45$, $df=150$, $p<.01$; Positive Affect: $t=5.40$, $df=150$, $p<.01$; Negative Affect: $t=-5.93$, $df=150$, $p<.01$; Depression: $t=-4.78$, $df=150$, $p<.01$).

With the effects of the interaction and Locus of Control partialled out, a significant relationship was found between Hassles and all of the well-being measures across both groups, excluding Positive Affect in the Student sample (COM: Life 3: $t=-4.75$, $df=103$, $p<.01$; Positive Affect: $t=-3.38$, $df=103$, $p<.01$; Negative Affect: $t=8.30$, $df=103$, $p<.01$; Depression: $t=6.47$, $df=103$, $p<.01$) (STU: Life 3: $t=-2.74$, $df=149$, $p<.01$; Positive Affect: $t=-1.71$, $df=149$, n.s.; Negative Affect: $t=6.45$, $df=149$, $p<.01$; Depression: $t=3.70$, $df=149$, $p<.01$). The combined variables accounted for a small proportion of the variance for Life 3 and Positive Affect (COM: $R^2=.23$, $R^2=.16$; STU: $R^2=.22$, $R^2=.20$, respectively) and a moderate proportion of the variance for Negative Affect and Depression (COM: $R^2=.49$, $R^2=.40$; STU: $R^2=.45$, $R^2=.32$, respectively) in both groups.

TABLE 4: SUMMARY DATA ON MULTIPLE REGRESSION ANALYSES INVOLVING
LOCUS OF CONTROL, FOR COMMUNITY AND STUDENT SAMPLES.

<u>DEP VAR</u>	<u>INDEP VAR</u>	R ²	<u>COMMUNITY</u>			<u>STUDENT</u>			
			B	t	p	R ²	B	t	p
Life 3	Locus of Control x Hassles	.01	.119	1.23	n.s.	.08	.279	3.57	<.01
	Locus of Control	.06	.207	2.16	<.05	.19	.332	4.45	<.01
	Hassles	.23	-.420	-4.75	<.01	.22	-.203	-2.74	<.01
	(N)		(107)			(153)			
Positive Affect	Locus of Control x Hassles	.03	-.027	-.276	n.s.	.03	.170	2.12	<.05
	Locus of Control	.07	.260	2.72	<.01	.19	.403	5.40	<.01
	Hassles	.16	-.311	-3.38	<.01	.20	-.129	-1.71	n.s.
	(N)		(107)			(153)			
Negative Affect	Locus of Control x Hassles	.01	-.089	-.911	n.s.	.13	-.354	-4.65	<.01
	Locus of Control	.16	-.389	-4.27	<.01	.29	.413	-5.93	<.01
	Hassles	.49	.593	8.30	<.01	.45	.405	6.45	<.01
	(N)		(107)			(153)			
Depression	Locus of Control x Hassles	.00	.00	.000	n.s.	.14	-.374	-4.96	<.01
	Locus of Control	.15	-.392	-4.30	<.01	.25	-.392	-4.78	<.01
	Hassles	.40	.505	6.47	<.01	.32	.258	3.70	<.01
	(N)		(107)			(153)			

Purpose in Life

Summary data for the multiple regression analyses on the interaction term, Purpose in Life, and Hassles are presented in Table 5 for both samples. As shown in Table 5, Purpose in Life and Hassles interacted significantly to predict all well-being measures (Life 3: $t=3.73$, $df=151$, $p<.01$; Positive Affect: $t=3.28$, $df=151$, $p<.01$; Negative Affect: $t=-4.25$, $df=151$, $p<.01$; Depression: $t=-5.38$, $df=151$, $p<.01$) in the Student sample. Purpose in Life and Hassles also interacted significantly to predict Negative Affect ($t=-3.18$, $df=111$, $p<.01$) and Depression ($t=-2.19$, $df=111$, $p<.05$) but failed to demonstrate a significant relationship to Life 3 ($t=1.87$, $df=111$, n.s.) and Positive Affect ($t=1.15$, $df=111$, n.s.) in the Community group.

Purpose in Life, after the effects of the interaction term had been removed, demonstrated a significant relationship with all the well-being measures in both samples (COM: Life 3: $t=8.74$, $df=110$, $p<.01$; Positive Affect: $t=9.28$, $df=110$, $p<.01$; Negative Affect: $t=-10.89$, $df=110$, $p<.01$; Depression: $t=-9.99$, $df=110$, $p<.01$) (STU: Life 3: $t=7.11$, $df=150$, $p<.01$; Positive Affect: $t=7.90$, $df=150$, $p<.01$; Negative Affect: $t=-7.40$, $df=150$, $p<.01$; Depression: $t=-7.33$, $df=150$, $p<.01$).

With the effects of the interaction term and Purpose in Life eliminated, Hassles was found to be significantly related to Negative Affect and Depression for both samples, but failed to relate to Life 3 or Positive Affect significantly in either group (COM: Life 3: $t=-1.76$, $df=109$, n.s.; Positive Affect: $t=-.227$, $df=109$, n.s.; Negative Affect: $t=4.66$, $df=109$, $p<.01$; Depression: $t=3.22$, $df=109$, $p<.01$) (STU: Life 3: $t=-1.50$, $df=149$, n.s.; Positive Affect: $t=-.183$, $df=149$, n.s.; Negative Affect: $t=5.25$, $df=149$, $p<.01$; Depression: $t=2.57$, $df=149$, $p<.05$). The combined variables accounted for a moderate proportion of the variance for all well-being measures across both groups (COM: Life 3, $R^2=.40$; Positive Affect, $R^2=.45$; Negative Affect, $R^2=.63$; Depression, $R^2=.54$) (STU: Life 3, $R^2=.33$; Positive Affect, $R^2=.34$; Negative Affect, $R^2=.49$; Depression, $R^2=.41$).

TABLE 5: SUMMARY DATA ON MULTIPLE REGRESSION ANALYSES, INVOLVING PURPOSE IN LIFE, FOR COMMUNITY AND STUDENT SAMPLES

<u>DEP VAR</u>	<u>INDEP VAR</u>	R ²	<u>COMMUNITY</u>			<u>STUDENT</u>			
			B	t	p	R ²	B	t	p
Life 3	Purpose in Life x Hassles	.03	.174	1.87	n.s.	.08	.290	3.73	<.01
	Purpose in Life	.38	.610	8.74	<.01	.32	.516	7.11	<.01
	Hassles	.40	-.154	-1.76	n.s.	.33	-.108	-1.50	n.s.
	(N)		(113)			(153)			
Positive Affect	Purpose in Life x Hassles	.01	.108	1.15	n.s.	.07	.258	3.28	<.01
	Purpose in Life	.45	.680	9.28	<.01	.34	.563	7.90	<.01
	Hassles	.45	-.005	-.227	n.s.	.34	-.012	-.183	n.s.
	(N)		(113)			(153)			
Negative Affect	Purpose in Life x Hassles	.08	-.289	-3.18	<.01	.11	-.327	-4.25	<.01
	Purpose in Life	.56	-.711	-10.89	<.01	.35	.526	-7.40	<.01
	Hassles	.63	.319	4.66	<.01	.49	.340	5.25	<.01
	(N)		(113)			(153)			
Depression	Purpose in Life x Hassles	.04	-.203	-2.19	<.05	.16	-.401	-5.38	<.01
	Purpose in Life	.50	-.697	-9.99	<.01	.38	-.585	-7.33	<.01
	Hassles	.54	.246	3.22	<.01	.41	.172	2.57	<.05
	(N)		(113)			(153)			

Assertiveness Anxiety

Table 6 presents the summary data for the multiple regression analyses of the interaction term, Assertiveness Anxiety and Hassles for both samples. The results show that the interaction of Assertiveness Anxiety and Hassles was not significant in predicting any of the dependent variables for either group.

Assertiveness Anxiety, with the effects of the interaction term partialled out, demonstrated a significant relationship to all the well-being measures in the Student group (Life 3: $t=-3.23$, $df=150$, $p<.01$; Positive Affect: $t=-4.33$, $df=150$, $p<.01$; Negative Affect: $t=4.12$, $df=150$, $p<.01$; Depression: $t=3.69$, $df=150$, $p<.01$) while failing to show a significant relationship to any of the dependent variables in the Community group.

After the effects of the interaction term and Assertiveness anxiety had been removed, a significant relationship was found between Hassles and all well-being measures with the exception of Positive Affect in both samples (COM: Life 3: $t=-3.55$, $df=102$, $p<.01$; Positive Affect: $t=-1.71$, $df=102$, n.s.; Negative Affect: $t=5.66$, $df=102$, $p<.01$; Depression: $t=4.96$, $df=102$, $p<.01$) (STU: Life 3: $t=-2.77$, $df=149$, $p<.01$; Positive Affect: $t=-1.19$, $df=149$, n.s.; Negative Affect: $t=6.02$, $df=149$, $p<.01$; Depression: $t=3.75$, $df=149$, $p<.01$).

The combined variables accounted for a small to moderate amount of the variance for each well-being measure in both samples (COM: Life 3, $R^2=.18$; Positive Affect, $R^2=.10$; Negative Affect, $R^2=.35$; Depression, $R^2=.25$) (STU: Life 3, $R^2=.12$; Positive Affect, $R^2=.12$; Negative Affect, $R^2=.29$; Depression, $R^2=.16$).

TABLE 6: SUMMARY DATA ON MULTIPLE REGRESSION ANALYSES, INVOLVING ASSERTIVENESS ANXIETY, FOR COMMUNITY AND STUDENT SAMPLES

<u>DEP VAR</u>	<u>INDEP VAR</u>	R ²	<u>COMMUNITY</u>			<u>STUDENT</u>			
			B	t	p	R ²	B	t	p
Life 3	Assertiveness Anxiety x Hassles	.05	-.047	-.481	n.s.	.01	-.090	-1.11	n.s.
	Assertiveness Anxiety	.08	-.271	-2.86	<.01	.07	-.255	-3.23	<.01
	Hassles	.18	-.364	-3.55	<.01	.12	-.226	-2.77	<.01
	(N)		(106)			(153)			
Positive Affect	Assertiveness Anxiety x Hassles	.02	.024	.245	n.s.	.00	-.036	-.448	n.s.
	Assertiveness	.07	-.266	-2.80	<.01	.11	-.333	-4.33	<.01
	Hassles	.10	-.183	-1.71	n.s.	.12	-.097	-1.19	n.s.
	(N)		(106)			(153)			
Negative Affect	Assertiveness Anxiety x Hassles	.01	.100	1.03	n.s.	.01	.106	1.31	n.s.
	Assertiveness Anxiety	.15	.375	4.13	<.01	.11	.318	4.12	<.01
	Hassles	.35	.515	5.66	<.01	.29	.442	6.02	<.01
	(N)		(106)			(153)			
Depression	Assertiveness Anxiety x Hassles	.04	.037	.375	n.s.	.05	.048	.592	n.s.
	Assertiveness Anxiety	.07	.262	2.76	<.01	.09	.289	3.69	<.01
	Hassles	.25	.486	4.96	<.01	.16	.298	3.75	<.01
	(N)		(106)			(153)			

Assertiveness Behaviour

In Table 7, the multiple regression analyses for the interaction term, Assertiveness Behaviour, and Hassles are presented for both samples. The results show, for both groups, that the interaction of Assertiveness Behaviour and Hassles does not predict any of the well-being measures.

After the effects of the interaction term had been removed, Assertiveness Anxiety demonstrated a significant relationship to all the well-being measures in both samples, with the exception of Life 3 in the Community group (COM: Life 3: $t=-.877$, $df=104$, n.s.; Positive Affect: $t=-3.50$, $df=104$, $p<.01$; Negative Affect: $t=2.81$, $df=104$, $p<.01$; Depression: $t=2.57$, $df=104$, $p<.05$) (STU: Life 3: $t=-2.68$, $df=151$, $p<.01$; Positive Affect: $t=-4.05$, $df=151$, $p<.01$; Negative Affect: $t=3.51$, $df=151$, $p<.01$; Depression: $t=3.53$, $df=151$, $p<.01$).

With the effects of the interaction term and Assertiveness Behaviour partialled out, a significant relationship was found between Hassles and all well-being measures across both groups (COM: Life 3: $t=-5.02$, $df=103$, $p<.01$; Positive Affect: $t=-2.69$, $df=103$, $p<.01$; Negative Affect: $t=7.35$, $df=103$, $p<.01$; Depression: $t=5.91$, $df=103$, $p<.01$) (STU: Life 3: $t=-3.53$, $df=150$, $p<.01$; Positive Affect: $t=-2.29$, $df=150$, $p<.05$; Negative Affect: $t=7.05$, $df=150$, $p<.01$; Depression: $t=4.48$, $df=150$, $p<.01$).

The combined variables accounted for a small to moderate proportion of the variance of each well-being measure for both samples (COM: Life 3, $R^2=.20$; Positive Affect, $R^2=.14$; Negative Affect, $R^2=.40$; Depression, $R^2=.30$) (STU: Life 3, $R^2=.13$; Positive Affect, $R^2=.13$; Negative Affect, $R^2=.31$; Depression, $R^2=.20$).

TABLE 7: SUMMARY DATA ON MULTIPLE REGRESSION ANALYSES, INVOLVING ASSERTIVENESS BEHAVIOUR, FOR COMMUNITY AND STUDENT SAMPLES

<u>DEP VAR</u>	<u>INDEP VAR</u>	R ²	<u>COMMUNITY</u>			<u>STUDENT</u>			
			B	t	p	R ²	B	t	p
Life 3	Assertiveness Behaviour x Hassles	.00	-.047	-.484	n.s.	.01	-.090	-1.11	n.s.
	Assertiveness Behaviour	.01	-.090	-.877	n.s.	.05	-.213	-2.68	<.01
	Hassles	.20	-.450	-5.02	<.01	.13	-.271	-3.53	<.01
	(N)		(107)			(154)			
Positive Affect	Assertiveness Behaviour x Hassles	.00	.023	.231	n.s.	.04	-.036	-.446	n.s.
	Assertiveness Behaviour	.11	-.342	-3.50	<.01	.10	-.313	-4.05	<.01
	Hassles	.14	-.247	-2.69	<.01	.13	-.175	-2.29	<.05
	(N)		(107)			(154)			
Negative Affect	Assertiveness Behaviour x Hassles	.01	.099	1.02	n.s.	.01	.104	1.29	n.s.
	Assertiveness Behaviour	.08	.278	2.81	<.01	.09	.273	3.51	<.01
	Hassles	.40	.573	7.35	<.01	.31	.479	7.05	<.01
	(N)		(107)			(154)			
Depression	Assertiveness Behaviour x Hassles	.04	.037	.383	n.s.	.01	.051	.625	n.s.
	Assertiveness Behaviour	.06	.258	2.57	<.05	.08	.276	3.53	<.01
	Hassles	.30	.497	5.91	<.01	.20	.342	4.48	<.01
	(N)		(107)			(154)			

Summary

The interaction of Locus of Control and Hassles was significant in predicting all the well-being measures in the Student sample while failing to predict any of the dependent variables in the Community sample. Purpose in Life and Hassles interacted significantly to predict all the well-being measures in the Student sample, and to predict Negative Affect and Depression in the Community group. The other two interaction terms, Assertiveness Anxiety x Hassles and Assertiveness Behaviour x Hassles, failed to demonstrate a significant relationship to any of the dependent variables in either sample. In general the interaction terms, while sometimes significant, failed to account for any substantial amount of the variance in well-being.

With the effects of the interaction term partialled out, each of the personality variables, Locus of Control, Purpose in Life, Assertiveness Anxiety, and Assertiveness Behaviour, showed a significant relationship to all of the well-being measures in both samples, with the exception of Assertiveness Behaviour to Life 3 in the Community group. The interaction term and personality combined, accounted for a small proportion of the variance in each well-being measure with the exception of Purpose in Life, where they accounted for a moderate amount of the variance.

After the effects of the interaction term and the related personality variable had been removed, a significant relationship was found between Hassles and Negative Affect, and Hassles and Depression for both samples. In some cases Hassles also related significantly to Life 3 and Positive Affect.

Overall, the combined variables accounted for a small to moderate proportion of the variance in Life 3 and Positive Affect, and a moderate proportion of the variance in Negative Affect and Depression.

Analysis Procedures II

Hypothesis 2 predicted that the combined effect of the personality variables (locus of control, purpose in life, and assertiveness) would account for more of the variance of subjective well-being than any single personality variable. It was theorised that these personality variables would cluster together and the resultant personality style would predispose an individual towards a sense of well-being. In order to explore the relative contribution of the personality variables to the dependent variables, predictor variables were entered into a series of hierarchically arranged multiple regression analyses. As in the previous analysis, these analyses were run on the residuals obtained by partialling out social desirability from the dependent variables. The personality variables were entered into the equation in sequence according to their simple correlation with the residuals of the dependent variables (refer to Appendix E). Thus, Purpose in Life, Locus of Control, Assertiveness Anxiety, and Assertiveness Behaviour were entered into the equation in that order. Hassles was entered subsequently to explore whether it accounted for further variance in well-being beyond that explained by the personality variables. In total four multiple regression analyses were run, one for each well-being measure, on each sample.

Results II

This section will discuss the results of the multiple regression analyses for the Community and Student samples. The analyses will be considered for each well-being measure in turn.

Table 8 presents the summary data of the multiple regression analyses showing the relative contributions of the personality variables and Hassles on the well-being measures for both samples. The squared multiple correlation (R^2), R^2 -change, F values and their significance are given for each independent variable.

Life 3

As can be noted in Table 8, Purpose in Life was entered first into the equation and contributed a significant proportion of the variance to Life 3 for both samples (COM: $R^2=.43$, $F(1,101)=77.18$, $p<.01$; STU: $R^2=.31$, $F(1,147)=66.26$, $p<.01$). Locus of Control was entered next and

TABLE 8: SUMMARY OF MULTIPLE REGRESSION ANALYSES, FOR EACH WELL-BEING MEASURE, FOR COMMUNITY AND STUDENT SAMPLES

DEP VAR	INDEP VAR	COMMUNITY				STUDENT			
		R ²	R ² change	f	p	R ²	R ² change	f	p
Life 3	Purpose in Life	.43	-	77.18	<.01	.31	-	66.26	<.01
	Locus of Control	.43	.000	.165	n.s.	.32	.012	2.60	n.s.
	Assertiveness Anxiety	.43	.000	.061	n.s.	.33	.006	1.42	n.s.
	Assertiveness Behaviour	.47	.047	8.88	<.01	.33	.000	.082	n.s.
	Hassles	.49	.012	2.47	n.s.	.34	.010	2.22	n.s.
	(N)		(103)			(149)			
Positive Affect	Purpose in Life	.41	-	70.05	<.01	.34	-	74.79	<.01
	Locus of Control	.41	.000	0.12	n.s.	.36	.025	5.67	<.05
	Assertiveness Anxiety	.41	.001	0.22	n.s.	.39	.026	6.09	<.05
	Assertiveness Behaviour	.42	.008	1.50	n.s.	.39	.005	1.29	n.s.
	Hassles	.42	.000	.019	n.s.	.39	.000	.020	n.s.
	(N)		(103)			(149)			
Negative Affect	Purpose in Life	.50	-	102.02	<.01	.33	-	72.44	<.01
	Locus of Control	.52	.016	3.35	n.s.	.37	.041	9.66	<.01
	Assertiveness Anxiety	.54	.020	4.49	<.05	.39	.019	4.43	<.05
	Assertiveness Behaviour	.54	.008	1.73	n.s.	.39	.000	.119	n.s.
	Hassles	.61	.069	17.58	<.01	.49	.104	29.53	<.01
	(N)		(103)			(149)			
Depression	Purpose in Life	.46	-	86.91	<.01	.36	-	82.92	<.01
	Locus of Control	.48	.024	4.80	<.05	.37	.015	3.44	n.s.
	Assertiveness Anxiety	.49	.001	.300	n.s.	.39	.013	3.09	n.s.
	Assertiveness Behaviour	.49	.000	.078	n.s.	.39	.008	1.95	n.s.
	Hassles	.55	.058	12.64	<.01	.43	.033	8.43	<.01
	(N)		(103)			(149)			

failed to add significantly to the variance for either group. Assertiveness Anxiety which followed, also failed to add a significant contribution to the variance for either sample. The next variable entered, Assertiveness Behaviour, accounted for a significant increase in the R^2 of .047 ($F(1,144)=8.88$, $p<.01$) in the Community group, but failed to increase the variance significantly in the Student sample ($F(1,98)=.082$, n.s.). Beyond the contributions of the personality variables, Hassles, which was entered last, failed to account for a significant increase in R^2 for either group (COM: $F(1,97)=2.47$, n.s.; STU: $F(1,143)=2.22$, n.s.). The combined variables accounted for a moderate proportion of the variance of Life 3 in both samples (COM: $R^2=.49$; STU: $R^2=.34$).

Positive Affect

Purpose in Life was entered into the equation first and accounted for a significant amount of the variance of Positive Affect for both samples as revealed in Table 8 (COM: $R^2=.41$, $F(1,101)=70.05$, $p<.01$; STU: $R^2=.34$, $F(1,147)=74.79$, $p<.01$). In the Community sample none of the other personality variables added a significant contribution to the variance beyond Purpose in Life. In the Student sample, Locus of Control, which was entered next, contributed a significant increase in R^2 of .025 ($F(1,146)=5.67$, $p<.05$) and Assertiveness Anxiety, which followed, also contributed a significant increase in R^2 of .026 ($F(1,145)=6.09$, $p<.05$). Assertiveness Behaviour, entered next, failed to significantly increase R^2 in the Student sample ($F(1,144)=1.29$, n.s.). Hassles entered last, failed to make a significant increase to the variance in either group (COM: $F(1,97)=.019$, n.s.; STU: $F(1,143)=.020$, n.s.). In both samples, a moderate proportion of the variance in Positive Affect was accounted for by the combined variables (COM: $R^2=.42$; STU: $R^2=.39$).

Negative Affect

Table 8 shows that the first variable entered, Purpose in Life, contributed a significant proportion of the variance to Negative Affect in both groups (COM: $R^2=.50$, $F(1,101)=102.02$, $p<.01$; STU: $R^2=.33$, $F(1,147)=72.44$, $p<.01$) Locus of Control, entered next, accounted for a significant increase in R^2 of .041 in the Student sample ($F(1,146)=9.66$, $p<.01$) but failed to increase R^2 significantly in the Community group ($F(1,100)=.016$, n.s.). The next variable entered, Assertiveness Anxiety, added a significant increase in R^2 of .020 ($F(1,99)=4.49$, $p<.05$) in the Community sample, and a significant increase in R^2 of .019 ($F(1,145)=4.43$, $p<.05$)

in the Student group. Assertiveness Anxiety, entered next, failed to add a significant contribution in R^2 to either sample. Hassles, the last variable entered, was found to account for a significant increase in variance in both groups (COM: $F(1,97)=17.58$, $p<.01$; STU: $F(1,143)=29.53$, $p<.01$). The combined variables accounted for a moderate proportion of the variance of Negative Affect for both samples (COM: $R^2=.61$; STU: $R^2=.49$).

Depression

Table 8 reveals that Purpose in Life, the first variable entered, contributed a significant proportion of the variance to Depression in both samples (COM: $R^2=.46$, $F(1,101)=86.91$, $p<.01$; STU: $R^2=.36$, $F(1,147)=82.92$, $p<.01$). Locus of Control, the next variable entered accounted for a significant increase in R^2 of .024 in the Community sample ($F(1,146)=4.80$, $p<.05$) but failed to add a significant increase in variance in the Student group ($F(1,100)=3.44$, n.s.). Assertiveness Anxiety, which was entered next, failed to add a significant increase in R^2 for either sample. Assertiveness Behaviour, entered next, did not account for a significant increase in R^2 for either sample. Hassles added a significant contribution to the variance, beyond the personality variables in both groups (COM: $F(1,97)=12.64$, $p<.01$; STU: $F(1,143)=8.43$, $p<.01$). A moderate proportion of the variance of Depression was accounted for by the combined variables in both samples (COM: $R^2=.55$; STU: $R^2=.43$).

Summary

Although the two samples presented somewhat different results, Purpose in Life contributed a significant proportion of the variance to each dependent variable in both groups. Locus of Control accounted for a significant increase in R^2 for the Student sample in two cases and for the Community sample in one case. The other personality variables were found to contribute a significant increase to R^2 occasionally in both samples. In general, there was no single personality variable that consistently made a significant increase to the variance of the well-being measures beyond that of Purpose in Life. Hassles accounted for a significant increase in variance for Negative Affect and Depression in both samples, beyond the contributions of the personality variables. While the increases attributable to Hassles were significant, they were not substantial in terms of the total variance explained in well-being.

Subsidiary Analysis

The results obtained from the second major analysis indicated that Purpose in Life consistently contributed the greatest proportion of variance to the well-being measures. However, because Purpose in Life was entered into the equation first, this result might simply be a consequence of placing the variable in the multiple regression analyses in that order. To check for this possibility an alternative series of hierarchically arranged multiple regression analyses were run, changing the order of the predictor variables. As in the previous analyses, these analyses were run on the residuals obtained by partialling out social desirability from the dependent variables. The personality variables, Locus of Control, Assertiveness Anxiety, Assertiveness Behaviour, and Purpose in Life, were entered in that order. Since Purpose in Life was the final personality variable entered, it had the least possibility of contributing large increases in variance to the well-being measures.

Table 9 presents the summary data of the subsidiary multiple regression analyses, showing the relative contributions of the personality variables and Hassles on the well-being measures for each sample. The squared multiple correlation (R^2), R^2 -change, F values and their significance are provided for each independent variable. Even though entered last, Purpose in Life consistently accounted for significant and substantial increases in R^2 for each well-being measure in both samples, as in the previous analysis. Locus of Control, the first variable entered, generally accounted for a significant proportion of the variance for each well-being measure, in both samples. However, in the Community group these contributions to R^2 , while significant, were insubstantial. Assertiveness Anxiety, entered next, added significant but also insubstantial increases to R^2 for each well-being measure. Assertiveness Behaviour entered next, failed to contribute a significant increase to the variance of the well-being measures except in one case.

TABLE 9: SUMMARY OF SUBSIDIARY MULTIPLE REGRESSION ANALYSES,
FOR EACH WELL-BEING MEASURE, FOR COMMUNITY AND STUDENT SAMPLES

<u>VAR</u>	<u>INDEP VAR</u>	<u>COMMUNITY</u>				<u>STUDENT</u>			
		R ²	R ² change	f	p	R ²	R ² change	f	p
Life 3	Locus of Control	.03	-	3.53	n.s.	.13	-	22.89	<.01
	Assertiveness Anxiety	.11	.078	8.81	<.01	.17	.036	6.33	<.05
	Assertiveness Behaviour	.12	.010	1.11	n.s.	.17	.000	.003	n.s.
	Purpose in Life (N)	.48	.36 (103)	67.98	<.01	.33	.16 (149)	34.21	<.01
Positive Affect	Locus of Control	.05	-	5.75	<.05	.18	-	31.49	<.01
	Assertiveness Anxiety	.13	.078	9.11	<.01	.25	.070	13.65	<.01
	Assertiveness Behaviour	.17	.038	4.68	<.05	.25	.003	.504	n.s.
	Purpose in Life (N)	.42	.25 (103)	42.10	<.01	.39	.14 (149)	34.13	<.01
Negative Affect	Locus of Control	.12	-	14.07	<.01	.21	-	38.94	<.01
	Assertiveness Anxiety	.27	.15	21.35	<.01	.26	.055	10.98	<.01
	Assertiveness Behaviour	.27	.000	.030	n.s.	.26	.000	.000	n.s.
	Purpose in Life (N)	.54	.27 (103)	58.74	<.01	.39	.13 (149)	29.84	<.01
Depression	Locus of Control	.13	-	15.88	<.01	.16	-	27.70	<.01
	Assertiveness Anxiety	.21	.079	10.13	<.01	.21	.052	9.77	<.01
	Assertiveness Behaviour	.22	.007	.910	n.s.	.21	.004	.783	n.s.
	Purpose in Life (N)	.49	.27 (103)	51.25	<.01	.39	.18 (149)	43.26	<.01

CHAPTER VII

DISCUSSION

Before reintroducing the hypotheses, it is necessary to consider why each of the major analyses showed inconsistencies between samples, at least to some extent. A factor which may have contributed to these inconsistencies is the differences between the groups on absolute levels of stressors, personality characteristics, and well-being, prior to the analyses. The results of the t-tests provided evidence for these types of differences between the samples. While stressor levels were similar for both groups, personality characteristics and levels of well-being reflected some differences. The Student group had a more internal locus of control and a stronger sense of meaning in life. In contrast, the Community group was more depressed and experienced more negative affect. These factors could have influenced the subsequent results by contributing to the differences found between groups.

In addition, the distribution of sex and marital status were noticeably different for the two samples. This could also have an effect on the results, although this is only speculative since socio-demographic information was not included in the analyses.

Hypothesis 1 predicted that each of the personality variables (locus of control, meaning in life and assertiveness) would interact with stressors to moderate between stressors and well-being. To consider this hypothesis, each personality variable will be discussed in turn.

Locus of Control and Hassles interacted significantly to predict well-being in the Student sample. This finding provides support for the hypothesis since Locus of Control appears to moderate the effects of stressors, thereby producing well-being or preventing negative well-being. However, these interactions failed to account for a substantial amount of the variance in well-being, and were not found in the Community sample. Therefore, their importance should be regarded with caution. The main effects of Locus of Control and Hassles

significantly predicted all well-being measures, indicating that they have an important relationship to well-being. These results suggest that an individual with an internal locus of control would experience a sense of well-being while a person with an external locus of control would experience an absence of well-being. Similarly, a person with low stressors would be inclined towards a sense of well-being, while this would not be true for an individual with high stressors.

Purpose in Life and Hassles interacted significantly to predict the "negative" well-being measures for both samples, and Life 3 in the Community group. This supports the hypothesis since Purpose in Life can be viewed as moderating the effects of stressors, thereby preventing negative outcomes, or in the last case, producing well-being. However, the amount of variance accounted for by the interactions is again small, making it necessary to regard this interpretation with caution. Purpose in Life, as a main effect, was consistently significant in predicting well-being, suggesting that an individual with a strong sense of meaning in life is likely to experience well-being. Hassles, as a main effect, is also significant but only in regard to predicting the "negative" well-being measures. This indicates that individuals with high stressors are likely to experience an absence of well-being.

The two assertiveness measures, Assertiveness Anxiety and Assertiveness Behaviour, show a similar pattern of results. Neither of these variables interact with Hassles, suggesting that Assertiveness does not buffer the effects of stressors as predicted in the hypothesis. Assertiveness Anxiety, as a main effect, is consistently significant in predicting well-being, and Assertiveness Behaviour is also generally significant in predicting well-being. This indicates that assertive individuals would be likely to experience well-being. Hassles, as a main effect, was also significant here. These results suggest that persons with high stressors would be inclined towards an absence of well-being.

Overall, the results of the first major analyses only gave partial support to the hypothesis. While personality interacted with Hassles to buffer the effects of stressors on well-being at times, these interactions were not consistent across samples and did not occur with the assertiveness measures. When they did occur, they accounted for only a small amount of the variance in well-being.

The failure of stressors to consistently interact with personality to effect an outcome, is not a unique finding of the present study. As mentioned earlier, Lefcourt, Miller, Ware & Sherk (1981) in a number of studies focusing on locus of control and mood disturbance, reported interactions between stressful life events and locus of control intermittently. Lefcourt et.al. (1981) concluded that the differences in the results of the studies were due to the measurement instrument employed. When the measures reflected immediate life events, the interaction was not found, but when the measure reflected remote life events, locus of control interacted with stressful life events, resulting in a lower disturbance of moods. The conclusions reported by Lefcourt et.al. (1981) implied that locus of control functioned to buffer the effects of stressors over the long term, but made little impact on the immediate situation.

Kobasa and her colleagues (Kobasa, 1979; Kobasa, Maddi, Courington, 1981; Kobasa, Maddi & Kahn, 1982; Kobasa & Puccetti, 1983) also failed to find consistent interactions between hardiness and stressful life events in predicting illness onset. An example of their failure to find an interaction was reported in a prospective investigation (1981), mentioned previously, focusing on the relationship between stressful life events, constitutional predisposition, hardiness and illness. However, in an alternative analysis of the data (1982), which eliminated constitutional factors from the predictor variables, stressful life events were found to interact with hardiness in predicting illness onset.

These studies, together with evidence provided by the present investigation, illustrate the tenuous nature of the interactive relationship between stress and personality. The pattern that emerges from the present study supports the view that personality and recent stressors moderate well-being, through an additive rather than interactive function.

Hypothesis 2 predicted that the combined personality variables (locus of control, meaning in life, and assertiveness) would explain a greater proportion of the variance of well-being than any single personality variable.

In the analysis to test this hypothesis, Purpose in Life, which was entered first, consistently accounted for a significant and substantial proportion of the variance of well-being. Locus of Control and the

assertion variables occasionally contributed to an increase in R^2 , but overall, were relatively unimportant. The entry order of the predictor variables was changed to explore what happened to Purpose in Life when entered last. As in the previous analysis, Purpose in Life consistently accounted for significant and substantial increases in the variance of well-being. However, in the changed order, Locus of Control and Assertiveness Anxiety also added significant increases to the variance of well-being.

Overall, the personality variables jointly accounted for a greater percentage of the variance in well-being than any single variable, giving support to the hypothesis. However, it is clear from the results of the analyses that Purpose in Life has the strongest relationship to well-being. Presumably an individual with a strong sense of meaning in life, is predisposed towards well-being. It can be argued from the results of the analyses, that these personality variables are closely related and share common characteristics, so that the order the predictor variables are entered into the multiple regression analysis, will to some extent determine their importance. A factor analysis of all of the items in each of the personality measures could firmly establish the essence of the personality factor or factors that account for the variance of well-being. This was not undertaken here because the subject numbers were too low relative to the number of variables involved.

These results generally confirm the work of Antonovsky (1979) and Kobasa and her colleagues (Kobasa, 1979; Kobasa et.al. 1981, Kobasa et.al. 1982; Kobasa et.al. 1983) on personality variables functioning together to constitute a "healthful" personality style. Since health and well-being are influenced by similar personality styles this lends evidence in support of the relationship between these two concepts.

Implications

The present study has several implications for the measurement of stressors as well as for the structure of well-being.

The results of the first major analyses demonstrated that Hassles as a main effect, generally had a substantial relationship to "negative" well-being. That is, Hassles consistently predicted depression and negative affect. This lends support to the studies which view Hassles

as a good predictor of adaptational outcomes (Kanner et.al. 1981; DeLongis, Coyne, Dakoh, Falkman & Lazarus, 1982). While life events have shown only a modest relationship to well-being (Kammann, 1982; Diener, 1983), the present study provides evidence for a more substantial relationship between chronic daily stressors and well-being, or at least "negative" well-being.

The second major analysis indicated that Hassles contributed modestly to the variance of well-being, after the effects of personality had been removed. These results provide additional evidence in support of the relationship between stressors and well-being. Since Hassles was entered last, it is possible that the variable shares some of the characteristics of the personality variables.

There has been intense controversy over the issue of whether positive and negative affect are independent or are negatively associated. While Bradburn (1969) found, based upon his Affect Balance Scale, the two constructs to be statistically independent, Kammann and his colleagues (Kammann, Christie, Irwin & Dixon, 1979; Kammann, Farry, & Herbison, 1982) found with their Affectometer, that Positive and Negative Affect correlate strongly and inversely. This controversy was dealt with at length in a recent article by Diener (1983) who concludes that positive and negative affect are dependent at a particular moment in time, while average levels of affect over longer time spans are statistically independent. Warr, Barter & Brownbridge (1983) present a number of explanations in support of the independence of positive and negative affect. One of the explanations propose that the negative intercorrelations of positive and negative affect may arise as a result of the response format used. This occurs when respondents identify the proportion of the stated period in which they have experienced a feeling (such as in the Affectometer 2), instead of giving a response which is relative to a personal norm.

Although the Affectometer 2 was used in the present study, and the results showed the expected statistical negative intercorrelations between positive and negative affect, as mentioned previously, a decision was made to treat Positive and Negative Affect separately in the analyses. The results of the analyses provided support for this decision. In the first major analysis, identical predictor variables consistently accounted

for a substantially larger amount of the variance in Negative Affect than in Positive Affect. While Positive Affect functioned similarly in the analyses to Life 3, a global measure of well-being, Negative Affect closely resembled the Depression measure. This suggests that positive and negative affect are two separate dimensions of well-being, rather than an inverse reflection of one another. In other words, well-being is not simply a product of the absence of negative affect and depression, but appears to be a combination of the absence of negative well-being plus another unique factor.

The second major analyses also provided support for the independence of positive and negative affect. While entering Hassles into the equation significantly increased the variance of Negative Affect and Depression, it failed to significantly add to the variance of Positive Affect or Life 3. This indicates a relationship between stressors and Negative Affect which was not found between stressors and Positive Affect.

The wider implications of the separate nature of positive and negative well-being are important in the clinical situation. In terms of treatment approach, this implies a difference between alleviating depression and assisting a client to develop a sense of well-being. The results drawn from the present study suggest that treating clients for depression will not automatically increase their sense of well-being.

Conclusions and Suggestions for Future Research

The findings from this study indicate that personality has an important relationship to well-being. Locus of control, meaning in life and assertiveness each appear to have an additive rather than interactive, relationship with stressors in moderating well-being. Meaning in life demonstrates the strongest relationship to well-being, while the personality variables in combination constitute a personality style which accounts for a moderate proportion of the variance in well-being. This suggests that individuals with this personality style are predisposed towards a sense of well-being. In the present study, personality and stressors were found to have a stronger relationship with negative well-being measures than with positive well-being measures. This gives support to the view that two independent factors contribute to the structure of well-being.

Although the present study provided evidence for the relationship between stressors, personality and well-being, further research is clearly needed in this area. Several suggestions for future research will be discussed.

While the present model has been useful, it could be expanded to incorporate the consideration of coping styles. It is possible that for individuals who adapt a particular type of coping style, personality has a different function than for individuals using an alternative coping style. Another expansion of the model might involve the inclusion of a positive life events measure such as "Uplifts" (Kanner et.al., 1981) to explore how personality relates to positive events and well-being. The model might also be extended to include a measurement of remote stressors in order to ascertain whether the relationship of stressors and personality becomes interactive, as suggested by Lefcourt et.al. (1981).

As discussed previously a refinement of the personality style resulting from the constitution of several related personality variables is needed. A factor analysis of all personality items from each scale could produce an improved measure which could be used in subsequent studies.

Finally during the present study, the author was aware of the limitations inherent in the design of the locus of control scale because of the instrument's failure to include control through a deity. Many respondents commented upon this issue in the space which was provided at the end of their questionnaire. Therefore it might be an advantage for future research to develop a locus of control scale which includes this specific dimension of control.

In conclusion, while a number of questions remain in this area, the evidence presented here strongly suggests that personality factors play an important role in an individual's ability to achieve a sense of well-being. It is a significant development in contemporary psychology to focus on the scientific investigation of well-being in addition to the more traditional emphasis on mental illness. In the final analysis, the achievement of well-being is one of the most basic and essential ingredients contributing to a fulfilling life experience.

REFERENCES

- Andrews, F.M. & Withey, S.B. (1976). *Social indicators of well-being: America's perception of life quality*. New York: Plenum.
- Antonovsky, A. (1979). *Health, stress, and coping*. San Francisco: Jossey - Bass Inc.
- Bradburn, N.M. (1969). *The structure of psychological well-being*. Chicago: Aldine.
- Bradburn, N.M. & Caplovitz, D. (1965). *Reports on Happiness*. Chicago: Aldine.
- Campbell, A., Converse, P.E. & Rodgers, W.L. (1976). *The quality of American life*. New York: Russell Sage Foundation.
- Cantril, H. (1965). *The pattern of human concerns*. New Brunswick, N.J.: Rutgers University Press.
- Carkhuff, R., & Berenson, G. (1976). *Beyond Counselling and Therapy* (2nd ed) New York: Holt, Rinehart & Winston.
- Chamberlain, K. (1982). *Perceptions of well-being in Palmerston North*. Occasional papers in psychology, Massey University, No. 8.
- Crumbaugh, J. (1968). Cross-validation of Purpose-in-Life Test based on Frankl's concepts. *Journal of Individual Psychology*, 24, 75-81.
- Dahlstrom, W.G. & Welsh, G.S. (1960). *An MMPI handbook: A guide to use in clinical practice and research*. Minneapolis: University Minn. Press.
- Davison, G. & Neale, J. (1974). *Abnormal Psychology: an experimental clinical approach*. (2nd ed.) New York: John Wiley & Sons.
- Dawley, H.H. & Wenrich, W.W. (1976). *Achieving Assertive Behavior*. Belmont: Wadsworth Publishing Company, Inc.

- DeLongis, A., Coyne, J.C., Dakof, S.F., Folkman, S. & Lazarus, R.D. (1982). Relationship of daily hassles, uplifts, and major life events to health status. *Health Psychology, 1*, (2), 119-136.
- Diener, E. (1983). *Subjective Well-Being*. Unpublished manuscript, University of Illinois at Champaign - Urbana.
- Eisler, R.M., Hersen, M., Miller, P. & Blanchard, E.B. (1975). Situational Determinants of Assertive Behavior. *Journal of Consulting and Clinical Psychology, 43* (3), 330-340.
- Eisler, R.M., Miller, P.M. & Hersen, M. (1973). Components of assertive behavior. *Journal of Clinical Psychology, 29*, 295-299.
- Fabry, J.B. (1968). *The pursuit of meaning*. Boston: Beacon Press.
- Fellows, E.W. (1966). Happiness: A survey of research. *Journal of Humanistic Psychology, 6*, 17-29.
- Frankl, V. (1955). *The Doctor and the Soul*. New York: Bantam Books, Inc.
- Frankl, V. (1959). *Man's Search for Meaning*. London: Hodder & Stoughton Ltd.
- Frankl, V. (1967). *Psychotherapy and Existentialism*. New York: Simon & Schuster.
- Fried, M. (1982). Endemic stress: the psychology of resignation and the politics of scarcity. *American Journal of Orthopsychiatry, 52* (1), 4-19.
- Fromm, E. (1941). *Escape from Freedom*. New York; Farror & Rinehart.
- Gambrill, E. & Richey, C. (1975). An assertion inventory for use in assessment and research. *Behavior Therapy, 6*, 550-561.
- Hartwig, W.H., Dickson, A., & Anderson, H.N. (1980). Locus of control and assertion. *Psychological Reports, 46*, 1345-1346.
- Heimberg, R.G., Montgomery, D., Madsen C.H. & Heimberg, J.S. (1977). Assertion Training: A review of the literature. *Behavior Therapy, 8* (5), 953-971.

- Joe, V.C. (1971). Review of the internal-external control construct as a personality variable. *Psychological Reports*, 28, 619-640.
- Johnson, J.H. & Sarason, I.G. (1978). Life stress, depression and anxiety: internal-external control as a moderator variable. *Journal of Psychosomatic Research*, 22, 205-208.
- Kammann, R. (1982). *Personal circumstances and life events as poor predictors of happiness*. Paper presented at the 90th Annual Convention of the American Psychological Association, Washington, D.C.
- Kammann, R. (1983). Objective Circumstances, life satisfactions, and general well-being: consistencies across time and place. *New Zealand Journal of Psychology*, 12, 14-22.
- Kammann, R., Christie, D., Irwin, R., & Dixon, G. (1979). Properties of an inventory to measure happiness (and psychological health). *New Zealand Psychologist*, 8, 1-12.
- Kammann, R., Farry, M., & Herbison, P. (1984). The analysis and measurement of happiness as a sense of well-being. In press, *Social Indicators Research*.
- Kammann, R. & Flett, R. (1983). Affectometer 2: A scale to measure current level of general happiness. *Australian Journal of Psychology*, 35, 257-263.
- Kanner, A.D., Coyne J.C., Schaefer, C. & Lazarus, R.S. (1981). Comparison of two modes of stress measurement: daily hassles and uplifts versus major life events. *Journal of Behavioral Medicine*, 4 (1), 1-39.
- Kerlinger, F.N. & Pedhazur, E.J. (1973). *Multiple regression in behavioral research*. New York: Holt, Rinehart & Winston, Inc.
- Kobasa, S. (1979). Stressful life events, personality and health: an inquiry into hardiness. *Journal of Personality and Social Psychology*, 37 (1), 1-11.
- Kobasa, S., Maddi, S. & Courington, S. (1981). Personality and Constitution as Mediators in the Stress-Illness relationship. *Journal of Health and Social Behavior*, 22 (4), 368-378.

- Kobasa, S., Maddi, S. & Kahn, S. (1982). Hardiness and Health: a prospective study. *Journal of Personality and Social Psychology*, 42 (1), 168-177.
- Kobasa, S. & Puccetti, M. (1983). Personality and social resources in stress resistance. *Journal of Personality and Social Psychology*, 45 (4), 839-850.
- Kotchen, T.A. (1960). Existential Mental Health: An empirical approach. *Journal of Individual Psychology*, 16, 175-181.
- Kuypers, J.A. (1971). Internal-external locus of control and ego-functioning correlates in the elderly. *Gerontologist*, 12, 168-173.
- Langer, E. & Rodin, J. (1976). The effects of choice and enhanced personal responsibility for the aged: A field experiment in an institutional setting. *Journal of Personality and Social Psychology*, 34 (2), 191-195.
- Langone, M. (1979). Assertiveness and Lewinsohn's theory of depression: An empirical test. *Behavior therapist*, 2, 21.
- Lazarus, R.S. & DeLongis, A. (1983). Psychological stress and coping in aging. *American Psychologist*, 38 (3), 245-254.
- Lea, G. & Paquin, M. (1981). Assertiveness and Clinical Depression. *Behavior Therapist*, 4 (2), 9-10.
- Lefcourt, H. (1976). *Locus of control: current trends in theory and research*. New Jersey: Lawrence Erlbaum Associates.
- Lefcourt, H.M. (1980). Locus of control and coping with life's events. In Staub, E. (ed) *Personality: Basic aspects and current research*, Englewood Cliffs, N.J.: Prentice-Hall Inc.
- Lefcourt, H.M., Miller, R.S., Ware, E.E., and Sherck, D. (1981). Locus of Control as a modifier of the relationship between stressors and moods. *Journal of Personality and Social Psychology*, 41 (2), 357-369.
- Maddi, S. (1967). The existential neurosis. *Journal of Abnormal Psychology*, 72 (4), 311-325.

- Maslow, A. (1966). Comments on Dr. Frankl's paper. *Journal of Humanistic Psychology*, 6, 107-112.
- May, R. (1953). *Man's Search for Himself*, New York: Norton & Company, Inc.
- Moum, T. (1983). *Resignation and quality of life*. Paper presented at the 1983 World Conference on Systems, Caracas, Venezuela.
- Palmore, E. & Luikart, C. (1972). Health and social factors related to life satisfaction. *Journal of Health & Social Behavior*, 13, 68-80.
- Pervin, L.A. (1960). Existentialism, Psychology and Psychotherapy. *American Psychologist*, 15, 305-309.
- Petrie, K. & Rotheram, M.J. (1982). Insulators against stress: self esteem and assertiveness. *Psychological Reports*, 50, 963-966.
- Rabkin, J. & Struening E.L. (1976). Life events, stress and illness. *Science*, 194, 1013-1020.
- Reich, J.W. & Zautra, A. (1981). Life events and personal causation: Some relationships with satisfaction and distress. *Journal of Personality and Social Psychology*, 41 (5), 1002-1012.
- Reid, D.W., Haas, G. & Hawkings, D. (1977). Locus of desired control and positive self-concept of the elderly. *Journal of Gerontology*, 32, 441-450.
- Reid, D. & Ziegler, M. (1980). Validity and stability of a new desired control measure pertaining to psychological adjustment of the elderly. *Journal of Gerontology*, 35 (3), 395-402.
- Replogle, W.H., O'Bannon, R.M., McCullough, P.W., Cashion, L.H. (1980). Locus of control and assertive behavior. *Psychological Reports*, 47, 769-770.
- Rich, A.R. & Schroeder, H. (1976). Research Issues in assertiveness training. *Psychological Bulletin* 83 (6), 1081-1096.
- Robinson, J.P. & Shaver, P.R. (1973). *Measures of social psychological attitudes*. (rev. ed.). Michigan: Survey Research Centre.

- Rodda, B.E., Miller, C.M., & Bruhn, J.G. (1971). Prediction of anxiety and depression patterns among coronary patients using a marker process analysis. *Behavioral Science*, 16, 482-489.
- Rodin, J. & Langer, E.J. (1977). Long-term effects of a control-relevant intervention with the institutionalized aged. *Journal of Personality and Social Psychology*, 35 (12) 897-902.
- Rotter, J.B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs*, 80 (1), 1-28.
- Rotter, J.B. (1975). Some problems and misconceptions related to the construct of internal versus external control of reinforcement. *Journal of Consulting and Clinical Psychology*, 43 (1), 56-67.
- Sanchez, V. & Lewinsohn, P.M. (1980). Assertive Behavior and Depression. *Journal of Consulting and Clinical Psychology*, 48 (1), 119-120.
- Schulz, R. (1976). Effects of control and predictability on the physical and psychological well-being of the institutionalized aged. *Journal of Personality and Social Psychology*, 35 (5), 565-575.
- Schulz, R. & Hanusa, B.H. (1978). Long-term effects of control and predictability enhancing interventions: findings and ethical issues. *Journal of Personality and Social Psychology*, 36 (11), 1194-1201.
- Thiel, H.G. Parker, D. & Bruce, T.A. (1973). Stress factors and the risk of myocardial infarction. *Journal of Psychosomatic Research*, 17, 43-57.
- Toves, T., Schill, T. & Ramanaiah, N. (1981). Sex differences, internal-external control, and vulnerability to life stress. *Psychological Reports*, 49, 508.
- Warehime, R. & Foulds, M. (1971). Perceived locus of control and personal adjustment. *Journal of Consulting and Clinical Psychology*, 37 (2), 250-252.
- Warr, P., Barter, J. & Brownbridge, G. (1983). On the independence of positive and negative affect. *Journal of Personality and Social Psychology*, 44 (3), 644-651.

- Weisskopf - Joelson, E. (1955). Some Comments on a Viennese school of psychiatry. *Journal of Abnormal and Social Psychology*, 51, 701-703.
- Wolk, S. (1976). Situational constraint as a moderator of the locus of control - adjustment relationship. *Journal of Consulting & Clinical Psychology*, 44, 420-427.
- Wolk, S. & Kurtz, J. (1975). Positive adjustment and involvement during aging and expectancy for internal control. *Journal of Consulting and Clinical Psychology*, 43 (2), 173-178.

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APPENDIX A: LETTER GIVEN TO THE RESPONDENTS

Massey University

PALMERSTON NORTH, NEW ZEALAND

TELEPHONES. 69-079, 69-089, 69-099.

In reply please quote

DEPARTMENT OF PSYCHOLOGY

Thank you for agreeing to complete our Life Assessment Survey. Your answers will be kept completely confidential, and the information you will provide will be analysed along with responses gained from 100 similar interviews in Palmerston North.

We are trying to find out how people in this community feel about specific experiences they have had, the sorts of hassles they encounter and how they perceive their lives in general .

We appreciate your co-operation, as it is important in studies of this type to obtain responses from all of the people who have been randomly selected.

Should you have any enquiries concerning the interview, please contact me (69-099, extension 2589) or the project supervisor, Kerry Chamberlain (69-099, extension 2300) through Massey University.

Yours sincerely



SHERYL ZIKA

PROJECT RESEARCH OFFICER

APPENDIX B: QUESTIONNAIRE USED IN THE PRESENT STUDY



LIFE ASSESSMENT SURVEY

People are different. They live in a variety of situations and they don't feel the same way about the events and circumstances that they encounter in day to day life.

In this study we are trying to find out about the experiences people have and how they feel about them.

This questionnaire looks at how you perceive your life. There are no right or wrong answers; an answer is right if it is true for you. It is important that you answer all questions as carefully and honestly as possible. We don't need to know your name and all the information you give will be kept strictly confidential.

Instructions

This is not a very long questionnaire, but it will take you some time to complete. Please choose a quiet place, free from distractions where you are not likely to be interrupted. While you may wish to discuss these questions with other people, please don't do this until you have answered them all. Work through the questions in one sitting at your own pace, without thinking too long about any single item. Most of the questions should be interesting, many will be easy - its your life not some unknown topic - but some questions will be hard. Answer them all as well as you can.

MASSEY UNIVERSITY
SOCIAL SCIENCE FACULTY

We experience many hassles in our daily lives. These hassles are irritants that can range from minor annoyances to fairly major pressures, problems or difficulties. They can occur few or many times.

Listed below are a number of ways in which a person can feel hassled. We want you to indicate the hassles that have happened to you in the past month. If a particular hassle did not happen to you in the last month, circle the 0 in the "Not at all" column below. If a particular hassle did occur in the last month, indicate how much of a problem it was for you by circling 1, 2, or 3 to indicate whether it was somewhat, moderately or extremely severe.

	0	1	2	3	
	Not at all	Somewhat	Moderately	Extremely	
Misplacing or losing things	0	1	2	3	<input type="checkbox"/> 5
Troublesome neighbours	0	1	2	3	<input type="checkbox"/>
Social obligations	0	1	2	3	<input type="checkbox"/>
Inconsiderate smokers.....	0	1	2	3	<input type="checkbox"/>
Troubling thoughts about your future	0	1	2	3	<input type="checkbox"/>
Thoughts about death	0	1	2	3	<input type="checkbox"/> 10
Health of a family member	0	1	2	3	<input type="checkbox"/>
Not enough money for clothing.....	0	1	2	3	<input type="checkbox"/>
Not enough money for housing	0	1	2	3	<input type="checkbox"/>
Concerns about owing money	0	1	2	3	<input type="checkbox"/>
Concerns about getting credit	0	1	2	3	<input type="checkbox"/> 15
Concerns about money for emergencies	0	1	2	3	<input type="checkbox"/>
Someone owes you money	0	1	2	3	<input type="checkbox"/>
Financial responsibility for someone who doesn't live with you	0	1	2	3	<input type="checkbox"/>
Cutting down on electricity, water, etc.....	0	1	2	3	<input type="checkbox"/>

For Office Use

1
 2
 3
 4

	0	1	2	3	
	Not at all	Somewhat	Moderately	Extremely	
Smoking too much.....	0	1	2	3	<input type="checkbox"/> 6
Use of alcohol	0	1	2	3	<input type="checkbox"/>
Personal use of drugs	0	1	2	3	<input type="checkbox"/>
Too many responsibilities.....	0	1	2	3	<input type="checkbox"/>
Decision about having children	0	1	2	3	<input type="checkbox"/>
Non-family members living in your house	0	1	2	3	<input type="checkbox"/> 25
Care for pet	0	1	2	3	<input type="checkbox"/>
Planning meals	0	1	2	3	<input type="checkbox"/>
Concerned about the meaning of life.	0	1	2	3	<input type="checkbox"/>
Trouble relaxing	0	1	2	3	<input type="checkbox"/>
Trouble making decisions	0	1	2	3	<input type="checkbox"/> 30
Problems getting along with fellow workers	0	1	2	3	<input type="checkbox"/>
Customers or clients give you a hard time	0	1	2	3	<input type="checkbox"/>
Home maintenance (inside)	0	1	2	3	<input type="checkbox"/>
Concerns about job security	0	1	2	3	<input type="checkbox"/>
Concerns about retirement	0	1	2	3	<input type="checkbox"/> 35
Laid-off or out of work	0	1	2	3	<input type="checkbox"/>
Don't like current work duties	0	1	2	3	<input type="checkbox"/>
Don't like fellow workers	0	1	2	3	<input type="checkbox"/>
Not enough money for basic necessities	0	1	2	3	<input type="checkbox"/>
Not enough money for food.....	0	1	2	3	<input type="checkbox"/> 40

For Office Use

	0	1	2	3	For Office Use
	Not at all	Somewhat	Moderately	Extremely	
Too many interruptions.....	0	1	2	3	<input type="checkbox"/>
Unexpected company.....	0	1	2	3	<input type="checkbox"/>
Too much time on hands.....	0	1	2	3	<input type="checkbox"/>
Having to wait.....	0	1	2	3	<input type="checkbox"/>
Concerns about accidents.....	0	1	2	3	<input type="checkbox"/> 45
Being lonely.....	0	1	2	3	<input type="checkbox"/>
Not enough money for health care...	0	1	2	3	<input type="checkbox"/>
Fear of confrontation.....	0	1	2	3	<input type="checkbox"/>
Financial security.....	0	1	2	3	<input type="checkbox"/>
Silly practical mistakes	0	1	2	3	<input type="checkbox"/> 50
Inability to express yourself.....	0	1	2	3	<input type="checkbox"/>
Physical illness.....	0	1	2	3	<input type="checkbox"/>
Side effects of medication.....	0	1	2	3	<input type="checkbox"/>
Concerns about medical treatment...	0	1	2	3	<input type="checkbox"/>
Physical appearance	0	1	2	3	<input type="checkbox"/> 55
Fear of rejection.....	0	1	2	3	<input type="checkbox"/>
Difficulties with getting pregnant...	0	1	2	3	<input type="checkbox"/>
Sexual problems that result from... physical problems.....	0	1	2	3	<input type="checkbox"/>
Sexual problems other than those resulting from physical problems...	0	1	2	3	<input type="checkbox"/>
Concerns about health in general....	0	1	2	3	<input type="checkbox"/> 60
Not seeing enough people.....	0	1	2	3	<input type="checkbox"/>

	0	1	2	3	For Office Use
	Not at all	Somewhat	Moderately	Extremely	
Friends or relatives too far away....	0	1	2	3	<input type="checkbox"/>
Preparing meals.....	0	1	2	3	<input type="checkbox"/>
Wasting time	0	1	2	3	<input type="checkbox"/>
Auto maintenance	0	1	2	3	<input type="checkbox"/> 65
Filling out forms	0	1	2	3	<input type="checkbox"/>
Neighbourhood deterioration.....	0	1	2	3	<input type="checkbox"/>
Financing children's education.....	0	1	2	3	<input type="checkbox"/>
Problems with employees.....	0	1	2	3	<input type="checkbox"/>
Problems on job due to being a woman or man	0	1	2	3	<input type="checkbox"/> 70
Declining physical abilities.....	0	1	2	3	<input type="checkbox"/>
Being exploited.....	0	1	2	3	<input type="checkbox"/>
Concerns about bodily functions.....	0	1	2	3	<input type="checkbox"/>
Rising prices of common goods.....	0	1	2	3	<input type="checkbox"/>
Not getting enough rest.....	0	1	2	3	<input type="checkbox"/> 75
Not getting enough sleep.....	0	1	2	3	<input type="checkbox"/>
Problems with aging parents.....	0	1	2	3	<input type="checkbox"/>
Problems with your children.....	0	1	2	3	<input type="checkbox"/>
Problems with persons younger than yourself.....	0	1	2	3	<input type="checkbox"/>
Problems with your lover.....	0	1	2	3	<input type="checkbox"/> 80
Difficulties seeing or hearing.....	0	1	2	3	<input type="checkbox"/>
Overloaded with family responsibilities.....	0	1	2	3	<input type="checkbox"/>

	0	1	2	3	
		Not at all			For Office Use
		Somewhat			
		Moderately			
		Extremely			
Too many things to do.....	0	1	2	3	<input type="checkbox"/>
Unchallenging work.....	0	1	2	3	<input type="checkbox"/>
Concerns about meeting high standards.	0	1	2	3	<input type="checkbox"/> 85
Financial dealings with friends or acquaintances.....	0	1	2	3	<input type="checkbox"/>
Job dissatisfactions.....	0	1	2	3	<input type="checkbox"/>
Worries about decisions to change jobs.	0	1	2	3	<input type="checkbox"/>
Trouble with reading, writing, or spelling abilities.....	0	1	2	3	<input type="checkbox"/>
Too many meetings.....	0	1	2	3	<input type="checkbox"/> 90
Problems with divorce or separation.	0	1	2	3	<input type="checkbox"/>
Trouble with arithmetic skills.....	0	1	2	3	<input type="checkbox"/>
Gossip.....	0	1	2	3	<input type="checkbox"/>
Legal problems.....	0	1	2	3	<input type="checkbox"/>
Concerns about weight.....	0	1	2	3	<input type="checkbox"/> 95
Not enough time to do the things you need to do	0	1	2	3	<input type="checkbox"/>
Television.....	0	1	2	3	<input type="checkbox"/>
Not enough personal energy.....	0	1	2	3	<input type="checkbox"/>
Concerns about inner conflicts.....	0	1	2	3	<input type="checkbox"/>
Feel conflicted over what to do....	0	1	2	3	<input type="checkbox"/> 100
Regrets over past decisions.....	0	1	2	3	<input type="checkbox"/>
Menstrual (period) problems.....	0	1	2	3	<input type="checkbox"/>
The weather.....	0	1	2	3	<input type="checkbox"/>

	0	1	2	3	
		Not at all			For Office Use
		Somewhat			
		Moderately			
		Extremely			
Nightmares.....	0	1	2	3	<input type="checkbox"/>
Concerns about getting ahead.....	0	1	2	3	<input type="checkbox"/> 105
Hassles from boss or supervisor...	0	1	2	3	<input type="checkbox"/>
Difficulties with friends.....	0	1	2	3	<input type="checkbox"/>
Not enough time for family.....	0	1	2	3	<input type="checkbox"/>
Transportation problems.....	0	1	2	3	<input type="checkbox"/>
Not enough money for transportation..	0	1	2	3	<input type="checkbox"/> 110
Not enough money for entertainment and recreation.....	0	1	2	3	<input type="checkbox"/>
Shopping.....	0	1	2	3	<input type="checkbox"/>
Prejudice and discrimination from others	0	1	2	3	<input type="checkbox"/>
Property, investments or taxes....	0	1	2	3	<input type="checkbox"/>
Not enough time for entertainment and recreation.....	0	1	2	3	<input type="checkbox"/> 115
Yardwork or outside home maintenance.....	0	1	2	3	<input type="checkbox"/>
Concerns about news events.....	0	1	2	3	<input type="checkbox"/>
Noise.....	0	1	2	3	<input type="checkbox"/>
Crime.....	0	1	2	3	<input type="checkbox"/>
Traffic.....	0	1	2	3	<input type="checkbox"/> 120
Pollution.....	0	1	2	3	<input type="checkbox"/>
Have we missed any of your hassles? Yes <input type="checkbox"/> No <input type="checkbox"/>					<input type="checkbox"/>
If so, please write them in here, and indicate their severity.					<input type="checkbox"/>
_____	0	1	2	3	<input type="checkbox"/>
_____	0	1	2	3	<input type="checkbox"/>

Has there been a recent change in your life that affected how you answered these questions? Yes No

If so, please tell us what it was

How do you feel about how happy you are? (Circle the appropriate number).

1. Terrible
2. Very dissatisfied
3. Mostly dissatisfied
4. Mixed about equally satisfied or dissatisfied
5. Mostly satisfied
6. Very satisfied
7. Delighted

How do you feel about your life as a whole? (Circle the appropriate number)

1. Terrible
2. Very dissatisfied
3. Mostly dissatisfied
4. Mixed about equally satisfied or dissatisfied
5. Mostly satisfied
6. Very satisfied
7. Delighted

For each of the following statements, circle the number that would be most nearly true for you. Note that the numbers always extend from one extreme feeling to its opposite kind of feeling. "Neutral" implies no judgement either way. Try to use this rating as little as possible.

I am usually:

1	2	3	4	5	6	7
completely bored			(neutral)			exuberant enthusiastic

Life to me seems:

7	6	5	4	3	2	1
always exciting			(neutral)			completely routine

For Office Use

125

130

In life I have:

1	2	3	4	5	6	7
no goals or aims at all			(neutral)			very clear goals and aims

My personal existence is:

1	2	3	4	5	6	7
utterly meaningless without purpose			(neutral)			very purposeful and meaningful

Every day is:

7	6	5	4	3	2	1
constantly new and different			(neutral)			exactly the same

If I could choose, I would:

1	2	3	4	5	6	7
prefer never to have been born			(neutral)			like nine more lives just like this one

After retiring, I would:

7	6	5	4	3	2	1
do some of the exciting things I have always wanted to			(neutral)			loaf completely the rest of my life

In achieving life goals I have:

1	2	3	4	5	6	7
made no progress whatever			(neutral)			Progressed to complete fulfillment

My life is:

1	2	3	4	5	6	7
empty, filled only with despair						running over with exciting good things

If I should die today, I would feel that my life has been:

7	6	5	4	3	2	1
very worthwhile			(neutral)			completely worthless

In thinking of my life, I:

1	2	3	4	5	6	7
often wonder why I exist			(neutral)			always see a reason for my being here

As I view the world in relation to my life, the world:

1	2	3	4	5	6	7
completely confuses me	(neutral)				fits meaningfully	
					with my life	

140

I am a:

1	2	3	4	5	6	7
very irresponsible	(neutral)				very responsible	
person					person	

Concerning man's freedom to make his own choices, I believe man is:

7	6	5	4	3	2	1
absolutely free to	(neutral)				completely bound by	
make all life choices					limitations of here-	
					dity and environ-	
					ment	

With regard to death, I am:

7	6	5	4	3	2	1
prepared and unafraid	(neutral)				unprepared and	
					frightened	

With regard to suicide, I have:

1	2	3	4	5	6	7
thought of it seriously	(neutral)				never given it a	
as a way out					second thought	

I regard my ability to find a meaning, purpose, or mission in life as:

7	6	5	4	3	2	1
very great	(neutral)				practically none	

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My life is;

7	6	5	4	3	2	1
in my hands and I am	(neutral)				out of my hands and	
in control of it					controlled by	
					external factors	

Facing my daily tasks is:

7	6	5	4	3	2	1
a source of pleasure	(neutral)				a painful and	
and satisfaction					boring experience	

I have discovered:

1	2	3	4	5	6	7
no mission or			(Neutral)		Clear-cut goals	
purpose in life					and a satisfying	
					life purpose	

Many people experience difficulty in handling social situations requiring them to assert themselves in some way, for example, turning down a request, asking a favour, giving someone a compliment, expressing disapproval or approval, etc. Please indicate your degree of discomfort or anxiety for each situation listed below by circling the appropriate number.

1 none
2 a little
3 a fair amount
4 much
5 very much

Turn down a request to borrow your car. 1 2 3 4 5

Compliment a friend..... 1 2 3 4 5

150

Ask a favour of someone that will mean time/work/effort for them..... 1 2 3 4 5

Resist sales pressure from sales-people who try to sell you things you don't want..... 1 2 3 4 5

Apologise when you know you've done something wrong..... 1 2 3 4 5

Turn down a request for a meeting or date..... 1 2 3 4 5

Admit to someone that you are afraid and ask that they be considerate..... 1 2 3 4 5

155

Tell a person you are intimately involved with when he/she says or does something that upsets you..... 1 2 3 4 5

Ask for a raise..... 1 2 3 4 5

Admit "I don't know" when you don't know about something..... 1 2 3 4 5

Turn down a request to borrow money. 1 2 3 4 5

Ask personal questions..... 1 2 3 4 5

160

Stop a conversation with a talkative friend..... 1 2 3 4 5

	1	2	3	4	5	
	1 none 2 a little 3 a fair amount 4 much 5 very much					
Ask for constructive criticism.....	1	2	3	4	5	<input type="checkbox"/>
Start a conversation with a stranger.	1	2	3	4	5	<input type="checkbox"/>
Compliment a person you are romantically involved with or interested in.	1	2	3	4	5	<input type="checkbox"/>
Request a meeting or a date with a person.....	1	2	3	4	5	<input type="checkbox"/> 166
Your first request for a meeting is turned down and you ask the person again at a later time.....	1	2	3	4	5	<input type="checkbox"/>
Admit you are confused about something being talked about and ask for a clearer explanation.....	1	2	3	4	5	<input type="checkbox"/>
Apply for a job.....	1	2	3	4	5	<input type="checkbox"/>
Ask whether you have offended someone.....	1	2	3	4	5	<input type="checkbox"/>
Tell someone that you like them.....	1	2	3	4	5	<input type="checkbox"/> 72
Ask for expected service when it is not given (e.g. in a restaurant).....	1	2	3	4	5	<input type="checkbox"/>
Discuss openly with the person his/her criticism of your behaviour.....	1	2	3	4	5	<input type="checkbox"/>
Return faulty items (e.g. restaurant or shop).....	1	2	3	4	5	<input type="checkbox"/>
Express an opinion that differs from that of the person you are talking to.	1	2	3	4	5	<input type="checkbox"/>
Resist sexual advances when you are not interested.....	1	2	3	4	5	<input type="checkbox"/> 175
Tell the person when you feel he/she has done something that is unfair to you.....	1	2	3	4	5	<input type="checkbox"/>
Accept a date.....	1	2	3	4	5	<input type="checkbox"/>
Tell someone good news about yourself.	1	2	3	4	5	<input type="checkbox"/>
Resist pressure to drink.....	1	2	3	4	5	<input type="checkbox"/>
Say no when someone makes a completely unfair demand of you.....	1	2	3	4	5	<input type="checkbox"/> 180

	1	2	3	4	5	
	1 none 2 a little 3 a fair amount 4 much 5 very much					
Quit a job.....	1	2	3	4	5	<input type="checkbox"/>
Resist pressure to use drugs or mood altering substances.....	1	2	3	4	5	<input type="checkbox"/>
Discuss openly with the person his/her criticism of your work.....	1	2	3	4	5	<input type="checkbox"/>
Request the return of borrowed items.	1	2	3	4	5	<input type="checkbox"/>
Receive compliments.....	1	2	3	4	5	<input type="checkbox"/> 181
Continue to talk with someone who disagrees with you.....	1	2	3	4	5	<input type="checkbox"/>
Tell a friend or someone with whom you work when he/she says or does something that upsets you.....	1	2	3	4	5	<input type="checkbox"/>
Ask a person who is annoying you in a public situation to stop.....	1	2	3	4	5	<input type="checkbox"/>

Now we want you to answer these items a second time. This time indicate the probability or likelihood of your displaying the behaviour if actually presented with the situation. For example, if you rarely apologise when you are at fault, you would circle the "4" after that item. Circle the appropriate number for each item below.

	1	2	3	4	5	
	1 always do it 2 usually do it 3 do it about half the time 4 rarely do it 5 never do it					
Turn down a request to borrow your car.	1	2	3	4	5	<input type="checkbox"/>
Compliment a friend.....	1	2	3	4	5	<input type="checkbox"/> 190
Ask a favour or someone that will mean time/work/effort for them	1	2	3	4	5	<input type="checkbox"/>
Resist sales pressure from salespeople who try to sell you things you don't want.....	1	2	3	4	5	<input type="checkbox"/>
Apologise when you know you've done something wrong.....	1	2	3	4	5	<input type="checkbox"/>
Turn down a request for a meeting or date.....	1	2	3	4	5	<input type="checkbox"/>
Admit to someone that you are afraid and ask that they be considerate.....	1	2	3	4	5	<input type="checkbox"/> 195

	1	2	3	4	5
Tell a person you are intimately involved with when he/she says or does something that upsets you.....	1	2	3	4	5
Ask for a raise.....	1	2	3	4	5
Admit "I don't know" when you don't know about something.....	1	2	3	4	5
Turn down a request to borrow money..	1	2	3	4	5
Ask personal questions.....	1	2	3	4	5
Stop a conversation with a talkative friend.....	1	2	3	4	5
Ask for constructive criticism.....	1	2	3	4	5
Start a conversation with a stranger.	1	2	3	4	5
Compliment a person you are romantically involved with or interested in..	1	2	3	4	5
Request a meeting or a date with a person.....	1	2	3	4	5
Your first request for a meeting is turned down and you ask the person again at a later time.....	1	2	3	4	5
Admit you are confused about something being talked about and ask for a clearer explanation.....	1	2	3	4	5
Apply for a job.....	1	2	3	4	5
Ask whether you have offended someone.....	1	2	3	4	5
Tell someone that you like them.....	1	2	3	4	5
Ask for expected service when it is not given (e.g. in a restaurant)....	1	2	3	4	5
Discuss openly with the person his/her criticisms of your behaviour.....	1	2	3	4	5
Return faulty items (e.g. restaurant or shop).....	1	2	3	4	5
Express an opinion that differs from that of the person you are talking to.....	1	2	3	4	5

	1	2	3	4	5
Resist sexual advances when you are not interested.....	1	2	3	4	5
Tell the person when you feel he/she has done something that is unfair to you.....	1	2	3	4	5
Accept a date.....	1	2	3	4	5
Tell someone good news about yourself.	1	2	3	4	5
Resist pressure to drink.....	1	2	3	4	5
Say no when someone makes a completely unfair demand on you.....	1	2	3	4	5
Quit a job.....	1	2	3	4	5
Resist pressure to use drugs or mood altering substances.....	1	2	3	4	5
Discuss openly with the person his/her criticism of your work.....	1	2	3	4	5
Request the return of borrowed items..	1	2	3	4	5
Receive compliments.....	1	2	3	4	5
Continue to talk with someone who disagrees with you.....	1	2	3	4	5
Tell a friend or someone with whom you work when he/she says or does something that upsets you.....	1	2	3	4	5
Ask a person who is annoying you in a public situation to stop.....	1	2	3	4	5

Next there are a number of statements which represent a variety of opinions. Please indicate how much you agree or disagree with each statement below by circling the appropriate letter(s).

SA Strongly agree
A Agree
D Disagree
SD Strongly disagree

Wars between countries seem inevitable despite efforts to prevent them.....	SA	A	D	SD
---	----	---	---	----

SA Strongly agree
 A Agree
 D Disagree
 SD Strongly disagree

It is usually true of successful people that their good breaks far outweighed their bad breaks.....	SA	A	D	SD	<input type="checkbox"/>	230
Many times I feel that we might just as well make many of our decisions by flipping a coin.....	SA	A	D	SD	<input type="checkbox"/>	
The actions of other people toward me many times have me baffled.....	SA	A	D	SD	<input type="checkbox"/>	
Getting a good job seems to be largely a matter of being lucky enough to be in the right place at the right time.....	SA	A	D	SD	<input type="checkbox"/>	
A great deal that happens to me is probably just a matter of chance....	SA	A	D	SD	<input type="checkbox"/>	
I feel that I have little influence over the way people behave.....	SA	A	D	SD	<input type="checkbox"/>	235
Much of the time the future seems uncertain to me.....	SA	A	D	SD	<input type="checkbox"/>	
Some people seem born to fail while others seem born for success no matter what they do.....	SA	A	D	SD	<input type="checkbox"/>	
It is difficult for ordinary people to have much control over what politicians do in office..	SA	A	D	SD	<input type="checkbox"/>	
I feel that many people could be described as victims of circumstances beyond their control.....	SA	A	D	SD	<input type="checkbox"/>	
It seems many times that the grades one gets in school are more dependent on the teachers' whims than on what the student can really do.....	SA	A	D	SD	<input type="checkbox"/>	240
It isn't wise to plan too far ahead because most things turn out to be a matter of good or bad fortune anyhow.....	SA	A	D	SD	<input type="checkbox"/>	
I can't understand how it is possible to predict other people's behaviour.....	SA	A	D	SD	<input type="checkbox"/>	

SA Strongly agree
 A Agree
 D Disagree
 SD Strongly disagree

When things are going well for me I consider it due to a run of good luck.....	SA	A	D	SD	<input type="checkbox"/>	
There's not much use in trying to predict which questions a teacher is going to ask on an examination...	SA	A	D	SD	<input type="checkbox"/>	
Most people don't realize the extent to which their lives are controlled by accidental happenings.....	SA	A	D	SD	<input type="checkbox"/>	245
I have usually found that what is going to happen will happen, regardless of my actions.....	SA	A	D	SD	<input type="checkbox"/>	
Most of the disappointing things in my life have contained a large element of chance.....	SA	A	D	SD	<input type="checkbox"/>	
I don't believe that a person can really be a master of his fate.....	SA	A	D	SD	<input type="checkbox"/>	
Success is mostly a matter of getting good breaks.....	SA	A	D	SD	<input type="checkbox"/>	
Events in the world seem to be beyond the control of most people...	SA	A	D	SD	<input type="checkbox"/>	250
I feel that most people can't really be held responsible for themselves since no one has much choice about where he was born or raised.....	SA	A	D	SD	<input type="checkbox"/>	
Many times the reactions of people seem haphazard to me.....	SA	A	D	SD	<input type="checkbox"/>	
There's not much use in worrying about things...what will be, will be.....	SA	A	D	SD	<input type="checkbox"/>	
Success in dealing with people seems to be more a matter of the other person's moods and feelings at the time rather than one's own actions.....	SA	A	D	SD	<input type="checkbox"/>	
I think that life is mostly a gamble.....	SA	A	D	SD	<input type="checkbox"/>	255
Many times I feel that I have little influence over the things that happen to me.....	SA	A	D	SD	<input type="checkbox"/>	

SA Strongly agree
 A Agree
 D Disagree
 SD Strongly disagree

Sometimes I feel that I don't have enough control over the direction my life is taking..... SA A D SD
 Life is too full of uncertainties.... SA A D SD

These items are either sentences or adjectives which describe different feelings about yourself and your life. For each item please circle the number that best describes how often you have had that feeling over the last month.

0 Not at all
 1 Occasionally
 2 Some of the time
 3 Often
 4 All the time

My life is on the right track..... 0 1 2 3 4
 I seem to be left alone when I don't want to be 0 1 2 3 4
 I feel I can do whatever I want to..... 0 1 2 3 4
 I think clearly and creatively..... 0 1 2 3 4
 I feel like a failure..... 0 1 2 3 4
 Nothing seems very much fun any more. 0 1 2 3 4
 I like myself..... 0 1 2 3 4
 I can't be bothered doing anything... 0 1 2 3 4
 I feel close to people around me..... 0 1 2 3 4

0 Not at all
 1 Occasionally
 2 Some of the time
 3 Often
 4 All of the time

I feel as though the best years of my life are over..... 0 1 2 3 4
 My future looks good..... 0 1 2 3 4
 I have lost interest in other people and don't care about them..... 0 1 2 3 4
 I have energy to spare..... 0 1 2 3 4
 I smile and laugh a lot..... 0 1 2 3 4
 I wish I could change some parts of my life..... 0 1 2 3 4
 My thoughts go around in useless circles..... 0 1 2 3 4
 I can handle any problems that come up 0 1 2 3 4
 My life seems stuck in a rut..... 0 1 2 3 4
 I feel loved and trusted..... 0 1 2 3 4
 I feel there must be something wrong with me..... 0 1 2 3 4
 Satisfied..... 0 1 2 3 4
 Lonely..... 0 1 2 3 4
 Free-and-easy..... 0 1 2 3 4
 Clear-headed..... 0 1 2 3 4
 Helpless..... 0 1 2 3 4
 Impatient..... 0 1 2 3 4
 Useful..... 0 1 2 3 4
 Depressed..... 0 1 2 3 4
 Loving..... 0 1 2 3 4
 Hopeless..... 0 1 2 3 4
 Optimistic..... 0 1 2 3 4
 Withdrawn..... 0 1 2 3 4
 Enthusiastic..... 0 1 2 3 4
 Good-natured..... 0 1 2 3 4

260

265

270

275

280

285

290

	0	1	2	3	4
	0 Not at all				
	1 Occasionally				
	2 Some of the time				
	3 Often				
	4 All of the time				
Discontented.....	0	1	2	3	4
Confused.....	0	1	2	3	4
Confident.....	0	1	2	3	4
Tense.....	0	1	2	3	4
Understood.....	0	1	2	3	4
Insignificant.....	0	1	2	3	4

How do you feel about your life as a whole? (Circle the appropriate number)

1. Terrible
2. Very dissatisfied
3. Mostly dissatisfied
4. Mixed about equally satisfied and dissatisfied
5. Mostly satisfied
6. Very satisfied
7. Delighted

Next are a number of statements concerning personal attitudes. Decide whether each item is true or false for you, and circle the appropriate letter.

T. True
F. False

Before voting I thoroughly investigate the qualifications of all the candidates.....	T	F	<input type="checkbox"/>	300
I never hesitate to go out of my way to help someone in trouble.....	T	F	<input type="checkbox"/>	
It is sometimes hard for me to go on with my work if I am not encouraged.....	T	F	<input type="checkbox"/>	
I have never intensely disliked anyone.....	T	F	<input type="checkbox"/>	
On occasion I have had doubts about my ability to succeed in life.....	T	F	<input type="checkbox"/>	
I sometimes feel resentful when I don't get my way.....	T	F	<input type="checkbox"/>	305
I am always careful about my manner of dress..	T	F	<input type="checkbox"/>	
My table manners at home are as good as when I eat out in a restaurant.....	T	F	<input type="checkbox"/>	

T. True
F. False

If I could get into a movie without paying for it and be sure I was not seen, I would probably do it.....	T	F	<input type="checkbox"/>	
On a few occasions, I have given up doing something because I thought too little of my ability.....	T	F	<input type="checkbox"/>	
I like to gossip at times.....	T	F	<input type="checkbox"/>	310
There have been times when I felt like rebelling against people in authority even though I knew they were right.....	T	F	<input type="checkbox"/>	
No matter who I'm talking to, I'm always a good listener.....	T	F	<input type="checkbox"/>	
I can remember "playing sick" to get out of something.....	T	F	<input type="checkbox"/>	
There have been occasions when I took advantage of someone.....	T	F	<input type="checkbox"/>	
I'm always willing to admit it when I make a mistake.....	T	F	<input type="checkbox"/>	315
I always try to practice what I preach.....	T	F	<input type="checkbox"/>	
I don't find it particularly difficult to get along with loud mouthed, obnoxious people.	T	F	<input type="checkbox"/>	
I sometimes try to get even, rather than forgive and forget.....	T	F	<input type="checkbox"/>	
When I don't know something I don't at all mind admitting it.....	T	F	<input type="checkbox"/>	
I am always courteous, even to people who are disagreeable.....	T	F	<input type="checkbox"/>	320
At times I have really insisted on having things my own way.....	T	F	<input type="checkbox"/>	
There have been occasions when I felt like smashing things.....	T	F	<input type="checkbox"/>	
I would never think of letting someone else be punished for my wrongdoings.....	T	F	<input type="checkbox"/>	
I never resent being asked to return a favour.	T	F	<input type="checkbox"/>	
I have never been irked when people expressed ideas very different from my own.....	T	F	<input type="checkbox"/>	325
I never make a long trip without checking the safety of my car.....	T	F	<input type="checkbox"/>	

T. True
F. False

There have been times when I was quite jealous of the good fortune of others..... T F

I have almost never felt the urge to tell someone off..... T F

I am sometimes irritated by people who ask favours of me..... T F

I have never felt that I was punished without cause..... T F 330

I sometimes think when people have a misfortune they only got what they deserved.. T F

I have never deliberately said something that hurt someone's feelings..... T F

Thinking about how you have felt in the last month, do any of these statements apply to you? Circle YES or NO as appropriate.

I feel useless..... YES NO

I get tired for no reason..... YES NO

I have a good appetite..... YES NO 335

I am hopeful about the future..... YES NO

I feel that others would be better off if I were dead..... YES NO

I have trouble sleeping at night..... YES NO

I think about myself a lot..... YES NO

Everyday seems exactly the same..... YES NO 340

Life seems dull to me..... YES NO

I am usually bored..... YES NO

In thinking of my life, I often wonder why I exist..... YES NO

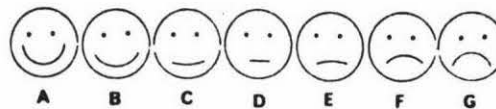
I feel down in the dumps..... YES NO

I awake in the morning feeling tired..... YES NO 345

I prefer to be by myself most of the time... YES NO

I just don't seem to have the energy to do things..... YES NO

Here are some faces expressing various feelings



Circle the letter of the face which comes closest to expressing how you feel about your life as a whole.....

Now we would like to ask you for some information which will help us understand and interpret the data from this study.

In what year were you born?.....

Are you male or female..... M F 350

Are you presently married, widowed, divorced, separated, or single?

married (includes defacto).....

widowed.....

divorced.....

separated.....

single.....

If you had to make a choice, would you call yourself upper middle class, middle-class, working class, or what?

upper-middle class..... 353

middle-class.....

working-class.....

Other(specify).....

Thank you very much for helping us with this project. We appreciate you giving us your time, and hope that you have found the experience interesting.

If you have any comments to make about this questionnaire, please do so here.

APPENDIX C: MEANS AND STANDARD DEVIATIONS FOR
MEASURES OBTAINED FROM THE QUESTIONNAIRE,
FOR COMMUNITY AND STUDENT SAMPLES

<u>MEASURE</u>	<u>COMMUNITY</u>		<u>STUDENT</u>	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
Hassles	66.661	42.615	63.157	32.371
Purpose in Life	101.642	17.232	107.146	12.672
Locus of Control	74.579	9.838	82.000	9.358
Assertiveness Anxiety	86.922	24.417	88.503	19.643
Assertiveness Behaviour	109.071	20.559	108.572	16.448
Life 1	4.883	1.070	4.999	0.855
Life 2	5.017	0.887	5.075	0.898
Life 3	4.945	0.917	5.034	0.803
Positive Affect	49.500	11.832	51.969	10.368
Negative Affect	21.942	12.953	18.975	10.445
Depression	3.983	3.332	3.127	2.764
Faces	5.417	0.958	5.637	0.894
Happy	4.867	1.053	4.938	0.864
Social Desirability	15.871	5.392	15.205	5.270

APPENDIX D: INTERCORRELATIONS OF HASSLES WITH
 INTERACTION TERMS, BEFORE AND AFTER STANDARDISATION,
 FOR THE COMMUNITY AND STUDENT SAMPLES

<u>INTERACTION TERM</u>	<u>CORRELATION WITH HASSLES</u>			
	<u>Before</u>		<u>After</u>	
	<u>Community</u>	<u>Student</u>	<u>Community</u>	<u>Student</u>
Hassles x Locus of Control	.97	.96	.02	-.21
Hassles x Purpose in Life	.93	.94	-.02	-.23
Hassles x Assertiveness Anxiety	.93	.93	-.26	.43
Hassles x Assertiveness Behaviour	.96	.95	-.02	.44

APPENDIX E: INTERCORRELATIONS OF PERSONALITY VARIABLES
WITH RESIDUALS OF DEPENDENT VARIABLES, FOR
COMMUNITY AND STUDENT SAMPLES

<u>PERSONALITY VARIABLE</u>	<u>CORRELATION WITH RESIDUALS</u>	
	<u>Community Sample</u>	<u>Student Sample</u>
Purpose in Life		
Life 3	.62	.55
Positive Affect	.67	.58
Negative Affect	-.74	-.58
Depression	-.70	-.59
Locus of Control		
Life 3	.19	.37
Positive Affect	.26	.42
Negative Affect	-.37	-.46
Depression	-.39	.39
Assertiveness Anxiety		
Life 3	-.27	-.26
Positive Affect	-.27	-.33
Negative Affect	.37	.32
Depression	.26	.29
Assertiveness Behaviour		
Life 3	-.07	-.22
Positive Affect	-.32	-.31
Negative Affect	.22	.28
Depression	.22	.28
