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**DEPRESSION AS A FUNCTION OF
STRESSFUL LIFE
EVENTS, SOCIAL SUPPORT AND
PERSONALITY**

A thesis presented in partial fulfillment of the requirements

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ABSTRACT

The effects of stressful life events, personality factors (extroversion, socialization/psychoticism and emotionality/neuroticism) and social support on depression were assessed. A questionnaire consisting of The Eysenck Personality Questionnaire, College Life Stress Inventory, Depression Inventory, and The Brief Social Support Questionnaire was administered to a sample of 124 volunteer university students enrolled in undergraduate psychology courses. Results showed that other than for socialization, with women scoring higher on average than men, there were no significant differences between men and women, or between ethnic groups, on any of the variables. Age was found to be inversely related to stressful university life events. Emotional instability and low satisfaction with social supports predicted depression. The effects of university life events on depression were mediated by satisfaction with social supports, but not by number of social supports. Emotional stability was found to predict satisfaction with social supports. Emotional instability predicted severity of university life events and explained the largest proportion of variance in depression scores.

CHAPTER ONE

1. Introduction.

The effects of stressful life events and social support on psychiatric illnesses have been well documented in past research. Previous studies have differed in terms of their findings, research designs and their focus on different variables in the stress-illness relationship. Generally it has been shown that social support can ameliorate the effect of stressful life events on psychiatric illnesses such as depression. Individual differences, such as the trait of neuroticism, have been found to be related to psychiatric disorders. However, little is known about the relation of individual differences to the buffering effect of social support on the stress-illness relationship.

In this chapter each of the variables will be assessed and defined. The significance of each of the variables to this study will be discussed briefly.

1.1 Depression defined.

Depression is an emotional state marked by great sadness and apprehension, feelings of worthlessness and guilt, withdrawal from others, loss of sleep, appetite and sexual desire, or loss of interest and pleasure in usual activities. (American Psychiatric Association 1994). Depression differs from normal feelings by virtue of its intensity and duration, and may interfere substantially with a person's ability to function. For someone to be diagnosed as depressed, he/she needs to have either one of the first two symptoms plus at least four others all happening at the same time, and all for a significant period-usually longer than two weeks.

There are additional symptoms, which can accompany depression. Some individuals in the midst of a major depressive or manic episode may experience psychotic symptoms such as hallucinations and delusions. A feature of depression may be overeating or oversleeping during episodes. Another symptom which occurs rarely but is very serious involves catatonia. Most usually this condition involves a total absence of movement and is referred to as a catatonic depressive episode.

The mean age of onset for a major depressive disorder is 27 years. (Barlow & Durand, 1995). A recent finding is that the incidence of depression and one of its consequences, suicide, seem to be steadily increasing. (Cross-National Collaborative Group, 1992). The same study conducted in Canada, Italy, Germany, France, Taiwan, Lebanon and New Zealand suggests that there is a trend toward developing depression at increasingly earlier ages worldwide. (Cross-National Collaborative Group, 1992).

Suicide is a possible consequence of depression. Studies have shown a dramatic increase in death by suicide in recent years. (Barlow & Durand, 1995). This increase appears to be most evident amongst adolescents. In two recent studies among college students approximately 25 percent had thought about suicide in the past 12 months. (Meehan, Lamb, Saltzman & O'Carroll, 1992; Schwartz & Whitaker, 1990). Only a minority of these college students (approximately 15 percent) will attempt to kill themselves, and of those, only a few will succeed. (Kovacs, Goldston & Gatsonis, 1993). Given the enormity of this problem, the importance of research on depression and variables influencing depression is very high.

1.2 Social Support Defined.

Social support has been the subject of much interest in research over the past few decades. Much of the interest in social support is associated with the hypothesis that it may represent a buffer of the effects of life stress. (Brown, Bhrolchain & Harris, 1975; Cobb, 1976; Dean & Lin, 1977; Cassel & Kaplan, 1977).

There is much diversity in terms of defining social support. Despite this diversity most definitions focus upon the helping elements and the availability of social relations to the individual. Gottlieb (1979a) defines it as, "support accessible to an individual through social ties to other individuals, groups and the larger community."(p.209). Johnson and Sarason (1979) refer to "the degree to which individuals have access to social resources in the form of relationships on which they can rely."(p.155). Stated simply, social support can be defined broadly as, "the availability of helping relationships and the quality of those relationships." (Leavy, 1983, p.5).

There is fairly consistent evidence suggesting that social support moderates the effects of stress on subsequent physical (Wallston, Alagna, DeVillis & DeVillis, 1984) and psychological distress (Kessler & McLeod, 1985). Thus social support is extremely important in the study of stress and depression and is a variable that must be included.

1.3. Stressful Life Events Defined.

Research has demonstrated a reliable connection between life stress and psychological distress. It has been known for some time that stressors are associated with a number of physiological and psychological changes in the individual (Selye, 1978).

Stressful life events are defined as major changes in one's life, such as personal relationships, health or employment (Sarafino & Ewing, 1999). Researchers have conceptualized stress as involving stressors, defined as environmental stimuli or sources of tension; strain, one's reaction to stressors, such as feelings or psychological reactions; and transactions, ongoing processes of person/environment interactions and adjustments that influence the stressors impact and the persons ability to cope with them (Baum, 1990; Coyne & Holroyd, 1982; Lazarus & Folkman, 1984).

For the purposes of this study stressful life events will be looked at in terms of those experienced by students and their effects on depression experienced by the students.

1.4. Personality Factors Defined.

There is substantial research literature documenting the role of personality in the stress process for major life events. (Allsopp, 1986; Clark, Hemsley & Nathan-Clark, 1987; Claridge, 1981; Eysenck, 1986, 1969, 1971, 1972; Forbes, 1980).

Included in this study is the effect of personality factors in the relationship between life events and psychological distress. The personality traits focused on include extroversion, socialization (psychoticism) and emotionality (neuroticism). As stated in the Eysenck Personality Inventory Manual it is beneficial to omit psychiatric terms, such as 'psychoticism' and 'neuroticism', especially when

discussing results with lay persons.(Eysenck, 1964). Thus in this study the terms emotionality (N) and poor socialization (P) will be used.

Although extroversion has not been involved in many studies on stress there is some evidence suggesting that the extroversion-introversion dimension may mediate the response to a potential stressor and thus influence vulnerability. (Eysenck, & Eysenck, 1964).

The 'typical' extrovert and 'typical' introvert may be regarded as idealized extremes on a continuum which real people may approach to a greater or lesser degree. The 'typical' extrovert is sociable, has many friends, and needs to have people to talk to. Such an individual craves excitement, takes chances, acts on the spur of the moment, and generally is an impulsive individual. An extrovert is carefree, optimistic, easy going and prefers to keep moving. Extroverts tend to be aggressive and can lose their tempers quickly. An extrovert's feelings are not kept under tight control and such an individual is not always reliable. (Eysenck & Eysenck, 1964).

The 'typical' introvert is quiet, introspective, reserved, and distant except to intimate friends. Such an individual tends to plan ahead and distrusts the impulse of the moment. An introvert does not like excitement, and will keep feelings under close control. Such persons seldom behave aggressively and don't lose their tempers easily. Introverts are reliable, somewhat pessimistic, and place great value on ethical standards. (Eysenck & Eysenck, 1964).

Psychoticism (Eysenck & Eysenck, 1964) is characterized by being rather solitary, insensitive and uncaring towards others and in general opposed to accepted social customs. (Pervin & John, 1997). There is little literature on this personality trait, however. It is easy to hypothesize that individuals low on socialization would have difficulty developing new social networks and adjusting to new and unfamiliar environments.

Psychoticism or poor socialization, as defined in the present study, refers to an underlying dispositional personality trait which is present in varying degrees in all persons. If present in marked degree, it predisposes a person to the development of psychiatric abnormalities. A person scoring high on 'P' may be described as being solitary, not caring for people, and not fitting in anywhere. Such individuals may be cruel and inhumane, lack in feeling and empathy, and be altogether insensitive. These individuals can be hostile and aggressive even to loved ones. They have a liking for odd things, and a disregard for danger. Such persons like to make a fool of others and upset them. This description refers in its entirety only to extreme examples, which occur rarely. Psychiatric terms which would assimilate this kind of behavior pattern are 'schizoid,' 'psychopathic' and 'behaviour disorders'. (Eysenck & Eysenck, 1964).

A personality variable that has received a lot of attention with respect to stress and coping is emotionality (N). Emotionality is defined as a predisposition to experience negative affect (McCrae, 1990), and therefore those who are high in N, or display emotional instability experience more anxiety, depression, hostility and self-consciousness. (McCrae & Costa, 1986).

A number of studies have indicated that, compared with low-N individuals, high-N individuals experience greater distress in response to major life-stress (Innes & Kitto, 1989; Ormel & Wohlfarth, 1991; Parke, 1990). The typical high-N scorer may be described as being an anxious, worrying individual, moody and frequently depressed. The person is likely to suffer from various psychosomatic disorders. He or she is overly emotional and finds it difficult to get back on an even keel after each emotionally arousing situation. A 'typical' neurotic reacts in irrational and sometimes rigid ways. A high- N individual can be described as a worrier, the main characteristic is a constant preoccupation with things that might go wrong, and a strong emotional reaction of anxiety to these thoughts. (Eysenck & Eysenck, 1964).

CHAPTER TWO

Research Rationale and Background

2. Introduction.

The purpose of this chapter is to report the status of research involving stressful life events, social support, personality factors and depression. There is extensive literature in these areas. Although many of the findings are replicated there are certain findings that are conflictual. This chapter will review the literature, the theoretical frameworks used around this subject matter and the findings of research studies.

2.1. Depression.

In New Zealand (as well as overseas) depression is likely to be a big factor behind the high and increasing teenage and young adult suicide rates. New Zealand has the second highest suicide rate in the world for males aged fifteen to twenty four years and the first for females. (Andrews & Merry, 1998). An important statistic behind these studies is that in most studies up to 80 percent of young people who take their own lives have a psychiatric disorder at the time, most commonly depression. (Barlow & Durand, 1995).

There are now a number of studies carried out in New Zealand, United States, and the United Kingdom, which look at large populations of teenagers and rate whether they are depressed. Most of the studies show small but significant rates of depression in teenagers. (Barlow & Durand, 1995).

It has been found that depression begins to be a significant health problem in teenage years. Although some very young children do experience depression, this is quite rare. Studies have shown that rates of depression are higher in older teenagers and are higher

in teenage women than men. Most studies find female rates that are about twice that of males. (Nolen-Hoeksema, 1990).

2.1.1. Depression and Personal Resources.

When looking at the association between psychological distress and psychiatric disorder, research has involved variables such as socioeconomic status (SES), (Bohrenwend & Dohrenwend, 1969), marital status (Gove, 1972; Turner, Dopkeen & Labreche, 1970) and minority status (Kessler & Neighbours, 1986). Much of this research has focused on identifying social and environmental experiences and personal and social resources that contribute to distress and disorder.

The 'stress process model' (Billings & Moos, 1982; Pearlin, Lieberman, Menaghan & Mullan, 1981) also emphasizes the significance of stress exposure and focuses on personal, or coping resources such as mastery and self-esteem that may act to buffer (moderate) the mental health impact of stressful experience and/or be indirect causal links (mediators) between social stress and various mental health outcomes.

The interest in potential mediators and moderators of stress has derived from the following considerations. Firstly, the idea that there are many factors influencing the stress-distress connection. This idea has been reinforced by everyday experience, which suggests that even if stressors were reliably measured some persons would still be relatively unaffected. Thus, it appears that humans differ in their experience of stress and in how effectively they deal with stress. Secondly, there is the idea that availability of resources for coping may differ according to social status. This issue of SES differences in vulnerability or responsiveness to stress has been researched by many authors (e.g., Dohrenwend, 1973; Kessler & Cleary, 1980; Turner & Noh, 1983), all of whom have supported the contention.

Thus, SES, and perhaps-other risk factors such as gender, age, and marital status may affect psychological well being due to differences in the availability of personal resources or characteristics that affect social-emotional adaptation.

Of the various personal resources researchers have considered, the one that has received the most attention has been perceived causal relevance. The construct has been addressed in terms of a sense of powerlessness (Seeman, 1959), effectance motivation (White, 1959), locus of control (Rotter, 1966), personal control (Bandura, 1977), helplessness (Seligman, 1975), hopelessness (Abramson, Alloy & Metalsky, 1989), mastery (Pearlin & Schoder, 1978), and fatalism (Wheaton, 1983). The constructs appear to represent alternative labels for the same personal attribute or resource. Mastery is thought to influence one's ability to cope with stress and accordingly play a role in depression. Person's high in mastery may effectively avoid a potentially stressful event. Control or mastery influence distress and depression because persons high in mastery are more likely to possess skills and abilities required to resolve difficult circumstances. (Turner & Avison, 1992). A greater sense of mastery is associated with reduced risk of depression as a response to life stress. (E.g., Pearlin & Schooler, 1978; Turner & Noh, 1983).

The connection between social structure and self-efficacy has been a major focus of research and when concepts such as mastery and personal control are considered; relationships with SES have consistently been observed. (Gurin et.al., 1978; Mirowsky & Ross, 1983). Brewer Smith (1968) provided an interpretation of this relationship by providing the insight that attitudes of mastery or self-efficacy are closely linked to a perception of the world as trustable and fair. According to Smith, competence and self-efficacy are differentially distributed in the social system because opportunity, respect, and power, and thus average responsiveness of the social environment are differentially distributed. Thus there appears to be both theory and evidence to support the conclusion that mastery is a personal resource relevant to mental health generally, and depression in particular, that arises, at least partially, out of a person's 'location' in the social system.

There is a significant connection between self-esteem and personal control. Since the principles of self-esteem formation include self-attribution, one's history of successes and failures in social and environmental encounters, which underlie mastery, may also be crucial for self-esteem. There is now a common view that self-esteem is based, in part, on mastery or control. Positive and stable self-esteem may have mediating functions similar to those of mastery. Research has accumulated indicating a significant inverse correlation between self-esteem and depressive symptoms (Pearlin & Lieberman, 1979; Rosenberg, 1985) and suggests that low self-esteem is a vulnerability factor in the presence of stress. (Brown, 1987). Despite much evidence for a link between esteem and depression, the conclusion that low self-esteem is a risk factor for depression, rather than the reverse, requires consideration. Rosenberg et.al. (1989) found evidence for a reciprocal causation between self-esteem and depression. These results were found to be stronger among lower SES subjects than higher SES ones. Gecas & Seff (1990) have noted the principles of self-esteem theory lead to a clear expectation of a positive relationship between self-esteem and social class. That is, those in the higher social class have greater power, resources and prestige, all of which should increase self-esteem. Subsequent reviews (Wylie, 1979) and research (Gecas & Seff, 1989, 1990) have confirmed a moderate, positive relationship between self-esteem and social class. Turner, Lloyd and Roszell (1999) conducted a study whereby they addressed the hypothesis that gender, age, marital status and SES matter for depression partly because of differences in the availability and/or impact of the personal resources of mastery and self-esteem. Based on a large sample (N=1,390), their findings failed to support the availability hypothesis in relation to marital status, and provided only modest support in relation to SES.

Thus variations in the availability of these resources, particularly mastery, provided an adequate explanation for the SES-depressive symptoms relationship.

2.1.2. Depressed clients' attributions of responsibility for the causes and solutions to their problems as well as their self-appraised problem-solving ability.

Wall and Hayes (2000) studied the attributions made by depressed clients regarding their responsibility for the causes of and solutions to their problems. A total of 160 university counselling center clients completed the Beck Depression Inventory (Beck & Steer, 1987) and instruments measuring attributions of responsibility, internality, stability and controllability for their problems. Results indicated that depressed clients attribute responsibility to themselves for causing the problems for which they seek counselling, and they do so more than clients who are a-symptomatic with respect to depression. This is consistent with previous research indicating that depressed individuals are more inclined than non-depressed individuals to attribute negative events to internal, stable factors. (Abramson, Metalsky & Alloy, 1989; Abramson, Seligman & Teasdale, 1978).

Another area that has received attention is that of depressed client's self-appraised problem-solving ability. It has been suggested that ineffective problem solving result in stressful outcomes such as depression. (E.g., Nezu, Nezu & Derri, 1989). Within the last decade there has been increased attention to cognitive self-appraisals of one's ability to resolve problems especially as it relates to depression (Nezu et.al.,1989). These studies have consistently found that self-appraised ineffective problem solvers compared with effective problem solvers reported significantly higher levels of depressive symptoms. (E.g., Heppner & Anderson, 1985; Nezu, 1985). Nezu (1986) extended this research by investigating the differences between hospitalized psychiatric patients who are clinically depressed and normal controls. Results indicated that participants who were depressed as compared with participants who were not depressed appraised themselves as significantly less effective problem solvers.

Taken in sum, results of various studies provide strong evidence that low problem solving appraisal is related to depressive symptoms across a variety of populations and cultures.

2.1.3. Loneliness, family environment and depression.

Loneliness is a major precursor of depression. (Beck, 1972). Among adolescents, previous researchers (Campbell et.al., 1992) found that boys are lonelier than girls are and girls are more depressed than boys are. Lau, Lau and Chan (1999) examined the relation among different facets of loneliness and depression in a sample of 6,356 Chinese children and adolescents. Their findings indicate a close relationship between loneliness and depression among Chinese children and adolescents. The relationship was highly significant because it was evident in every grade or age level and in boys and in girls. Peer-related loneliness and aloneness were more predictive than parent-related loneliness of depression. Gender differences were observable. Specifically among the primary school students, the boys were higher in loneliness and depression than the girls, whereas among secondary students, the boys were lower than the girls in depression but were not different from the girls in loneliness.

Another study of a sample of 397 high school adolescents (aged 14-18) found that boys were lonelier than girls or that boys and girls were equally lonely. (Koenig, Isaacs & Schwartz, 1994). Findings also suggested that girls were more depressed than boys were. (Koenig et.al., 1994).

Various studies have also focused on the family environment and depression, particularly amongst adolescents. In order to have greater understanding of adolescents' psychological development it is necessary to look at their social environment. Moos (1976), in his theory of social ecology, has identified three aspects or domains of social environment: relationship, personal growth and development, and system maintenance and change. During adolescent development depression and self-concept are two major indices of psychological development (Steinberg, 1990). Poor psychological adjustment has been shown to relate to depression and negative self-concept/self-esteem. When relating family environment to adolescent development it has been found that good perceived parent/child relationships are related to positive general self-concept and personality development of the adolescent. (Lau & Cheng, 1987; Lau & Leung, 1992).

Forman and Forman's (1981) study found that adolescents are relatively free of anxiety in families which emphasized the relationship domain, were more assertive and self-sufficient in families which encouraged personal growth, and were non-anxious and inclined to use denial in families which emphasized system maintenance.

In general, in either Western or Chinese adolescent samples, the associations of family functioning to personality functioning or self-esteem are positive but weak. However, an abusive family environment has a profound effect on one's personality, stress levels and possible subsequent depression. The most common reason for leaving home is family environment. Many youths leave home as a result of a family system characterized by high levels of conflict, abuse, financial insecurity, familial substance abuse, parental divorce or separation, and lack of communication. These youths may alternate between living on the streets and a variety of temporary locations. Street life is characterized by the day-to-day struggle to meet basic needs. Ayerst (1999) conducted a study investigating depression and stress in a Canadian sample, as well as the coping methods they used. Analysis revealed that stress and depression were positively correlated for street youth, and these youths had higher levels, compared with non-runaways, of both. There were also differences in coping methods whereby street youth were more likely to engage in acts of self-harm, while non-runaways more frequently resorted to productive problem solving and discussion with someone they trust.

2.1.4 Gender differences in depression.

Across different countries and cultures a high number of women experience depression compared with men. (Nolen-Hoeksema, 1990). However, prior to adolescence, more boys are depressed than girls are. Thus at some point between childhood and adolescence, a transition occurs in the prevalence rates of depression from more boys to more girls being depressed.

Numerous studies investigating depressed mood and depressive disorders suggest that the transition when girls start becoming more depressed than boys begins after the age of 13

years or in mid-puberty. For example two prospective longitudinal studies (Petersen, Sarigiani & Kennedy, 1991; Ge, Lorenz, Conger, Elder & Simons, 1994) following children from pre-adolescence to young adulthood found that in girls depressive symptoms and depressed mood increased after the age of 13 years, whereas symptoms and mood remained constant in boys.

Biological factors have provided little explanatory power to account for the gender differences in depression. For example, one study (Brooks-Gunn & Warren, 1989) found that the effects of sex hormone levels were minimal compared with the influence of social factors in explaining the gender differences in depressed mood.

Behavioural genetic studies suggest that genetic factors are associated with depression more strongly among pubertal girls than boys. (Silberg, Pickles, Rutter, Hewitt, Simonoff & Mores, 1999).

For cognitive factors research supports a ruminative response style to be an explanation for the emerging gender differences in depression. One study, (Schwartz & Koenig, 1996) of high school adolescents found that females ruminated more than males, and this characteristic rumination partially mediated the gender difference in depression.

Current evidence supports both negative environmental and gender-role explanations. Girls are more likely than boys to experience adversities within the family. Gender differences in child abuse exist, especially for child sexual abuse (CSA) with girls experiencing CSA far more than boys. This finding raises the possibility that child abuse may mediate, at least in part, the gender difference in depression. Several studies (Whiffen & Clark, 1997; Kessler, Davis & Kendler, 1997) examined the impact of major life events by using adult samples retrospectively recalling their experiences. The depressed mood of girls, but not that of boys, correlated with stressful life events, indicating that gender interacted with negative events to predict depressed mood.

In terms of gender-role expectations, it is hypothesized that during early adolescence girls begin to identify more strongly with the standard female stereotype and boys with the male stereotype. Testing this hypothesis, a cross sectional study (Wichstrom, 1999) of adolescents (12 to 18 years) found that excessive dissatisfaction of girls with their body shape led to increases in depressed mood around the age of 13 years through decreases in self-esteem and disappointment with physical appearance. Thus, it appears that girls who identify with the thin female stereotype and who undergo pubertal change early with excessive body fat show increased depressed mood due to dissatisfaction with their post-pubertal bodies. However, boys do not experience depression, as they typically become taller, thinner, more muscular, after puberty, which fits with the male stereotype.

2.2. Stressful life events.

2.2.1. The role of stressful life events in depression.

Undesirable changes and stressful conditions in life are demanding for the individual. Children and adolescents are assumed to be even more strongly influenced than adults are. Many studies have found that depressed adolescents have experienced many major events in their lives. (Allgood-Merten, Lewinson & Hops, 1990; Goodyer, Cooper, Vize & Ashby, 1993).

Other studies emphasize that only undesirable life events are important for the distress (Adams & Adams, 1991; Goodyer, 1990; Garrison, Jackson, Marsteller, McKeon, Addy & 1990). Daily stressful events are strongly related to depression at all ages (Banez & Compas, 1990). Chronic stress, psychosocial adversities, and daily events have been found to have a stronger impact than single serious events in adolescent population studies (Wagner & Compas, 1990; Esser & Schmidt, 1993). The greatest risk seems to come from situations with long-term psychological threat, such as repeated and serious conflicts between parents (Enos & Handel, 1986; Ferguson, Horwood & Lynskey, 1996). Another important factor is illness among family members. (deWilde, Kienhorst, Diekstra & Wolters, 1992).

The relations to family and friends are important for mental health. In a longitudinal study of family discord and adolescents' problems with their own role in the family and not being accepted by peers predicted major depression. (Reinherz, Giaconia, Pakiz, Silverman, Frost & Lefkowitz, 1993).

Research studies have looked at 'dependent events'. Adolescents with depressive or conduct disorder act in a manner that leads to still more negative events, these are so-called dependent events. Youngsters who have experienced many adversities early in life seem to be prone to these self-inflicted stressful life events later on. (Champion, Goodall & Rutter, 1995). The initial degree of symptoms, however, is a stronger predictor of mental distress than life events (Berden, Althaus & Verhulst, 1990; Garrison, Jackson, Marsteller, McKeon & Addy, 1990; Gersten, Langner, Eisenstein & Simcha-Fagan, 1977; Slavin & Compas, 1989), even though a high symptom level is also related to subsequent negative events. (Compas, 1987).

Research has also looked at cognition and events. Some authors stress that the individual's problem-solving capacity is important for the impact of events (Adams & Adams, 1993) and that negative life events are associated with depression only when this capacity is poor (Adams & Adams, 1996). This is important since depressive disorder is related to dysfunctional coping attitudes (Martin, Kazarian & Breiter, 1995), problematic attributional style and cognitive errors (Cole & Turner, 1993), and poor social competence (McGee & Stanton, 1992). Thus it is thought that disturbed cognition can make new negative events more harmful. Olsson, Nordstrom, Artinelli and Knorrning (1999) conducted a study, which aimed at comparing stressful life events among adolescents with depressive disorder and healthy controls. They also aimed to compare the frequency and type of life events in groups with different depressive diagnoses with and without conduct disorder. Results indicated that total number of stressful life events was higher in depressed than in healthy subjects. Most of the events were more frequent among depressed subjects and were described as situations with ongoing daily stress rather than distinct major events. Strains on the family from unemployment, chronic illness, or conflicts in the family, and peer problems all go on for an unpredictable time.

The long-term stress seems to be demoralizing and is associated both with depression and with disruptive behavior. (Vaux & Ruggiero, 1983; Swearingen & Cohen, 1985).

2.2.2 Stressful life events vs. daily hassles.

Evidence of an association between stressful life events and a variety of psychological and physical disorders has accumulated over the last few decades. Life events has been consistently linked to depression, (Benjaminsen, 1981; Brown & Harris, 1978), neurotic impairment (Tennant & Andrews, 1978), coronary heart disease (Theorell, 1974), cancer (Jacob & Charles, 1980) as well as other physical and psychological problems.

However correlations between life events scores and measures of health and well being have been weak suggesting that life events may account for, at best, 9 percent of the variance. This weak correlation may be due to the moderating effects of other factors. Much attention has been focused on the possible role social support plays in moderating the life stress-health relationship (Caplan, 1972; Cassel, 1976; Kaplan, Cassel & Gore, 1977).

Another possible reason for the modest relationship between life stress and psychological distress may be the exclusive focus on major life events, thereby neglecting minor but recurrent daily hassles. In some recent research daily hassles have been found to be strong predictors of psychological distress in community surveys. (DeLongis et. al., 1988)

However, life events and daily hassles are often linked. For example, university transition may be regarded as a major life change however by focusing on the context of the event it may be appropriate to conceptualize the transition as a series of daily hassles which are part of a students move into university. These daily hassles may include residence problems, academic demands, social initiations and so on.

2.2.3. Stressful life events and mediating factors.

Many studies have been conducted whereby life stress has played an important role in terms of physical and/or psychological distress. Interest in life event research was aroused in the 1940's and 1950's which suggested an association between occurrence of life events and a diverse range of psychological and somatic disorders (for example, tuberculosis, cardiovascular disease, stroke and depression). A number of studies have demonstrated that stressful life events are significantly, though moderately, related to the occurrence of depression (Brown & Harris, 1978; Paykel, 1974; Paykel & Dinelt, 1971, Paykel, Myers, Dinelt, Klerman, Lindenthal & Pepper, 1969; Paykel, Prusoff & Tanner, 1976).

Through reviewing available literature on the stress-depression relationship it becomes clear that there is a need to elaborate the investigation of this relationship by including variables which may mediate the re-occurrence of stress and depression. Two main variables have been recognized in these terms; sociological factors such as social support (Dean & Lin, 1977; Gore, 1978; Kaplan, 1975; Moriwaki, 1973) and personality factors (Rotter, 1966; Rosenberg, 1965; Campbell, Converse, Miller & Stokes, 1960).

For example, Dean and Ensel (1982) conducted a longitudinal study where life events, social support and personal competence were examined in terms of their ability to explain depressive symptoms in three age groups of males and females. They found stressful life events did play a role, however, social support had the largest and most direct effects on depression. Life events were found to influence social support, which in turn influenced depression. Personal competence was also found to demonstrate large total effects on depression across age and sex categories.

Some studies have found stressful life events to be a predictor of psychological distress of certain kinds but not a predictor of depression. Lu (1994) studied first year students. The students were given questionnaires measuring stressors (major life events, minor daily hassles and perceived university stress), personality and mental health (depression,

anxiety and somatic symptoms). Findings indicated that life events predicted anxiety while daily hassles predicted depression.

De Jong, van Sonderen & Emmelkamp (1999) have conducted a study on the basis of a comprehensive model of stress. The various components of the model included experienced stress, psychological distress, neuroticism, problem-focused coping, avoidant coping, and satisfaction with received social support and unassertiveness. A covariance path analysis technique was used. The aim was to investigate an integrative model in which the most important variables are included, and their inter-dependency can thus be taken into account. Subjects were asked to participate in a questionnaire study regarding stress and well being and/or to participate in a stress management program. The sample included 358 subjects that were employees in a number of corporations and institutions in the Netherlands. Findings indicated the following: Environmental stress was directly related to the degree of psychological distress. Neuroticism appeared to be indirectly related to psychological distress. Problem-focused coping was directly (although weakly) related to psychological distress. However, avoidant coping was neither directly nor indirectly related to psychological distress. Satisfaction with social support was found to be indirectly related to psychological distress through its association with experienced stress. Unassertiveness appeared to be indirectly related to psychological distress through its association with experienced stress and coping. Thus the most conspicuous finding of this study was that experienced stress was the only variable in the model that showed a substantial direct relationship with psychological distress. (De Jong, van Sonderen & Emmelkamp, 1999).

2.2.4. Stressful life events in terms of college students.

The present study focuses on a sample of undergraduate students. Research studies have examined a number of stressors having an influence on psychological distress in the lives of college students. Tyrell (1992) conducted a survey of psychology students in the four years of the undergraduate course to identify important sources and symptoms of stress. Findings indicate that concerns about academic progress are the most common sources of

stress. Being motivated to study and not falling behind with course work are important issues for students at all levels. Financial worries, time pressure and interpersonal relationships were found to be relatively stressful. Female students reported a higher number of symptoms of psychological distress than did male students.

2.3. Social support.

2.3.1. Social support and affect/ depression.

Substantial research has been done regarding the importance of social support for optimal physical and mental health throughout the life span. For example, epidemiological research has suggested that the prevalence of psychological disorder in communities may be influenced by the availability of social support. (Henderson, Byrne, Duncan-Jones, Adcock, Scott & Steele, 1978). However, it still remains unclear as to what specifically about social support provides health benefits. Also unclear is to what extent social support plays an influencing role in the stress-depression relationship.

When looking at social support it is important to keep in mind that it is a multidimensional construct. Social support includes the size of the social network, frequency of contact with members in the social network, emotional support, and quality of social support. and reciprocal helping relationships (Antonucci, Fuhrer & Dartigues, 1997). Chou (1999) conducted a study whereby he focused on the associations between social support (including social network size, social contact frequency, and satisfaction with social support, instrumental support and helping others) and measures of subjective well being (including depressive symptomology, negative affect and positive affect). Findings indicate significant bivariate relationships between positive affect and all dimensions of social support. Helping others variables and relationship satisfaction variables were negatively related to both depressive symptoms and negative affect. The results of this study confirm previous findings indicating that subjective perceptions of the quality of relationships are more important than objective social network measures,

such as network size, especially concerning depression. (Antonucci, et. al., 1997; Oxam et. al., 1992).

Another such study involving a sample of 280 undergraduate students found that although both poor functional (quality of support) support and structural support (social network size) were related to depression and anxiety, functional support was more strongly related to these outcome variables, with the strongest relationship associated with depression. (Vandervoort, 1999).

Evidence for a direct relationship between social support and well-being has repeatedly been found (Cohen & Wills, 1995; Bolger & Eckenrode, 1991; Emmelkamp, 1996). In addition, evidence has been found that social support influences well-being indirectly through its association with coping styles. Several studies have found that individuals with a supportive family environment tended to use more active, problem-focused coping strategies as compared to individuals who lacked such support and who, in contrast, are more likely to engage in avoidant coping strategies (Holahan & Moos, 1987; Cronkite & Moos, 1984). In addition, social support is likely to have a beneficial effect on well being through its negative relationship with experienced stress. (De Jong & Emmelkamp, 1996).

2.3.2 Perceived support and received support.

There is some research looking at the effects of perceived support and received support. Perceived support refers to the belief that helping behaviors will be provided when needed, and received support refers to naturally occurring helping behaviors that are being provided (Barrera, 1986). Norris and Kaniasty (1996) conducted a study involving victims of severe natural disasters. They found perceived support mediated the long-term effects of distress of both scope of disaster and post-disaster received support.

2.3.3. Models of social support.

There are various ways of explaining the role of social support in the stressor-strain relationship. Direct, mediational, supressor, and moderator effects models of social support on the stressor-strain relationship have been postulated and investigated.

The direct effects model assumes that social support will reduce the level of distress regardless of the intensity of the stressor experienced. (Beehr, 1985; Cohen & Wills, 1985; Eisenberger, Fasolo & Davis-La-Mastro, 1990).

The moderator effect model/moderating hypothesis states that social support interacts with stressors to affect stress. Empirical support for the moderating effects of social support has been mixed across studies. Whereas some studies have found the moderating effect (Abdul-Halim, 1982) others have not (Ganster et.al., 1986), or have found support for a reverse moderating effect (Kaufman & Beehr, 1986). A reverse moderating effect occurs when high levels of social support increase, rather than decrease, the effects of stressors.

The mediational model implies a causal sequence. For example, a mediational model can be used when researching stressors, social support and strains. To test for mediational effects the correlations must be cumulated (1) between social support and stressors and (2) between social support and strains. These correlations along with the correlation between stressors and strain, can be used to test the partial and the full mediational model. Evidence supports a full mediational model if the partial correlation between stressors and strain drops to zero after partialing social support. Past research focuses on social support mediating the stressor-strain relationship.

2.3.4. Positive and negative effects of social support.

Also important to mention is the potential of social support to have a negative effect on health and well being. This has been increasingly documented. Rook (1992) has

conducted studies involving negative effects of social support. His studies seem to suggest that the effects of negative social exchanges are more unwavering and robust on health than that of positive exchanges. Researchers have conceptualized negative social exchanges as social stressors and found them to have greater significance for psychological well being than non-social stressors.

However, as has been mentioned, there is considerable evidence suggesting the positive impact of social support on both physical and psychological health status. Medalie and Goldbourn (1976) found those with social support were more likely to present symptoms of angina pectoris. Berkman and Syme (1979) found lower rates of mortality among those with social support. Susan Gore (1973, 1978) found that among a sample of men who had lost their jobs social support moderated the effect of some physiological variables on some indicators of illness. In addition, social support has been found to positively influence psychological well-being among the ill and disabled. (Davidson, Bowden & Feller, 1981; Dimond, 1979; Jamison, Wellish & Pasnau, 1978).

Despite variations in the concept and methods used across studies, there is clear and quite consistent evidence that social support plays an important role in maintaining and promoting physical and psychological health.

2.4. Personality.

2.4.1. Extroversion, Socialization (Psychoticism) and Emotionality (Neuroticism).

From reviewing the literature there seems to be little convincing evidence for personality factors acting as stress buffers. Most research on personality has focused on the direct effects of coping or mental health rather than stress buffering effect.

The concept of extroversion and emotionality are thought to be potentially promising in the stress-depression areas of study. (Eysenck & Eysenck, 1970, 1985). Research in many different areas of psychology seems to suggest the possibility that extroversion and

emotionality may underlie many relationships that have been found between perceived social support, general well-being and happiness (Costa & McCrae, 1985), overall satisfaction with life and adjustment as well as a number of significant gender differences. (Borys & Perlman, 1985).

Maltby, Macaskill, Day and Garner (1999) investigated the relationship between Adler's concept of social interest and Eysenck's personality dimensions among 224 undergraduates. Social interest refers to displaying an interest in the well-being of others within the community. Social interest is claimed to influence a wider range of personality characteristics and is assumed to be essential to psychological well being. Adler (1992) suggested that psychotics and neurotics have low levels of social interest. It would be expected that social interest would share a significant negative correlation with P (solitary, troublesome, cruel, inhumane traits) and emotionality N (anxious, worrying and moody traits). Results indicated that social interest scores share a significant negative relationship with P and N and no significant relationship with extroversion. (Maltby et al., 1999).

The Eysenck Personality Questionnaire (EPQ) measures the constructs of extroversion, neuroticism, and psychoticism. (Eysenck & Eysenck, 1994). As defined earlier, the term socialization will be used instead of psychoticism (P) such that a high P score indicates poor socialization, and a low P score good socialization.

Rushton and Chrisjohn (1981) suggested that the nervous system of those who score high on P predispose them to be somewhat uncaring and distant from people, making them less likely to feel empathy or concern for others and making them prone to engage in undesirable behaviors. Research has related high scores on the P scale to conditions such as addiction (Doherty & Mathews, 1988), psychopathy (Robinson & Zohn, 1985), and unemployment (Layton & Eysenck, 1985). Poor socialization has been associated with antisocial acts in adolescents (Berman & Paisley, 1984) as well as to self-reported antisocial behaviors in adults. (Rushton & Chrisjohn, 1981).

Rider, Chubick and Witherspoon (1999) conducted a study focusing on the relationship between Eysenck's socialization dimension and one's level of functioning as measured by the Environmental Deprivation Scale (Jenkins & Sanford, 1972). The Environmental Deprivation Scale provides a measure of social functioning based on a person's involvement with his or her surroundings. In the study the Eysenck Personality Questionnaire- Revised and the Environmental Deprivation Scale were administered to 23 parolees and 18 probationers. Results showed a significant correlation between environmental deprivation scores and the Eysenck measure of poor socialization (P). Environmental deprivation scores were also correlated with those on the extroversion scale but not those on the emotionality (N) scale. The traits measured by the P scale such as aggression, coldness, egocentrism, impersonality, impulsiveness, unempathic, and antisocial tendencies, also interfere with interpersonal relations, and employment possibilities which may account for high scores on the environmental deprivation scale in these areas. The extroversion scores correlated negatively with those on the environmental deprivation scale indicating that those who were socially withdrawn scored higher on the emotional deprivation scale.

Eysenck and Eysenck (1970) suggest the hypothesis that high P scores in a significant number of cases would characterize criminals and other people indulging in antisocial activities. They conducted studies to test this hypothesis. In one study the first group (group A) consisted of male non-prisoners. The group was regarded as approximating a random sample. The second group (group B) consisted of university students. The third group (group C) consisted of industrial apprentices. None of these groups was ideal for the purpose; however, each group was representative of the population in a certain way. The results strongly support the prediction as far as socialization is concerned. The results reported suggest that prisoners, as a whole, differ in their personality make-up from non-criminal controls. Criminals indeed scored significantly higher on P than do members of various control groups.

When focusing on the stress-process, emotionality appears to play a prominent role. Emotionality has been repeatedly found to have a negative influence on well-being, both directly in the sense that it was found to be positively related to psychological well-being (Bolger & Schilling, 1991; Watson & Clark, 1984), as well as indirectly through its association with experienced stress, coping, social support and assertiveness. With regard to experienced stress, it was found that individuals who scored high on emotional instability tended to be more frequently exposed to stressors as compared to emotionally stable individuals (Bolger & Schilling, 1991). In addition, perceptions of stress appeared to have been influenced by the level of emotionality (Schroeder, 1984). Furthermore, emotional instability has been shown to be associated with inadequate ways of coping (Jelinek & Morf, 1995; Costa & McCrae, 1980, 1986) and with greater dissatisfaction with social support (Costa, Zonderman & McCrae, 1985). Thus it appears that individuals who are more emotionally unstable are more likely to experience more distress.

Some research has been conducted in terms of academic adjustment of university students. Halamandaris and Power (1999) looked at the relationship between personality variables, perceived social support and overall psychological adjustment to university life. Research findings revealed no significant sex differences in any of the personality variables. Sex differences were found in social support with males being lonelier than female students and females being better adjusted than males. Students who were well adjusted to university life had a lower score on emotionality, a higher score on extroversion, a higher score on perceived social support than those students who were poorly adjusted. An inverse relationship was found between socialization and overall adjustment to university life. Achievement motivation correlated with extroversion and emotionality, fear of failure correlated negatively with extroversion and positively with emotionality. Emotion-focused coping correlated with emotionality, as found with earlier research. (e.g., Sakofske & Yackulic, 1989).

Research on personality variables, stressful life events, hassles and mental health has also been conducted. Lu (1994) conducted a study on a sample of 102 first year students.

Questionnaires measuring stressors (hassles and stressful life events), personality variables (locus of control, extroversion and emotionality) and mental health (depression, anxiety and somatic symptoms) were taken. Findings regarding personality factors indicated that locus of control and extroversion correlated negatively, while emotionality correlated positively with university stress. Emotionality had a main effect on symptom recording across the board, while extroversion had a vulnerability effect on somatic symptoms.

Many research findings in this area are conflicting. In another study extroverts were found to show poorer job adjustment (Cooper & Payne, 1967). The easy-going element associated with extroversion has also been found to correlate with depression as well as psychosomatic symptoms. (Holahan & Moos, 1985, 1986). However, strong evidence suggests a reliable connection between extroversion and happiness measures, in turn negatively related to symptomology (Costa & McCrae, 1980; Lu & Argyle, 1991).

There is also some research suggesting that high levels of extroversion and emotionality are related to somatic symptoms, while introversion is related to psychological symptoms. (Sutherland & Cooper, 1990). Demakis and McAdams (1994) focused on the relationship between social support, extroversion and intimacy motivation. Findings indicated that extroversion was significantly but modestly related to social support. It is thought that extroversion is associated with network size. It may then be assumed that extroversion may be a basic component in the satisfaction of supportive social networks.

2.4.2. Personality variables and coping styles.

Research on personality variables often involves the relationship between personality and coping styles. Gunthert, Cohen and Armeli (1999) conducted a study looking at the influence of emotionality on the occurrence of different types of daily events, primary and secondary appraisals of those events, use of specific coping strategies, and the end of day mood. Findings suggest that high-N individuals compared to low-N individuals reported more interpersonal stressors and had more negative primary and secondary

appraisals and reacted with more distress in response to increasingly negative primary and secondary appraisals. High-N individuals used less adaptive coping strategies. Such findings help to explain the negative affect associated with emotionality/neuroticism. Consistent with this study other research indicates that high-N individuals make poor choices regarding how to handle stress. In response to major life events, high-N individuals report using more hostile reaction, escapist fantasy, self-blame, distancing, sedation, withdrawal and wishful thinking and less planful problem solving to cope. (Bolger, 1990; McCrae & Costa, 1986; O'Brien & DeLongis, 1996).

Non-clinical research has also found that emotionality is associated with an increased number of negative life events (Magnus et.al., 1993; Ormel & Wohlforth, 1991), as well as daily stressors (Affleck et. al., 1994; Bolger & Schilling, 1991; Suls, Martin & David, 1998). David et.al. (1997) showed that emotionality is associated with higher rates of undesirable family and friend stressors, undesirable leisure stressors, and undesirable financial stressors. In addition, many studies have indicated that compared with low-N individuals high-N individuals experience greater distress in response to major life stress (e.g., Innes & Kitto, 1989; Ormel & Wohlforth, 1991)

In reviewing literature of personality factors, in terms of stress and distress, various other personality variables not yet discussed, have been studied.

2.4.3 Optimism and self-esteem.

Optimism and self-esteem are thought to provide valuable individual difference resources for coping. (Taylor & Brown, 1988). They contribute positively to psychological well being, social support and effective coping as well as physical health. (Taylor, 1989). Research suggests that an optimistic nature helps people cope effectively with stress (Sheier & Carver, 1985). Sheier and Carver (1986) studied divergent coping strategies of optimists and pessimists. Findings indicated reliable positive correlation's between optimism and problem-focused coping, seeking of social support, and emphasizing positive aspects of the stressful situation. Pessimism was associated with denial,

distancing, focusing on stressful feelings and with disengagement from the goal that the stressor was interfering.

Although it has received less attention, self-esteem is thought to be an effective resource in times of stress. (e.g., Fleishman, 1984; Leventhal & Nevenz, 1982). Research has shown that individuals with high self-esteem or a high feeling of control will adopt active coping strategies focused on problems, whereas individuals with a low self-esteem will adopt passive-avoidant coping styles focused on emotions. (Thoits, 1995).

DeLongis, Folkman and Lazarus (1988) conducted a study examining the daily stress processes among 75 married couples over a 6-month period. Findings suggest striking individual differences were found in the extent to which daily stress was associated with health and mood across time. Participants with unsupportive social relationships and low self-esteem were more likely to experience an increase in psychological and somatic problems both on and following stressful days.

2.4.4. Anxiety and reactivity.

Personality variables such as anxiety and reactivity have also received some attention. Kohn, Lafrenlere and Gurevich (1991) investigated the possible moderating effects of anxiety and reactivity on the adverse health consequences of hassle-based stress. Their study indicated that hassles and trait anxiety contributed positively to perceived stress as well as had a significant interactive effect in psychiatric symptomology. Hassles and reactivity both had a significant positive impact on minor ailments.

From the literature review it is clear that personality variables do play a significant role in the relationship between stress and distress. However, there are conflicting findings in terms of the extent to which personality has an influence. The present study will focus on the personality variables of extroversion, emotionality and socialization in terms of the effects it may have in the relationship between stress and depression. Substantial

research finds both extroversion and emotionality having a significant impact in the areas of stress and depression.

2.5. Research justification.

There has been some controversy over the effect of social support as an ameliorative factor on depression, with some studies showing the buffering effect and others not. Cohen and Wills (1985) and Plancherel et. al., (1994) have identified two major models to explain the protective roles of social support on stress. The first, the principal effect model, suggests that social support gives an individual a general positive context without regard for actual stressful experiences. The second model, the stress buffering effect, suggests that adequate social support will moderate the impact of stress on health. For example, Bolognini et. al., (1992) found that pre-adolescents' reports of low satisfaction with their social support was related to problems of anxiety, depression or sleep disturbances.

However, other studies have not found social support having a buffering effect. For example, Dumont and Provost (1998) studied the protective role of social support, coping strategies, self-esteem and social activities on the experience of stress and depression. They found social support to have the least significant effect on stress and depression among the variables used. They suggest social support should be considered together with other factors in the relationship with stress and depression.

Depression and its harmful consequences are a serious phenomenon. It is imperative to obtain a better understanding of depression and the variables influencing depression, in order to develop effective preventative and treatment measures. Thus, the aim of the study is to understand the relationship of social support in moderating the effects of stressful life events on depression as well as the effects of other variables, such as personality factors, on this relationship.

2.6. Thesis objectives.

The present study aims at looking at the relationship and influence of stressful life events, social support and personality factors on depression with a sample of university students, while controlling for age, gender and socially desirable responses. The aims/hypotheses are outlined as follows:

To determine if depression can be predicted by college life events, and mediated by social support, emotionality, extroversion and socialization.

1. To ascertain if social support has a direct mediating effect on the prediction of depression by stressful life events.
2. To determine whether number of social supports or satisfaction with social supports mediates the effects of stressful life events on depression.
3. To ascertain if emotionality will explain additional variance in depression beyond life events and social support.
4. To examine whether satisfaction with social support can be predicted by extroversion, socialization and emotional stability.

CHAPTER THREE

Research Design and Methodology

3. Introduction

This chapter reports information regarding the research design and methodology of the study. It includes a description of the research sample as well as the procedures and measuring instruments used.

3.1. The sample

The sample consisted of 124 first-year university students enrolled in undergraduate psychology courses at Massey University. All participation in the research was voluntary. Of the 124 participants, the majority (82.3%) were women (102). Ages ranged from 17 to 56 years of age with an average age of 29.77 years (S.D.=11.29). The majority (78.2%) classified themselves as New Zealand European/Pakeha; 10.5% were Maori, (Table 1).

Table 1**Demographic Information of the study sample (n=124)**

	Frequency	%
<i>Gender</i>		
Male	22	17.7%
Female	102	82.3%
<i>Ethnicity</i>		
European/Pakeha	97	78.2%
Maori	13	10.5%
Pacific Islander	6	4.8%
Asian	7	5.6%
<i>Mean Age</i>	29.77	
<i>Standard deviation</i>	11.29	

3.2. Survey procedures

The present author sought volunteers from a large first year psychology class of approximately 200 students. Approval for the research was granted by the Massey Human Ethics Committee. Participation was voluntary. Students were invited in class to participate after the next lecture in the following week. Before data collection the research project as well as the voluntary nature of the project was explained again to the students. Also emphasized to the students was the confidentiality and anonymity of participation in the research project. The research participants were asked to complete a questionnaire consisting of four parts. It was estimated that completion would take approximately forty minutes.

To those that agreed to take part an information sheet; questionnaire and envelope were handed out. The information sheet reiterated the details and explanations of the research

project. Participants deposited the completed, anonymous questionnaires in a collection box. If they chose to, the students completed a separate self-addressed envelope for mailing a summary of the findings to them.

3.3. Measuring instruments

The measurement instrument (Appendix C) used in the present study was in the form of a questionnaire which consisted of four parts; a Depression Inventory, the College Life Stress Inventory, Brief Social Support Questionnaire and the Eysenck Personality Questionnaire. At the end of the questionnaire were a few basic and brief questions regarding demographics. Demographic questions included gender, age and ethnicity.

3.3.1. The Depression Inventory

The Depression Inventory was developed from previous research (Bell et. al., 1982) with medical inpatients and outpatients, and cross-sectional studies such as the Stirling County (Leighton, Harding, Macklin, MacMillan & Leighton, 1963, cited in Bell et.al., 1982) and in the Midtown Manhattan surveys (Srole, Langner, Michael, Opler & Rennie, 1962, cited in Bell et. al., 1982). The inventory of 18 items gives a broader range of clinical symptoms than the Beck Depression Inventory, including:

- a) Affective symptoms related to lower mood, e.g. item 2., "How often do you have crying spells or feel like it?"
- b) Somatic symptoms, e.g. item 8., "Do you feel that you are bothered by all sorts of ailments in different parts of your body?"
- c) Altered patterns of reactivity, such as sleep and appetite, e.g., item 11, "How often do you have trouble with sleeping?"
- d) Negative self-evaluation, including lowered self-esteem, self-blame, suicidal ideation and sense of guilt e.g. item 14, "How often do you think about suicide?"

- e) An existential dimension characterized by pessimism, despair and a gloomy outlook on the future e.g. item 16, "Do you sometimes wonder if anything is worthwhile anymore?"

Each item is rated on a five-point scale ranging from 'often' to 'never', with a maximum score of 72. Bell et. al., (1982) reported an overall alpha coefficient of .90 for the items. Several items were reworded for New Zealand cultural conditions. For example, item one was reworded from "Do you feel in good spirits?" to "Do you have a feeling of well-being?" to avoid Maori connotations relating to the spirits of their ancestors. Another example, item 18 was reworded from "How does the future look to you?" to "Does your future seem uncertain to you?" to make sense in terms of the rating scale. The modified depression scale had a high internal consistency ($\alpha = .92$) for the present sample.

3.3.2 The College Life Stress Inventory

The College Life Stress Inventory was developed as an instrument illustrating life stress and its cumulative nature using events that are likely to be familiar to traditional-age college students and uses data from students concerning the relative perceived stressfulness of these events. (Renner & Mackin, 1994).

Most texts discuss Holmes and Rahe (1967) approach to stress and its effect on health, and many texts include Holmes and Rahe's Social Readjustment Scale (SRRS) instrument, which generates stress scores as life change units. The SRRS does not include many common events that act as stressors affecting traditional-age college students (e.g., final examinations). It also includes many items that are not meaningful to the typical entry-level college student.

Thus, Renner and Mackin saw the need to develop a similar instrument intended for classroom use, and one which focuses on stressors appropriate to college students. Renner and Mackin gave both the College Life Stress Inventory and Holmes and Rahe's (1967) original instrument to a large general psychology class. Students were asked to

suggest additional items. The instructions asked students to indicate which of the described events had happened to them in the last 12 months. The responses were collected and condensed into a draft form, with the goal that the instrument would include major and minor stressors affecting college students. Items were revised; some deleted based on student suggestions and frequency of occurrence.

The final version of the scale included 51 items. In the present study items were presented in alphabetical order. The research participants were asked to circle either 'yes' or 'no' as to whether they had experienced the particular event within the past year. Each item's stress value was scaled, so that the most stressful item had a stress value of 100 and the least stressful item had a stress value of 20.

The final version of the scale includes both minor and major stressors appropriate to college students. An example of an item measuring a major stressor includes, "Death of a family member". An example of an item measuring a minor stressor includes, "A class you hate." The authors did not provide any reliability and validity data.

3.3.3. The Brief Social Support Questionnaire

The role of social support in preventing or reducing the negative consequences of stressful life events has attracted considerable research attention in recent years. (E.g., Leary, 1983). Researchers have studied social support among diverse subject groups, for example, unemployed men (Gore, 1978), pregnant adolescents (Barrera, 1981), new mothers (Cutrana, 1984), to name a few. One criticism of most of the studies of social support research has been that they generally employ ad hoc measures of social support with questionable reliability and validity (Leary, 1983).

Recently this situation has been somewhat remedied. One of the most promising of the recently developed social support measures is the Social Support Questionnaire (SSQ; Sarason, Levine, Basham & Sarason, 1983). The SSQ measures two important measures of social support namely, network size (N) and perceived social support (S). The full

version of the SSQ is impressive in terms of its psychometric properties and evidence suggesting support for its validity. At the same time its development has relied entirely upon college student's data and in practice it is an overly long questionnaire, with many redundant items. Thus it appeared necessary to develop a brief version of the SSQ (Siegert, Patren & Walkey, 1987).

The Brief SSQ was developed using a traditional item analysis method with a sample of university students. It was subsequently evaluated on a second sample of 400 students and a sample of 300 unemployed people. The results of the evaluation were good in that both the "N" and "S" sub-scales displayed high internal reliability and homogeneity as measured by split-half reliability, coefficient alpha, and item-total correlation's for both groups. (r 's > .90). These coefficients compare favorably with those reported for the full 54 item SSQ as described by Sarason et. al., (1983) in their original development of the SSQ. The Brief version of the Social Support Questionnaire displays concurrent validities with the General Health Questionnaire (GHQ), (ISSB), and the Social Support Questionnaire (SSQ-N) ranging from .26 to .46.

The brief version of the SSQ also measures both network size and perceived social support. Each item in the questionnaire has two parts. The first part asks participants to list all the people they know who they can count on for help or support in the way described, for example, "Who can you really count on to take your mind off your worries when you feel under stress?" Participants are asked to give the person's initials and their relationship to them, for example, "T.N. (brother)". The mean number of supporters listed yields the network size score (N score). The second part of each item asks participants to rate their level of satisfaction with the total support for that situation along a six-point continuum from "very satisfied" to "very dissatisfied". The average provides the satisfaction with social supports score (S score). The Brief SSQ comprises 12N and 12S items. This version was less than half the length of the original version but had retained high reliabilities of above .90 for both sub-scales. The "N" and "S" sub-scales of the Brief SSQ have coefficient alphas of .92 and .93 respectively.

3.3.4. The Eysenck Personality Questionnaire

The Eysenck Personality Questionnaire (EPQ), now in revised form, was a development of various earlier personality questionnaires. The first questionnaire in this series was the Maudsley Medical Questionnaire (Eysenck, 1952) which measured "N" (neuroticism/emotionality). This was followed by the Maudsley Personality Inventory (MPI) which measured "N" and "E" (emotionality, extroversion and introversion). The MPI (Eysenck 1959) was followed by the EPI (Eysenck & Eysenck, 1964); this added a "lie" (L) scale to measure dissimulation. The main advantage of the EPQ (Eysenck & Eysenck, 1975) was the introduction of a new variable, labeled "P" for psychoticism (poor socialization).

The importance of describing the major patterns of behavior in human subjects has always been recognized, and the search for the main dimensions of personality has been pursued by well-known figures. Two very clearly marked and significant dimensions are recognized, namely, extroversion-introversion and neuroticism (emotionality).

In 1952, Eysenck hypothesized a third major dimension of personality independent of "E" and "N". This third dimension was labeled "P" (psychoticism). The P, E and N scales used in this questionnaire were developed through a lengthy series of about twenty factorial studies, using in each case slightly different items selected partly on the basis of the results obtained in previous analyses, partly on the basis of theoretical considerations. The questionnaire also includes a "lie scale". This scale, which was first incorporated in a series of questionnaires in the EPI, attempts to measure a tendency on the part of some subjects to "fake good" or provide socially desirable responses (social desirability). A series of factorial and experimental studies have been carried out to investigate the nature of this scale in some detail (Eysenck & Eysenck, 1970; Michaelis & Eysenck, 1971; Eysenck, Nias & Eysenck, 1971). The scale possesses a considerable degree of factorial unity, with individual items having high loading on this factor, and on no other.

The Eysenck Personality Questionnaire (EPQ) was accompanied by numerous criticisms of the psychometric properties of the P scale (Bishop, 1977), as well as other aspects of the concept itself. There were three major faults in the original P scale. The first of these was the low reliability of the scale (0.74 for males and 0.68 for females). The second fault was the low range of scoring with means of 3.78 for males and 2.63 for females. The third fault was the grossly skewed distribution of scores.

Hence, Eysenck, Eysenck and Barrett (1985) attempted to improve the P scale. They conducted a study using a 117-item questionnaire, which contained all the 90 items of the EPQ plus almost all of the P items used for a previous version of the questionnaire. The sample comprised groups of students, teachers, and other willing and varied subjects being approached to complete the questionnaire and return it by post. Loadings were scrutinized for suitable P items to improve the original scale. There are now 32 items on the new P scale, that is seven more than in the EPQ's P scale, very few changes were made to the E and N scales. The E scale has 23 items and the N scale has 24 items, the Lie scale has its original 21 items. The total number of items, therefore, is now 100. However, six items were appended to the questionnaire, which are only used and scored if the addiction scale or criminality scale is required.

The manual discusses numerous studies which argue for the validity of the scales. For example, Kline and Cooper (1983), cited in Eysenck and Eysenck (1985), looked at the structure of Machiavellianism, and concluded that of all the Cattelian and Eysenkian factors, only the P scale is related to Machiavellianism.

3.4. Analysis of data

In terms of t-tests and ANOVA's, Levene's test for the equality of variances was computed to ascertain if there were significant differences between variances in variable scores. If the null hypothesis of no difference was rejected, the conservative value of the statistic was used. All statistical analyses were completed using the SPSS-10. To

interpret the EPQ's P scale in terms of socialization, a low score indicates high socialization; a high score, lower socialization.

To determine whether stressful life events (SLE), number of social supports (NS), satisfaction with social supports (SS), emotionality (N), extroversion (E) and socialization contribute unique variance to participants' depression scores, hierarchical regression techniques were conducted. Similarly, hierarchical regression analysis was used to determine whether NS, E, N, and socialization scores contribute unique variance to participants' satisfaction with social support scores. Following the recommendation of Cohen and Cohen (1983), the control variables of age and sex would be entered in to the regression equation before entering each successive predictor variable in the order stated in the hypothesis. If the result of entering a predictor reduces the significance of the link between a previously entered variable and the criterion then that predictor variable is considered to be a *partial* mediator; if the result is that the link is rendered non-significant then that variable entered is a *complete* mediator. (Baron & Kenny, 1986).

CHAPTER FOUR

Results

4. Introduction

The purpose of this chapter is to present the results pertaining to the objectives of the study. To reiterate, the main objective was to assess the effects of stressful life events, social support and personality on depression. The study also aimed at assessing the varying relationships amongst the variables; for example, the extent to which social support mediates the effect of stressful life events on depression, as well as assessing the additional variance that emotionality or the other personality factors may explain.

4.1. Descriptives

Table 2 and Appendix A show the means, standard deviations and range of scores on the scales of the measuring instruments used. For most of the scales the distributions were reasonably normal.

For the total sample, depression scores were moderate. Socialization scores were low, indicating a high degree of socialization in the sample. The distribution of satisfaction with social support scores was greatly negatively skewed, indicating that most of the respondents were satisfied with their social supports.

Table 2: Means, standard deviations (SD's), ranges, and skewness of scores on the continuous scales and coefficients of internal consistency (α).

Variable	N	Range of scores	Possible range of scores	Skewness	Mean	SD	α
Depression	123	28-85	18-90	.75	48.06	10.16	.85
Life events	124	303-2223	0-3523	.14	1272.23	354.74	-
Number of social support	124	2-108	0-216	.598	45.40	21.64	.92
Satisfaction with social support	124	16-72	1-144	-2.05	61.61	9.43	.91
Emotionality	122	0-24	0-24	-.39	13.39	5.62	.87
Extroversion	123	3-23	0-23	-.26	14.78	4.67	.82
Socialization	122	0-16	0-32	.39	6.16	3.57	.69
Social desirability	124	0-17	0-21	.52	7.15	3.49	.70
Age	122	17-56	17-56	.82	28.63	11.29	-

Table 3 shows the means and standard deviations for men and women on each of the continuous variables. Except for socialization, there were no significant differences in means between women's and men's scores on the variables. Women obtained significantly lower mean scores on socialization ($M=5.67$, $SD=3.46$) than men ($M=8.36$, $SD=3.37$), $t(119) = -3.33$, $p < .001$, indicating that women in the sample had a higher degree of socialization. The internal consistency for all of the scales is moderately high, except for the socialization scale ($\alpha = .69$), but still above the acceptable level of .6 (Nunnally, 1978).

Because the majority of the sample were European/Pakeha (78.2%), with small percentages for the remaining ethnic groups, comparisons between the ethnic groups would not have yielded meaningful information.

Table 3: Means and standard deviations (SD's) for men and women for each of the continuous variables.

Variable	N	Female		N	Male		<i>t</i>	df
		Mean	SD		Mean	SD		
Depression	100	47.46	10.55	22	51.0	7.95	-1.48	120
Life events	101	1250.25	355.36	22	1384.05	342.88	-1.81	121
Number of supports	101	45.91	21.20	22	43.09	24.41	.55	121
Satisfaction with social support	101	61.81	9.90	22	60.73	7.26	.49	121
Emotionality	99	13.39	5.57	22	13.18	5.98	.16	119
Extroversion	100	14.53	4.50	22	15.77	5.42	-1.13	120
Socialization	99	5.67	3.46	22	8.36	3.37	-3.33***	119
Social desirability	101	7.41	3.44	22	6.05	3.62	1.67	121
Age	100	28.73	11.29	22	28.18	11.53	.21	120

*** $p < .001$

4.2 Relationships among the variables.

The correlations among the continuous variables are shown in Table 4. Significant ($p < .05$) positive correlations were found between depression and stressful life events ($r = .38$), and between depression and emotionality ($r = .66$). Depression scores correlated significantly ($p < .05$) and negatively with age, number of social supports, satisfaction with social supports, and extroversion ($r = -.18, -.27, -.44$ and $-.23$, respectively).

Stressful life events scores correlated significantly and negatively with age ($-.39$), and positively with emotionality, extroversion and socialization ($r = .19, .25$, and $.24$, respectively). Number of social supports was significantly correlated with satisfaction with social supports ($.28$) and extroversion ($.25$). Satisfaction correlated significantly and positively with extroversion ($.20$), and negatively with emotionality ($-.24$) and socialization ($-.20$).

Table 4: Correlations among the variables. (N=124)

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1.Depression										
2.Life events	.38***									
3.Number of social supports	-.27**	-.11								
4.Satisfaction with social supports	-.44***	-.15	.28**							
5.Emotionality	.66***	.19*	-.15	-.24**						
6.Extroversion	-.23*	.25**	.25**	.20*	-.30**					
7.Socialization	.12	.24**	-.17	-.20*	-.03	.05				
8.Social desirability	-.09	-.16	-.17	-.09	-.23*	-.11	-.13			
9.Gender	.02	.02	-.03	-.03	.06	.12	.16	-.12		
10.Age	-.18*	-.39**	-.03	-.03	-.14	-.03	-.08	.16	-.02	

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

N's may vary depending on missing values.

4.3. Depression, life events and social support.

Table 5 presents the results of hierarchical regression analysis for the effects of life events, social support and personality traits on depression. The regression analysis consisted of four steps with depression as the dependent variable.

In Step One age, sex and stressful life events were assessed. Stressful life events predicted depression ($\beta=.33, p<.001$) which accounted for 9.2 percent of the variance in depression scores, $R^2=.139, F(3,113) = 6.06, p=.001$. This effect was in the expected direction: the higher the life events score, the higher the depression scores.

In Step Two number of social supports was added to the equation. Stressful life events still contributed significant but less variance in depression scores. Number of supports was predictive of depression ($\beta=-.26, p<.001$) which accounted for 7.8 percent of variance in depression scores, $R^2=.206, F(1,112) = 9.47, p<.001$. This indicates the more social supports the lower the depression. Thus, number of social supports proved to be a partial mediator in the relationship of stressful life events and depression.

However, in Step Three when satisfaction with social supports was added to the equation the contribution of number of social supports fell to a non-significant level, $p>.05$. Satisfaction with social supports thus had a partial mediating effect on the relationship between college life events and depression, and a complete mediating effect on the relationship between number of social supports and depression. Satisfaction with social supports predicted lower depression ($\beta=-.34, p<.001$) which accounted for 13.0 percent of the variance in depression scores, $R^2=.309, F(1,111) = 16.63, p<.001$.

In Step Four the personality factors (socialization, extroversion, emotionality) and social desirability were added to the equation. Socialization, extroversion and social desirability did not contribute significant variance to depression scores. However, emotionality was highly predictive of depression ($\beta=.55, p<.001$) which accounted for 35.6 percent of the variance in depression scores ($p<.001$) thereby accounting for the

highest percentage of variance in depression scores, $R^2=.590$, $F(4,107) = 18.36$, $p<.001$.
The completed model accounted for 59.0 percent of variance in depression scores.

Table 5: Results of hierarchical regression analysis for the effects of life events, social support, and personality traits on depression, controlling for age, gender and socially desirable responses.

	B	SEB	β	t	Partial r ²
Dependant Variable: Depression					
Step One (R²=.139)					
(Constant)	34.88	5.59		6.24***	
Age	-.05	.09	-.06	-.60	.003
Sex	2.22	2.31	.09	.96	.008
Life events	.01	.00	.33	3.39***	.092
Step Two (R²=.206)					
(Constant)	43.40	6.06		7.16***	
Age	-.08	.08	-.09	-0.94	.008
Sex	2.00	2.23	.08	0.90	.007
Life events	.01	.00	.28	2.93**	.071
Number of social supports	-.12	.04	-.26	-3.08***	.078
Step Three (R²=.309)					
(Constant)	67.55	8.21		8.23***	
Age	-.10	.08	-.11	-1.26	.014
Sex	1.85	2.09	.07	.89	.007
Life events	.01	.00	.23	2.62**	.059
Number of social supports	-.08	.04	-.16	-1.91	.032
Satisfaction with social supports	-.39	.10	-.34	-4.08***	.130
Step Four (R²=.590)					
(Constant)	39.83	7.79		5.11***	
Age	-.04	.06	-.04	-0.56	.003
Sex	2.95	1.73	.11	1.71	.027
Life events	.01	.00	.22	2.92**	.073
Number of social supports	-.04	.03	-.08	-1.12	.012
Satisfaction with social supports	-.22	.08	-.20	-2.85**	.071
Socialization	-.01	.21	-.00	-0.04	.000
Extroversion	-.14	.16	-.06	-0.87	.007
Emotionality	1.01	.13	.55	7.70***	.356
Social desirability	.22	.20	.07	1.06	.010

p<.01, *p<.001

4.4. Satisfaction with social supports, number of social supports and personality traits.

Table 6 presents the results of hierarchical regression analysis for the prediction of satisfaction with social supports, by number of social supports and personality traits. The regression analysis consists of three steps with satisfaction with social supports as the dependent variable. Because gender and age did not correlate significantly with the social support variables, they were not entered into the regression equation.

In Step One number of social supports was entered into the equation. Number of social supports was predictive of satisfaction with social supports ($\beta=.30$, $p<.001$) which explained 8.8 percent of the variance in satisfaction scores, $R^2=.088$, $F(1,118) = 11.41$, $p=.001$.

In Step Two emotionality was added to the equation. Emotionality predicted satisfaction with social supports ($\beta=-.20$, $p<.01$) and explained an additional 4.2 percent of the variance in satisfaction scores, $R^2=.127$, $F(1,117) = 5.18$, $p<.01$.

In Step Three socialization was added to the equation and predicted satisfaction with social supports ($\beta=-.17$, $p<.01$), contributing an additional 3.8 percent of variance in satisfaction scores, $R^2=.160$, $F(1,116) = 4.62$, $p<.01$.

In both cases, emotionality and socialization had a partial mediating effect on the relationship between number of social supports and satisfaction with social supports.

In Step Four, extroversion was added to the equation but was not a significant predictor of satisfaction with social supports, $R^2= .168$, $F(1,115) = 1.08$, $p>.05$.

Table 6: Results of hierarchical regression analysis for the prediction of satisfaction with social supports (SS), by number of social supports and personality traits.

	B	SEB	β	<i>t</i>	Partial r^2
Dependant Variable: SS					
Step One (R²=.088)					
(Constant)	55.55	1.93		28.75***	
Number of social supports	.13	.04	.30	3.38***	.088
Step Two (R²=.127)					
(Constant)	60.69	2.95		20.57***	
Number of social supports	.12	.04	.26	3.01***	.072
Emotionality	-.34	.15	-.20	-2.28**	.042
Step Three (R²=.160)					
(Constant)	64.61	3.43		18.83***	
Number of social supports	.10	.04	.23	2.63**	.056
Emotionality	-.36	.15	-.21	-2.43**	.048
Socialization	-.50	.23	-.17	-2.15**	.038
Step Four (R²=.168)					
(Constant)	61.78	4.38		14.10***	
Number of social supports	.09	.40	.218	2.31*	.045
Emotionality	-.31	.15	-.186	-2.08*	.036
Socialization	-.52	.23	-.193	-2.23*	.041
Extroversion	.19	.19	.095	1.04	.009

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

CHAPTER FIVE

Discussion

5. Introduction

The purpose of this chapter is to discuss the results obtained in the study. The results obtained will be discussed in terms of the original hypotheses as well as the relevant literature that was previously reviewed.

5.1. Range and skewness of scores for the total sample

In the previous chapter, Table 2 presented the means, standard deviations, ranges and skewness of scores for the total sample. Several variables displayed skewed distributions. Socialization was slightly positively skewed, indicating that on the whole the sample were highly socialized. Extroversion was slightly negatively skewed indicating that respondents were more extroverted. However, emotionality displayed a negatively skewed distribution suggesting more emotional instability within the sample. Satisfaction with social supports was greatly negatively skewed, indicating that respondents were satisfied with their social supports. Depression was slightly positively skewed suggesting that, on the whole, the sample were less depressed. Thus, taken together, the sample displayed some emotional instability, was highly socialized, extroverted, satisfied with their social supports and experienced less depression.

5.2. Gender Differences

In the previous chapter, Table 3 showed the means and standard deviations for men and women on each of the variables. There were no significant differences between men and women on any of the variables other than socialization. Men obtained significantly lower mean scores on socialization than women. This may suggest that compared with the

women in the sample, the men were more likely to be solitary, uncaring, lacking in feeling, hostile, aggressive and insensitive.

The gender differences of the present study have both differences and similarities to previous research. For example, Halamandaris and Power (1999) found no significant gender differences on any personality variables in their study of personality, social support, coping and examination stress. This differs from the present study in terms of socialization being significantly higher in females than in males. Halamandaris and Power (1999) found a number of significant gender differences in terms of social support, with males having an overall lower mean score. Whereas, in the present study no significant gender differences in social support were found. The present study found no significant gender differences in terms of depression. This finding differs from many previous studies finding gender differences in the occurrence of depression. (Hankin & Abramson, 1999; Nolen-Hoeksema, 1990). Two prospective longitudinal studies following children from preadolescence to young adulthood found that girls' depressed mood increased after the age of 13 years, whereas depressed mood remained constant in boys. (Peterson et al., 1991; Ge et al., 1994). Wichstrom (1999) conducted a large cross-sectional study and found a similar pattern. In the present study the absence of gender differences in depression may be due to the age of the sample group. The sample consisted of mainly older adolescents and young adults. On the basis of previous research, (Peterson et al., 1991; Nolen-Hoeksema, 1990), depression is higher among boys than girls prior to 13 years of age, depression begins to increase among girls after 13 years of age and remains constant among boys; thus it is likely that in the present study depression among males and females would be similar due to the average age of the sample group.

5.3. Relationships between the variables

In the previous chapter Table 4 presented the relationships between the variables of the study. Several significant correlations were found between the variables. Significant positive correlations were found between depression and stressful life events. This

indicates that the more stressful life events experienced the greater the likelihood of experiencing depression. This finding is consistent with existing research. Many studies have found stressful life events to be strongly related to depressive symptoms at all ages. (Banez & Compas, 1990; Adams & Adams, 1991; Goodyer, 1990; Garrison et al., 1993). Research has found many types of stressful events having an effect on psychological well being. For example, family conflicts, illness among family members, situations with long-term psychological threat. (Enos & Hondel, 1986; Ferguson, Horwood & Lynskey, 1996). In the present study, college life events such as oversleeping for an exam, writing a major term paper, and difficulties with parents, affected levels of depression among first-year university students.

In the present study, stressful life events was found to be significantly and positively correlated with socialization and extroversion. This suggests that extroverted individuals as well as individuals low in socialization were likely to be exposed to more stressful life events. Research has found an inverse relationship between socialization and adjustment to university life. This suggests that those who are low in socialization have difficulty adjusting and coping and thus would be exposed to many stressors. (Halamandaris & Power, 1999). Research on the relationship between stressful life events and extroversion has, to a certain extent, yielded findings which differ from the present study. For example, Lu (1994) found a negative correlation between extroversion and perceived university stress, whereas, the present study found a positive correlation between extroversion and stressful life events. This may be explained in that perceived stress and experienced stress differ from one another. It seems likely that extroverted individuals perceive situations as less stressful than introverted individuals. (Lu, 1994). This is understandable in that extroverts have an internal locus of control. (Lu, 1994). This is in line with Rotter's (1966) original thoughts suggesting that individuals with an internal locus of control tend to view life changes as challenges rather than stressors. Therefore, although extroverts are often exposed to many stressors, they are likely to be better equipped to cope with them.

Within the present study depression scores correlated significantly and positively with emotionality (emotional instability). This indicates that emotionally unstable individuals were highly likely to experience depression. Emotional instability has been repeatedly found to have a negative influence on well-being. (Bolger & Schilling, 1991; Watson & Clark, 1984). In addition, emotionally unstable individuals have been shown to make use of inadequate ways of coping (Costa & McCrae, 1986) and have dissatisfaction with social supports (Costa, Zonderman & McCrae, 1985). This study's findings show that emotionality was inversely related to satisfaction with social support. Thus, emotionally unstable individuals were likely to be dissatisfied with their social supports. David et.al. (1997) showed that emotionality was associated with higher rates of undesirable friend and family stressors/interpersonal stressors. Costa, Zonderman and McCrae (1985) also found emotionally unstable individuals to have dissatisfaction with their social supports.

Within this study, age was negatively related to stressful life event scores and depression. Depression scores correlated negatively with age. This finding suggests that older class members did not experience the same number of college life events as that of younger class members and hence experienced less depression. Depression scores also correlated significantly and negatively with extroversion. This suggests that extroverted individuals were more likely to experience less depression. Lu (1994) found that extroversion correlated negatively with depression on a sample of first year university students. Research has been conflicting in terms of extroversion. Several studies found extroversion to be positively correlated with poor adjustment, depression and psychosomatic symptoms (Cooper & Payne, 1967; Holahan & Moos, 1985, 1986). However, strong evidence also supports a reliable connection between extroversion and happiness measures. (Costa & McCrae, 1980).

In the present study, depression scores were found to be significantly and negatively correlated with number of social supports and satisfaction with social supports. This finding suggests that social support was likely to decrease the experience of depression. Substantial research has been conducted regarding the importance of social support for optimal physical and psychological health. (Cohen & Wills, 1998; Bolger & Eckenrode,

1991; Emmelkamp, 1996). In addition social support has been found to be positively associated with active, problem-focused coping (Holahan & Moos, 1987) and negatively associated with experienced stress (De Jong & Emmelkamp, 1996). Thus, social support is highly likely to have a beneficial effect on well being.

This study's initial hypothesis was that depression could be predicted by age, gender, socialization, extroversion, emotionality, stressful life events, and number of social supports and satisfaction with social supports. This hypothesis was partially supported in that depression was significantly correlated with all the variables except gender. Gender was not significantly related to depression.

5.4. Depression as a function of life events, social support and personality.

In the previous chapter Table 5 presented the results of the hierarchical regression for the criterion variable of depression. Several variables were found to be influential in the occurrence of depression. Results showed that college life events accounted for a significant percent (9.2) of the variance in depression scores. This indicated that students experiencing more life events had higher depression scores than students who experienced fewer life events. In the present study life events such as writing a major term paper or difficulties with parents were predictive of depression. As previously stated, substantial evidence exists for the importance of stressful life events contributing to depression. (Allgood-Merten, Lewinson & Hops, 1990; Goodyer et al., 1993).

There is considerable evidence to suggest that social support has a significant impact on health status. (Turner, Frankel & Levin, 1983; Gore, 1973, 1978; Davidson, Bowden & Feller, 1981). It is important to determine which facet of social support is most influential. The present study as well as previous research have investigated the importance of number of social supports vs. satisfaction with social supports. Research suggests that quality of social supports (satisfaction with social supports) be more strongly related to depression than that of social network size (number of social supports). (Vandervoort, 1999; Chou, 1999). The present study found similar results. In

the present study number of social supports was found to explain 7.8 percent of variance in depression scores. However, when satisfaction with social support was entered into the equation the number of social supports fell to a non-significant level. Thus, satisfaction with social supports had a complete mediating effect on the relationship between number of social supports and depression. This finding is similar to previous findings. Chou (1999) found that satisfaction with relationships with family members and friends is consistently associated with depression. Antonucci et al., (1997) and Oyam et al., (1992) found that subjective perceptions of the quality of social relationships was more important than objective social network measures, such as social network size, especially concerning depression.

However, in the present study, when personality was entered into the equation satisfaction with social support became less significant ($p < .01$). Of all the personality variables entered into the equation emotionality was the most significant. Emotionality was found to account for the highest percentage (35.6) of the variance in depression scores. Thus emotional instability was found to be the most significant predicting variable in the occurrence of depression. In the present study, emotionally unstable individuals were highly likely to experience depression. Previous research has also found emotionality to have a prominent role in the stress process. Emotionally unstable individuals have inadequate ways of coping, such as emotion focused coping. (Jelinek & Morf, 1995; Costa & McCrae, 1980, 1986) and associated with greater dissatisfaction with social support (Costa, Zonderman & McCrae, 1985). In previous research emotionality was found to influence variables such as depression, amount of stress experienced and social support satisfaction. (Halamandaris & Power, 1999). Emotionally unstable individuals tend to be less socially supported, introverted anxious as well as employ emotion-focused coping strategies in difficult situations. (Costa & McCrae, 1980, 1986). Emotionality appears to play an influential role in varying situations such as university transition (Lu, 1994), and daily stress (Gunthert, Cohen & Armeli, 1999). Lu (1994) found emotionality correlated positively with university stress. Emotionality was found to have a main effect on depression, anxiety and somatic symptoms. Gunthert, Cohen and Armeli (1999) found high-N individuals, compared with low-N individuals

reported more interpersonal stressors and had more negative primary and secondary appraisals and reacted with more distress in response to increasingly negative primary and secondary appraisals. High-N individuals used less adaptive coping strategies and responded with more distress in response to such coping strategies. Thus, on the basis of previous research involving emotionality it is not surprising that in the present study emotionality contributed a highly significant percentage (35.6) of the variance in depression scores. In the present study emotionally unstable individuals were found to be most likely to experience depression, be exposed to stressful life events and be less satisfied with social supports.

Many of the initial hypotheses of the present study have been confirmed. One such hypothesis was, "emotionality will explain additional variance in depression to life events and social support." Findings have confirmed this hypothesis with emotionality accounting for the highest percentage of variance in depression scores. Another hypothesis of the present study was to determine whether number of social supports or satisfaction with social supports mediates the effects of stressful life events on depression. Both number of social supports and satisfaction with social supports explained a significant percent of variance in depression scores. Satisfaction with social supports had a complete mediating effect on the relationship between number of social supports and depression. However, when personality variables were entered into the equation satisfaction with social supports became less significant.

5.5. Satisfaction with social support as a function of number of supports and personality.

In previous research satisfaction with social supports has consistently been found to be predictive of well being. Various studies have compared the effectiveness of social network size and quality of social support. Such studies have found quality of social support as being the most influential in terms of depression and well being. (Vandervoort, 1999; Halamandaris & Power, 1999). When people are asked who they turn to in times of crisis and distress they cite family members and friends. Caplan's (1974) influential

work found that social support connotes various forms of aid and assistance supplied by family members, friends, neighbours and others. Lau and Kwok (2000) found that positive family relationships and support were most predictive of depression and self-concept among adolescents in Hong Kong. Jung and Khalsa (1989) found perceived family support was related to lower depression. On the basis of previous research it seems that support from significant others (quality of support) is highly predictive of well being. The present study has also found quality of support (satisfaction with social supports) to be highly influential with regards depression. Due to the significance of satisfaction with social supports in predicting depression it is important to determine which variables are predictive of satisfaction with social supports.

In the previous chapter, Table 6. presented the results of hierarchical regression analysis for satisfaction with social support. Socialization, emotionality and number of social supports accounted for significant proportions of variance in satisfaction with social support scores. This finding partially confirms a hypothesis of this study. This hypothesis stated, "satisfaction with social support can be predicted by high extroversion, socialization and emotional stability." Extroversion did not account for a significant proportion of variance. Emotional stability, socialization and number of social supports did play a significant predicting role in the satisfaction with social supports. This finding indicates that, in the present study, respondents that were highly socialized, emotionally stable and had a large social network were most likely to be satisfied with their social supports. Some of these findings are consistent with previous research.

With regards the relationship between emotionality and satisfaction with social supports, previous research has consistently found similar results to that of the present study. For example, De Jong et al., (1999) found emotionally unstable individuals to be less satisfied with social supports and in turn most likely to experience psychological distress. Halamandaris and Power (1999) found social support correlated negatively with emotionality and in turn emotionally unstable individuals had difficulty in adjusting to university life. The findings of the present study are consistent with previous research.

In the present study emotionally unstable individuals were less likely to be satisfied with their social supports.

In terms of the relationship between socialization and satisfaction with social support, previous research has found similar findings as the present study. Halamandaris and Power (1999) found that people high on psychoticism experience difficulty in developing new social networks and thus experience difficulty in adjusting to university life. Based on the definition of psychoticism, characterized as being solitary, insensitive and uncaring towards others it is easy to hypothesize that such individuals would find difficulty in developing social networks and thus have less satisfaction with their social supports. This is consistent with the present study where findings suggested that individuals low in socialization would be less likely to be satisfied with their social supports.

In the present study extroversion did not contribute significant variance to satisfaction with social supports. This, to a certain extent, contrasts with previous research. For example, Demakis (1994) as well as Costa & McCrae (1986) found extroversion to be significantly related to satisfaction with life thereby predisposing extroverted individuals toward general positive affect. Although extroversion was not directly related to satisfaction with social supports, its significant relation to satisfaction with life and positive affect suggests an indirect link to satisfaction with social supports. In the present study, the finding indicating no significant relation between extroversion and satisfaction with social supports was unpredicted. The present study found extroversion to be significantly and negatively related to depression. This suggests that in the sample extroverted individuals were likely to be less depressed. Following from these findings it would be understandable to hypothesize that extroversion would be predictive of satisfaction with social supports. However, when other variables were taken into account such as emotionality, socialization and number of social supports, the relationship between extroversion and satisfaction with social supports was not significant. Previous research findings involving extroversion have also been contradicting. Several studies find extroversion to be positively related to depression and psychosomatic symptoms.

(Cooper & Payne, 1967; Holahan & Moos, 1985, 1986). However, strong evidence also supports a reliable connection between extroversion and happiness measures. (Costa & McCrae, 1980). It seems the effects of extroversion may differ from study to study with extroverted individuals at times being found to experience less depression and in turn have greater satisfaction with social supports, and in other circumstances extroverts may be predisposed to depression and psychosomatic symptoms.

Thus, on the basis of the present study, individuals that are emotionally stable, highly socialized and have many social supports are most likely to be satisfied with their social supports. Such individuals are also likely to experience less depression.

CHAPTER SIX

Conclusions and Future Considerations

6. Introduction

The aim of this chapter is to highlight the main findings of the research. The limitations of the present study will also be discussed as well as future research directions identified.

6.1. Conclusions of the study

There were several findings from this study that should be highlighted.

Firstly, depression was significantly positively correlated with stressful life events. This means that the greater the stressful life events the greater the depression. As has been stated previously, this is consistent with previous research studies.

Depression was also significantly positively correlated with emotionality. That is, the more emotionally unstable an individual the more likely the individual will be depressed. Emotionality appears to be a key variable in the stress-depression relationship in that it largely influences the likelihood of depression even when controlling for the effects of stressful life events. As has been stated, emotionally unstable individuals have been found to use inadequate ways of coping (Costa & McCrae, 1986), they have been found to be dissatisfied with social supports. (Costa, Zonderman & McCrae, 1985) and more likely to be exposed to more stress. (Bolger & Schilling, 1991).

Depression was significantly negatively related to social supports. Both number of social supports and satisfaction with social supports were influential; however, satisfaction with supports was found to be more important than number of supports. When satisfaction was examined in the stress-support-depression equation, the effects of number of

supports dropped to insignificant levels. Thus individuals that were satisfied with their social support were less likely to have depression.

Thus, taken together, stressful life events and emotionality were the main predicting variables for depression, with emotionality increasing exposure to stress and decreasing satisfaction with social supports. Satisfaction with social support was found to be the main protector against depression.

6.2. Limitations of the study

Although the questionnaire used was adequate in reliability and validity it was of a self-report nature. Self-report measures have several inherent limitations. Thus the possible impact of response biases, difficulties inherent in the recall of events and information, must be considered when assessing findings. (Neuman, 1997).

In addition, this study was based on sample of university students. The questionnaire was focused on the stressful life events particular to university students. This study would serve as an accurate indicator of the stress process among university students. There would be difficulty in attempting to generalize findings obtained from this study to the rest of the general population. Thus, this study may be limiting in providing information pertaining to the rest of the population.

6.3. Future research considerations

It is recommended that research on the stress process and depression be continued and repeatedly conducted. Many research studies have obtained conflicting findings, perhaps due to differing methods or samples used. It is imperative that the significant variables within the stress process be highlighted and fully understood as to their role and influence within the process.

Longitudinal studies are likely to be beneficial so as to observe the long-term impact of stressful life events and social supports on depression. Making use of a diverse sample group is also likely to be beneficial in order to increase the generalizability of the findings.

Taken together, depression is a serious, debilitating disorder, which is influenced by variables such as stressful life events, social support and personality. A clear understanding of the influence of all these variables on depression is imperative so as to manage the disorder and, at best, prevent it.

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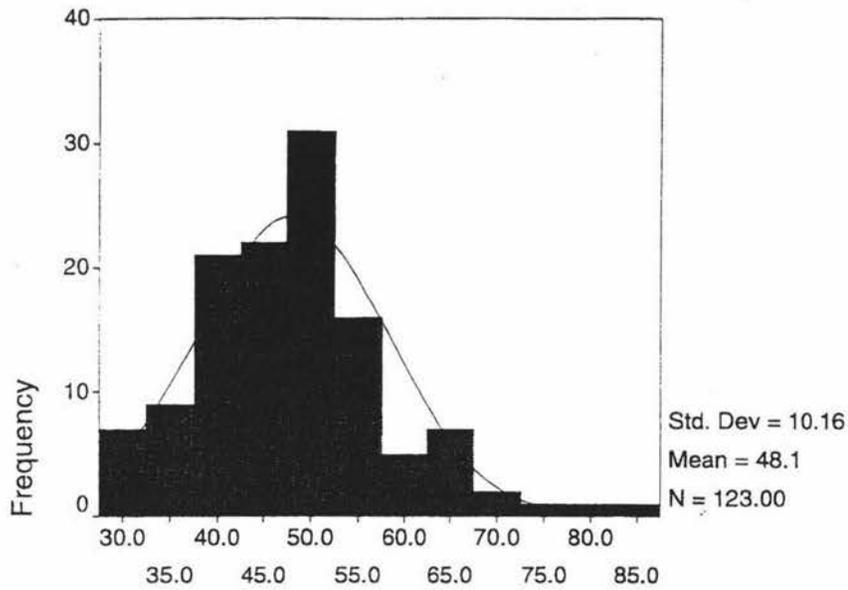
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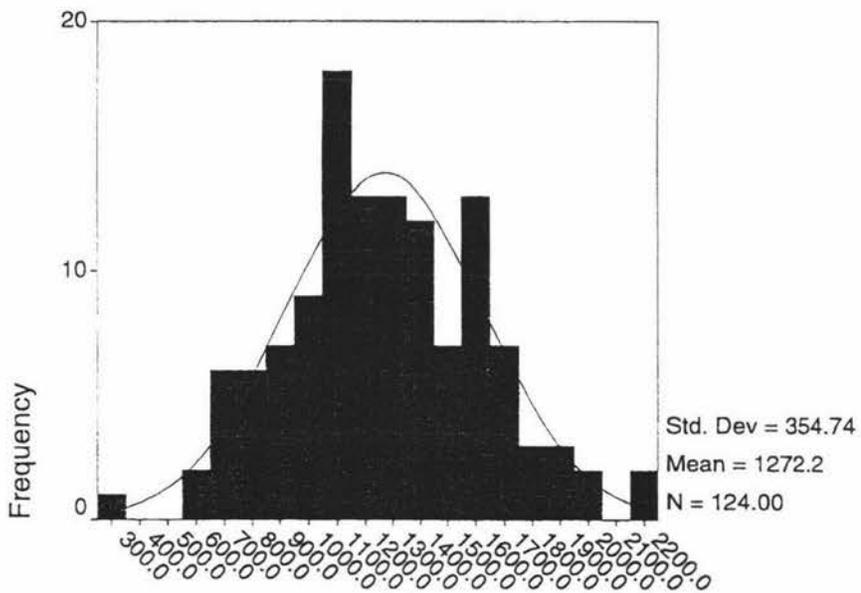
APPENDICES

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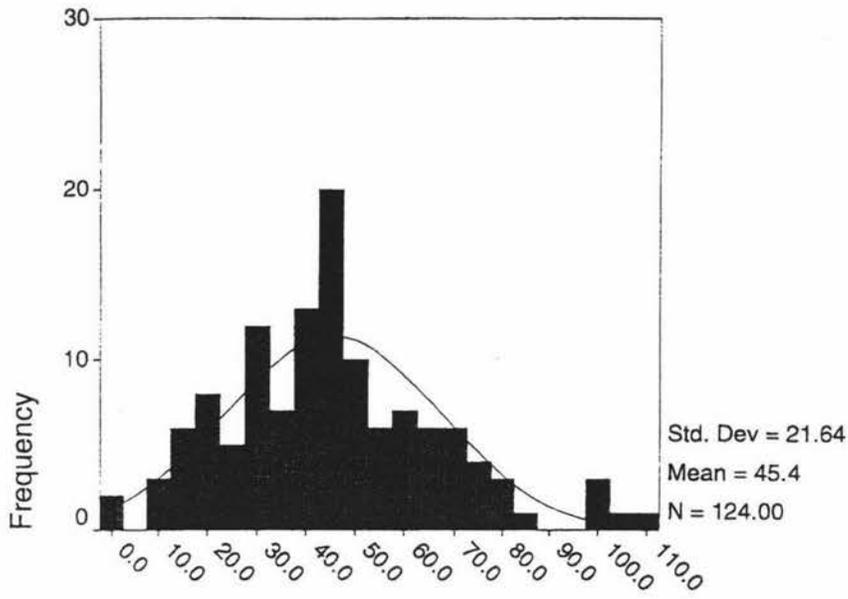
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EVENTS



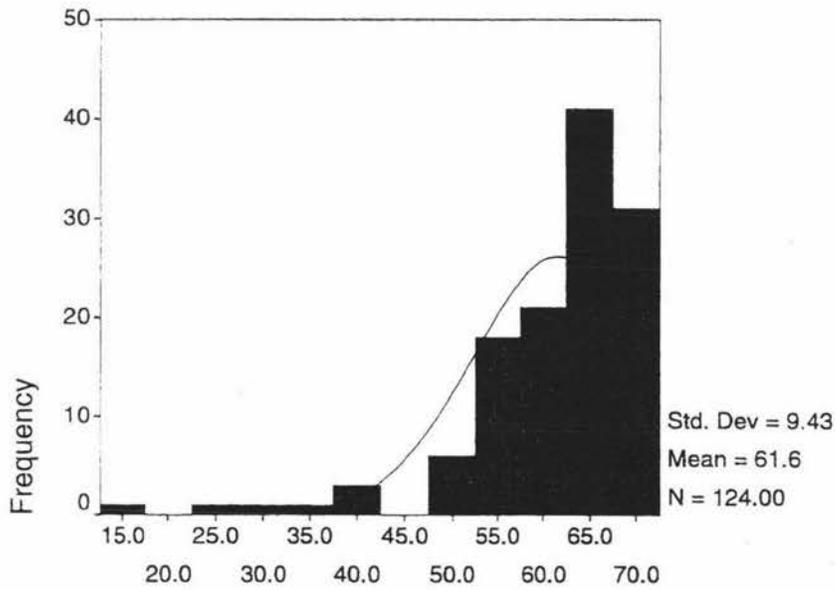
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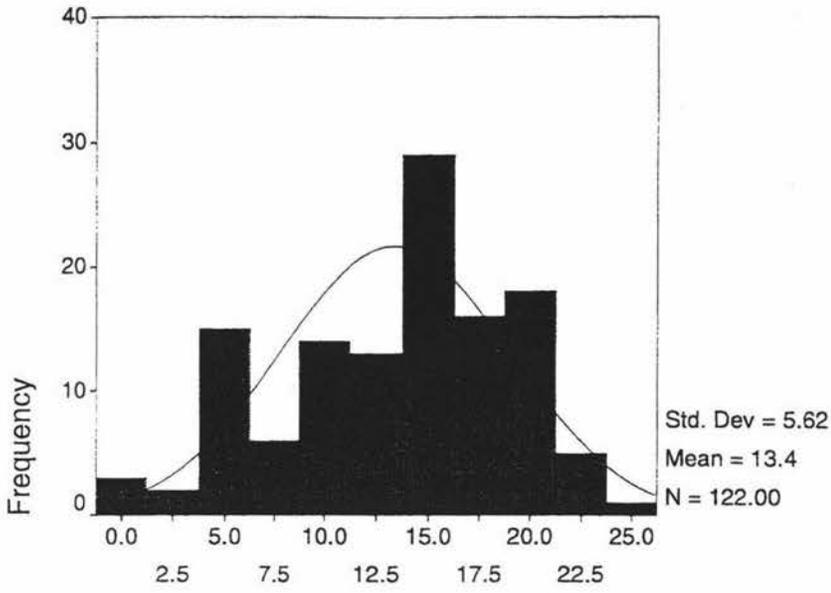
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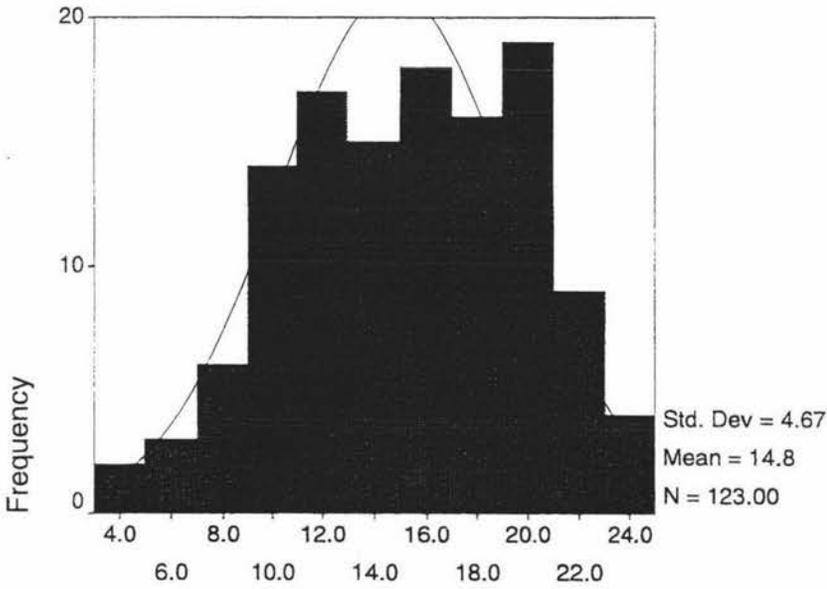
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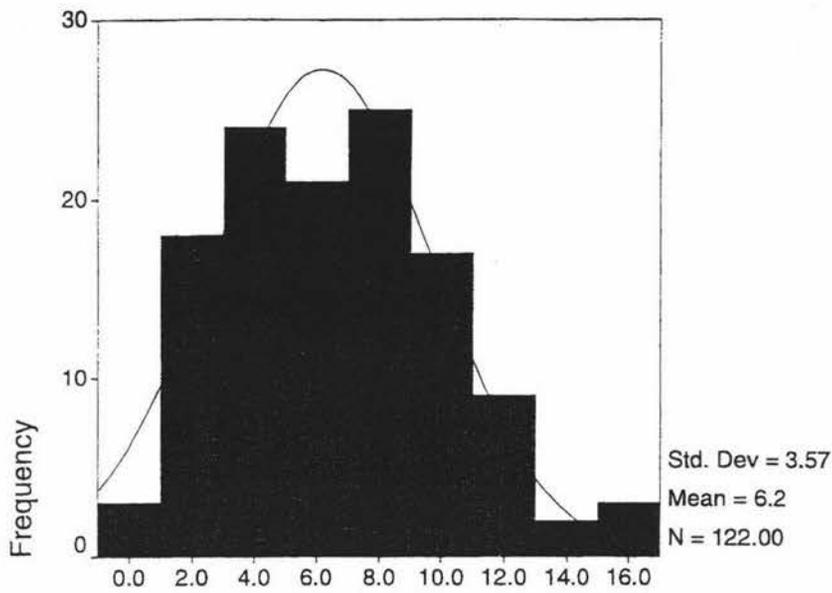
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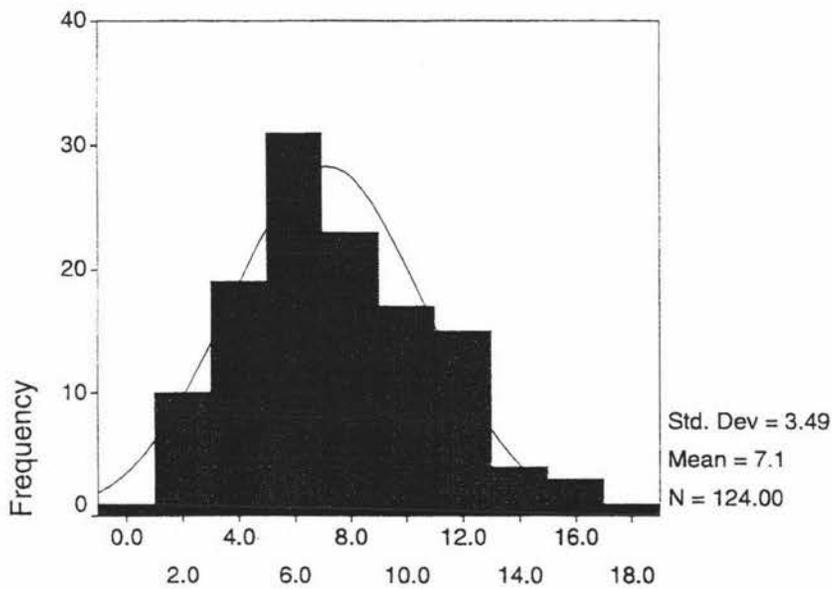
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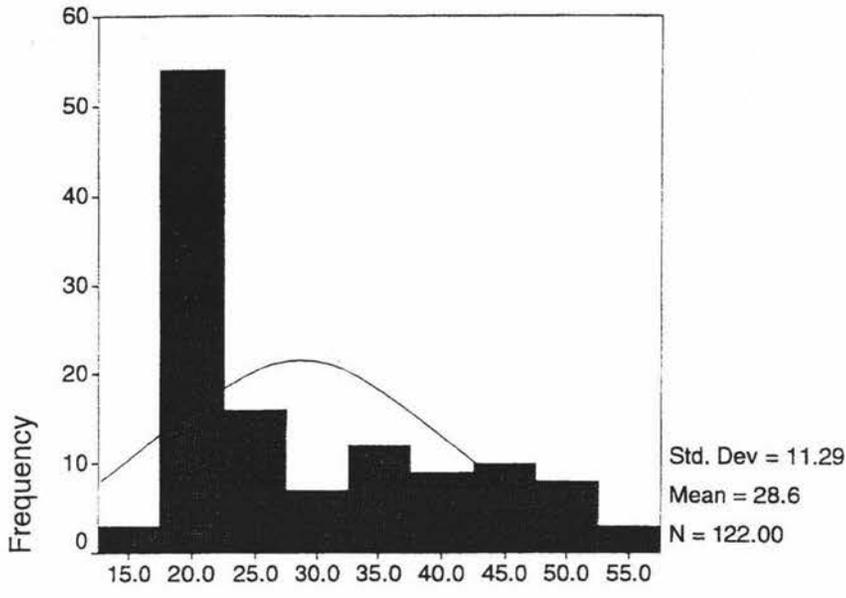
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DEPRESSION AS A FUNCTION OF STRESSFUL LIFE EVENTS, PERSONALITY AND SOCIAL SUPPORT

INFORMATION SHEET

My name is Tracy Freedman. I am a graduate student completing my Masters degree in psychology at Massey University in Albany. I wish to study the effects of personality, social support and stressful life events on depression. My supervisor is Dr. Dave Clarke.

By choosing to take part in the research you can enhance your understanding of stress, personality and depression, and how they are researched. You can also get some information about your own scores.

You will be asked to complete a questionnaire which has four parts. Completion of the questionnaire is estimated to take approximately thirty to forty minutes.

All information obtained will be coded into numbers only. The questionnaire is confidential and anonymous. Your name will not be associated with any of the information on the questionnaire. The information obtained will only be seen by my supervisor and myself. The data will be stored on floppy disk in a locked file. The findings may be published in an appropriate professional journal.

Ethical approval for this project has been given by the School of Psychology reviewers.

You have the right:

- to decline to participate;
- to refuse to answer any particular questions;
- to withdraw from the study at any time without consequence;
- to ask any questions about the study at any time during participation;
- to provide information with the understanding that your name will not be sought at all;
- to be given access to a summary of the findings of the study when it is concluded.

Participation in this research project is entirely voluntary. You are free to withdraw from the project up to the time when you hand in the questionnaire. After that, the questionnaires will be mixed together.

Should any questions arise at any time during the study, please do not hesitate to ask me.

The general findings will be presented in a later class to tell you about the research, the methodology used and how it relates to the text chapters on personality and stress.

If you wish to compare your percentile scores with those obtained by the rest of the class, note the number on the top right corner of the front page of the questionnaire.

If you wish to have a summary of the final report mailed to you, please print your name and address on the envelope provided. Please hand this in separately from the questionnaire.

If there are any issues raised that you find distressing, please contact Massey University Health and Counselling Service at 443 9783. They can provide you with times when they are available for help.

If you have any questions about the project please feel free to contact me, Tracy Freedman, by leaving a message at 443 9799 ext. 9863.

Thank you for your help with my research.

MASSEY UNIVERSITY ALBANY
DEPARTMENT OF PSYCHOLOGY
STRESS, PERSONALITY, SOCIAL SUPPORT AND
DEPRESSION QUESTIONNAIRE

INSTRUCTIONS:

1. Completion of this questionnaire implies that you agree with the conditions on the information sheet and give your consent to participate in this research project.
2. All responses to this questionnaire are completely confidential. No personal details are required other than basic general demographic questions.
3. The purpose of this survey is to assess the effects of stress, personality and social support on depression.
4. All questions are answered by either circling appropriate responses or writing responses on the questionnaire itself.
5. There are no right or wrong answers. Please give a response to each item so that reliable data can be obtained.
6. There are four sections in the questionnaire, which should take approximately 40 minutes to complete.
7. You may write any comments on the questionnaire.
8. A summary of the results will be available to those that are interested. If you would like a copy of the results sent to you please write your name and address on the envelopes provided and hand them in separately.
Each questionnaire has a number, note the number of your questionnaire in order to obtain your personal results from the questionnaire.
9. If you decide not to complete the questionnaire after receiving it, please return it to the researcher. All questionnaires must be returned to comply with copyright regulations and ethical guidelines for the administration and use of psychological tests.

Thank you for your assistance

Tracy Freedman
443 9799, ext.9863

SECTION A

Please answer each question by putting a circle around the 'YES' or 'NO' following the question. There are no right or wrong answers, and no trick questions. Work quickly and do not think too long about the exact meaning of the questions.

- | | | |
|--|-----|----|
| 1. Do you have many different hobbies? | YES | NO |
| 2. Do you stop to think things over before doing anything? | YES | NO |
| 3. Does your mood often go up and down? | YES | NO |
| 4. Have you ever taken the praise for something you knew someone else had really done? | YES | NO |
| 5. Do you take much notice of what people think? | YES | NO |
| 6. Are you a talkative person? | YES | NO |
| 7. Would being in debt worry you? | YES | NO |
| 8. Do you ever feel just 'miserable' for no reason? | YES | NO |
| 9. Do you give money to charities? | YES | NO |
| 10. Were you ever greedy by helping yourself to more than your share of anything? | YES | NO |
| 11. Are you rather lively? | YES | NO |
| 12. Would it upset you to see a child or an animal suffer? | YES | NO |
| 13. Do you often worry about things you should not have done or said? | YES | NO |
| 14. Do you dislike people who don't know how to behave themselves? | YES | NO |
| 15. If you say you will do something do you always keep your promise no matter how inconvenient it might be? | YES | NO |
| 16. Can you usually let yourself go and enjoy yourself at a lively party? | YES | NO |
| 17. Are you an irritable person? | YES | NO |

- | | | |
|--|-----|----|
| 18. Should people always respect the law? | YES | NO |
| 19. Have you ever blamed someone for doing something you knew was really your fault? | YES | NO |
| 20. Do you enjoy meeting new people? | YES | NO |
| 21. Are good manners very important? | YES | NO |
| 22. Are your feelings easily hurt? | YES | NO |
| 23. Are <i>all</i> your habits good and desirable ones? | YES | NO |
| 24. Do you tend to keep in the background at social occasions? | YES | NO |
| 25. Would you take drugs that may have strange or dangerous effects? | YES | NO |
| 26. Do you often feel 'fed-up'? | YES | NO |
| 27. Have you ever taken anything (even a pin or button) that belonged to someone else? | YES | NO |
| 28. Do you like going out a lot? | YES | NO |
| 29. Do you prefer to go your own way rather than act by the rules? | YES | NO |
| 30. Do you enjoy hurting people you love? | YES | NO |
| 31. Are you often troubled about feelings of guilt? | YES | NO |
| 32. Do you sometimes talk about things you know nothing about? | YES | NO |
| 33. Do you prefer reading to meeting people? | YES | NO |
| 34. Do you have enemies that want to harm you? | YES | NO |
| 35. Would you call yourself a nervous person? | YES | NO |
| 36. Do you have many friends? | YES | NO |

- | | | |
|--|-----|----|
| 37. Do you enjoy practical jokes that can sometimes really hurt people? | YES | NO |
| 38. Are you a worrier? | YES | NO |
| 39. As a child, did you do as you were told immediately and without grumbling? | YES | NO |
| 40. Would you call yourself happy-go-lucky? | YES | NO |
| 41. Do good manners and cleanliness matter much to you? | YES | NO |
| 42. Have you often gone against your parents' wishes? | YES | NO |
| 43. Do you worry about awful things that might happen? | YES | NO |
| 44. Have you ever broken or lost something belonging to someone else? | YES | NO |
| 45. Do you usually take the initiative in making new friends? | YES | NO |
| 46. Would you call yourself tense or 'highly-strung'? | YES | NO |
| 47. Are you mostly quiet when you are with other people? | YES | NO |
| 48. Do you think marriage is old-fashioned and should be done away with? | YES | NO |
| 49. Do you sometimes boast a little? | YES | NO |
| 50. Are you more easy-going about right and wrong than most people? | YES | NO |
| 51. Can you easily get some life into a rather dull party? | YES | NO |
| 52. Do you worry about your health? | YES | NO |
| 53. Have you ever said anything nasty or bad about anyone? | YES | NO |
| 54. Do you enjoy cooperating with others? | YES | NO |
| 55. Do you like telling jokes and funny stories to your friends? | YES | NO |
| 56. Do most things taste the same to you? | YES | NO |

- | | | |
|---|-----|----|
| 57. As a child, were you ever cheeky to your parents? | YES | NO |
| 58. Do you like mixing with people? | YES | NO |
| 59. Does it worry you if you know there are mistakes in your work? | YES | NO |
| 60. Do you suffer from sleeplessness? | YES | NO |
| 61. Have people said that you sometimes act too rashly? | YES | NO |
| 62. Do you always wash before a meal? | YES | NO |
| 63. Do you nearly always have a 'ready answer' when people talk to you? | YES | NO |
| 64. Do you like to arrive for appointments in plenty of time? | YES | NO |
| 65. Have you often felt listless and tired for no reason? | YES | NO |
| 66. Have you ever cheated at a game? | YES | NO |
| 67. Do you like doing things in which you have to act quickly? | YES | NO |
| 68. Is (or was) your mother a good woman? | YES | NO |
| 69. Do you often make decisions at the spur of the moment? | YES | NO |
| 70. Do you often feel life is very dull? | YES | NO |
| 71. Have you ever taken advantage of someone? | YES | NO |
| 72. Do you often take on more activities than you have time for? | YES | NO |
| 73. Are there several people that are trying to avoid you? | YES | NO |
| 74. Do you worry a lot about your looks? | YES | NO |
| 75. Do you think people spend too much time safeguarding their future with savings and insurance? | YES | NO |
| 76. Have you ever wished that you were dead? | YES | NO |

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|---|-----|----|
| 77. Would you dodge paying taxes if you were sure you could never be found out? | YES | NO |
| 78. Can you get a party going? | YES | NO |
| 79. Do you try not to be rude to people? | YES | NO |
| 80. Do you worry too long after an embarrassing experience? | YES | NO |
| 81. Do you generally 'look before you leap'? | YES | NO |
| 82. Have you ever insisted on having everything your own way? | YES | NO |
| 83. Do you suffer from 'nerves'? | YES | NO |
| 84. Do you often feel lonely? | YES | NO |
| 85. Can you on the whole trust people to tell the truth? | YES | NO |
| 86. Do you always practise what you preach? | YES | NO |
| 87. Are you easily hurt when people find fault with you or the work you do? | YES | NO |
| 88. Is it better to follow society's rules than go your own way? | YES | NO |
| 89. Have you ever been late for an appointment or work? | YES | NO |
| 90. Do you like plenty of bustle and excitement around you? | YES | NO |
| 91. Would you like other people to be afraid of you? | YES | NO |
| 92. Are you sometimes bubbling over with energy and sometimes very sluggish? | YES | NO |
| 93. Do you sometimes put off until tomorrow what you ought to do today? | YES | NO |
| 94. Do other people think of you as being very lively? | YES | NO |
| 95. Do people tell you a lot of lies? | YES | NO |
| 96. Do you believe one has special duties to one's family? | YES | NO |
| 97. Are you touchy about some things? | YES | NO |

- | | | |
|---|-----|----|
| 98. Are you always willing to admit it when you have made a mistake? | YES | NO |
| 99. Would you feel sorry for an animal caught in a trap? | YES | NO |
| 100. When your temper rises, do you find it difficult to control? | YES | NO |
| 101. Do you lock up your house carefully at night? | YES | NO |
| 102. Do you believe insurance schemes are a good idea? | YES | NO |
| 103. Do people who drive carefully annoy you? | YES | NO |
| 104. When you catch a train, do you often arrive at the last minute? | YES | NO |
| 105. Do your friendships break up easily without it being your fault? | YES | NO |
| 106. Do you sometimes like teasing animals? | YES | NO |

P.T.O. FOR SECTION B.....

SECTION B

Please indicate whether you have experienced any of the following events **within the past year**. To respond to each item please circle 'YES' or 'NO'.

- | | | |
|---|-----|----|
| 1. Attending an athletic event (e.g., a rugby game). | YES | NO |
| 2. A class you hate. | YES | NO |
| 3. A difficult class that you love. | YES | NO |
| 4. Being accused of rape. | YES | NO |
| 5. Being away from home for the first time. | YES | NO |
| 6. Being caught cheating on a test. | YES | NO |
| 7. Being raped. | YES | NO |
| 8. Change in housing situation (hassles, moves). | YES | NO |
| 9. Cheating on your boyfriend or girlfriend. | YES | NO |
| 10. Commuting to campus or work, or both. | YES | NO |
| 11. Competing or performing in public. | YES | NO |
| 12. Concerns about being pregnant. | YES | NO |
| 13. Concerns about your appearance. | YES | NO |
| 14. Concerns about your partner being pregnant. | YES | NO |
| 15. Confrontations with professors. | YES | NO |
| 16. Contracting a sexually transmitted disease (other than AIDS). | YES | NO |
| 17. Death of a close family member. | YES | NO |
| 18. Death of a close friend. | YES | NO |
| 19. Declaring a major or concerns about future plans. | YES | NO |
| 20. Depression or crisis in your best friend. | YES | NO |
| 21. Difficulties with a roommate. | YES | NO |

22. Difficulties with parents.	YES	NO
23. Drinking or use of drugs.	YES	NO
24. Drunk driving.	YES	NO
25. Ending a steady dating relationship.	YES	NO
26. Falling asleep in class.	YES	NO
27. Finals week.	YES	NO
28. Financial difficulties.	YES	NO
29. Finding out that you are HIV-positive.	YES	NO
30. Flunking a class.	YES	NO
31. Fraternity or sorority rush.	YES	NO
32. Getting in a physical fight.	YES	NO
33. Getting married.	YES	NO
34. Getting sick.	YES	NO
35. Getting straight A's.	YES	NO
36. Going on a first date.	YES	NO
37. Having a boyfriend or girlfriend cheat on you.	YES	NO
38. Job changes (applying, new job, work, hassles).	YES	NO
39. Lack of sleep.	YES	NO
40. Maintaining a steady dating relationship.	YES	NO
41. Making new friends; getting along with friends.	YES	NO
42. Negative consequences of drinking or drug use.	YES	NO
43. Oversleeping for an exam.	YES	NO
44. Peer pressures.	YES	NO

- | | | |
|---|-----|----|
| 45. Registration. | YES | NO |
| 46. Sense of overload in school or work. | YES | NO |
| 47. Serious illness in a close friend or family member. | YES | NO |
| 48. Starting a new semester. | YES | NO |
| 49. Talking in front of a class. | YES | NO |
| 50. Two exams in one day. | YES | NO |
| 51. Writing a major term paper. | YES | NO |

P.T.O. FOR SECTION C.....

SECTION C

The following questions ask about people in your life who give you help or support.

Each question has **two parts**. For the first part, list all the people you know, but not yourself, who you can count on for help or support in the way described. Give the person's initials and their relationship to you (see example).

Do not list more than one person next to each of the letters beneath the question.

For the second part, circle how satisfied you are with the overall support you have.

If you have no support for a question, put a tick beside the word "no one" but still rate your level of satisfaction.

Do not list more than nine people per question.

EXAMPLE:

Who do you know who you can trust with information that could get you into trouble?

No one	1. T. (brother)	4. S. (father)	7.
	2. L. (brother)	5.	8.
	3. R. (friend)	6.	9.

How satisfied?

6.very satisfied	5.fairly satisfied	4.a little satisfied	3.a little dissatisfied	2.fairly dissatisfied	1.very dissatisfied
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1. Who can you really count on to take your mind off your worries when you feel under stress?

No one	1.	4.	7.
	2.	5.	8.
	3.	6.	9.

2. How satisfied?

6.very satisfied	5.fairly satisfied	4.a little satisfied	3.a little dissatisfied	2.fairly dissatisfied	1.very dissatisfied
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3. Who can you really rely on when you need help?

No one	1.	4.	7.
	2.	5.	8.
	3.	6.	9.

4. How satisfied?

6.very satisfied	5.fairly satisfied	4.a little satisfied	3.a little dissatisfied	2.fairly dissatisfied	1.very dissatisfied
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5. With whom can you totally be yourself?

No one	1.	4.	7.
	2.	5.	8.
	3.	6.	9.

6. How satisfied?

6.very satisfied	5.fairly satisfied	4.a little satisfied	3.a little dissatisfied	2.fairly dissatisfied	1.very dissatisfied
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7. Who do you feel really appreciates you as a person?

No one	1.	4.	7.
	2.	5.	8.
	3.	6.	9.

8. How satisfied?

6.very satisfied	5.fairly satisfied	4.a little satisfied	3.a little dissatisfied	2.fairly dissatisfied	1.very dissatisfied
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9. Who can you really count on to give you advice or ideas that help you to avoid making mistakes?

No one	1.	4.	7.
	2.	5.	8.
	3.	6.	9.

10. How satisfied?

6.very satisfied	5.fairly satisfied	4.a little satisfied	3.a little dissatisfied	2.fairly dissatisfied	1.very dissatisfied
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11. Who will comfort you when you need it by holding you in their arms?

No one	1.	4.	7.
	2.	5.	8.
	3.	6.	9.

12. How satisfied?

6.very satisfied	5.fairly satisfied	4.a little satisfied	3.a little dissatisfied	2.fairly dissatisfied	1.very dissatisfied
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13. Who can you really count on to help you feel more relaxed when you are under pressure or tense?

No one	1.	4.	7.
	2.	5.	8.
	3.	6.	9.

14. How satisfied?

6.very satisfied	5.fairly satisfied	4.a little satisfied	3.a little dissatisfied	2.fairly dissatisfied	1.very dissatisfied
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15. Who accepts you totally, including your worst and best points?

No one	1.	4.	7.
	2.	5.	8.
	3.	6.	9.

16. How satisfied?

6.very satisfied	5.fairly satisfied	4.a little satisfied	3.a little dissatisfied	2.fairly dissatisfied	1.very dissatisfied
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17. Who can you really count on to care about you, regardless of what is happening to you?

No one	1.	4.	7.
	2.	5.	8.
	3.	6.	9.

18. How satisfied?

6.very satisfied	5.fairly satisfied	4.a little satisfied	3.a little dissatisfied	2.fairly dissatisfied	1.very dissatisfied
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19. Who can you really count on to help you feel better when you are feeling generally "down-in-the-dumps"?

No one	1.	4.	7.
	2.	5.	8.
	3.	6.	9.

20. How satisfied

6.very satisfied	5.fairly satisfied	4.a little satisfied	3.a little dissatisfied	2.fairly dissatisfied	1.very dissatisfied
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21. Who can you count on to help you feel better when you are very upset?

No one	1.	4.	7.
	2.	5.	8.
	3.	6.	9.

22. How satisfied?

6.very satisfied	5.fairly satisfied	4.a little satisfied	3.a little dissatisfied	2.fairly dissatisfied	1.very dissatisfied
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23. Who can you really count on to support you in major decisions you make?

No one	1.	4.	7.
	2.	5.	8.
	3.	6.	9.

24. How satisfied?

6.very satisfied	5.fairly satisfied	4.a little satisfied	3.a little dissatisfied	2.fairly dissatisfied	1.very dissatisfied
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P.T.O. FOR SECTION D.....

SECTION D

Please circle the option that best applies to you.

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|---|-------|----------------|-------------------|--------|-------|
| 1. Do you have a feeling of well-being? | Often | Some-
times | Occasion-
ally | Rarely | Never |
| 2. How often do you have crying spells or feel like it? | Often | Some-
times | Occasion-
ally | Rarely | Never |
| 3. How often do you feel you do not enjoy things anymore? | Often | Some-
times | Occasion-
ally | Rarely | Never |
| 4. How often do you feel alone or helpless? | Often | Some-
times | Occasion-
ally | Rarely | Never |
| 5. How often do you feel that people don't care what happens to you? | Often | Some-
times | Occasion-
ally | Rarely | Never |
| 6. How often do you feel that life is hopeless? | Often | Some-
times | Occasion-
ally | Rarely | Never |
| 7. Do you tend to feel tired in the mornings? | Often | Some-
times | Occasion-
ally | Rarely | Never |
| 8. Do you feel that you are bothered by all sorts of ailments in different parts of your body? | Often | Some-
times | Occasion-
ally | Rarely | Never |
| 9. Have you had periods of days or weeks when you have felt that you couldn't take care of things because you couldn't get going? | Often | Some-
times | Occasion-
ally | Rarely | Never |

10. Do you have any trouble getting to sleep or staying asleep?	Often	Sometimes	Occasionally	Rarely Never
11. How often do you have trouble with sleeping?	Often	Sometimes	Occasionally	Rarely Never
12. Do you ever have loss of appetite?	Often	Sometimes	Occasionally	Rarely Never
13. When things don't turn out the way you hoped, how often do you blame yourself?	Often	Sometimes	Occasionally	Rarely Never
14. How often do you think about suicide?	Often	Sometimes	Occasionally	Rarely Never
15. Do you ever feel that life has changed so much in our modern world that people are powerless to control their lives?	Often	Sometimes	Occasionally	Rarely Never
17. Do you sometimes wonder if anything is worthwhile anymore?	Often	Sometimes	Occasionally	Rarely Never
18. How often would you say that things do not turn out the way you want them to?	Often	Sometimes	Occasionally	Rarely Never
19. Does your future seem uncertain to you?	Often	Sometimes	Occasionally	Rarely Never

P.T.O FOR SECTION E

SECTION E

We would like to ask you some general information about your background. Please circle the appropriate answer and where necessary write the answer in the space provided.

1. What is your age, in years?years

2. What is your gender?

Female

Male

3. Which ethnic group do you identify with?

Maori

European/Pakeha

Pacific Island

Asian

Other – Please specify.....

Thank you for helping me with my research by completing this questionnaire. I shall give you feedback as soon as possible on the scales that you completed.