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The Measurement of Stress and Burnout among University Students

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Abstract

This study examines stress and burnout in a university student population and focuses on the relationship between interpersonal and academic demands and perceived stress and burnout. The mediating roles of social support and life events on the demand-burnout relationship is also considered.

Four measures were used in this study. The Student Stress Inventory was used as a stress measure and the Maslach Burnout Inventory was used to measure student burnout. The Student Life Events Questionnaire was used for the measurement of concurrent stressors that the student had experienced and the Multi-Dimensional Support Scale was used to identify levels of social support and by what source the support was provided.

The results of this study suggest that a high level of social/academic problems in combination with low levels of support and interaction from lecturers leads to lower levels of personal accomplishment and higher levels of depersonalisation and emotional exhaustion. It was also concluded that high levels of social support from family and friends, and from other students leads to an increase in personal accomplishment and a decrease in depersonalisation and emotional exhaustion.

The manner in which counselling services and academic departments can use these findings identify students at risk before problems reach serious proportions is also discussed.

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Introduction

Contemporary students face greater demands than ever before. These include pressures for entry to university, performing while at university, and pressures for subsequent employment when studies are completed. It is important to identify and understand these demands and where possible take steps to manage not only the learning experience but also the context within which it occurs to facilitate student learning and quality of life. Consequently it is important to understand student distress and how it can be managed. While a degree of negative stress is inevitable under such demanding circumstances the relationship between these demands and the more debilitating condition of burnout deserves more detailed consideration.

As demands accumulate, an individual's ability to cope or readjust may become overtaxed, depleting their physical and/or psychological resources. Excessive demands on an individual's energy, strength, and resources can lead to a feeling of being physically exhausted or worn-out. This phenomenon has typically been observed in the 'people' professions where high expectations to assist and be of service can be thwarted by client problems and/or organisation environment leading to experienced burnout. A number of studies on burnout have been undertaken. These primarily involved individuals who were employed in helping professions, law enforcement agencies or those in human service organisations.

However, this phenomenon need not be restricted to the helping professions. There exists good ground for expecting it to occur within a student population. Several parallels can be drawn between 'people' professions and students (e.g., high expectations, competition, need for self-regulation etc), raising the possibility that students may also be prone to burnout.

Burnout is considered to be a response to constant exposure to a stressful situation and a result of chronic stress (Green 1989). Burnout comprises of four components **(a)** emotional or physical exhaustion **(b)** emotional or physical withdrawal **(c)** lack

of personal accomplishment and (d) depersonalisation (Maslach & Jackson 1981, Maslach 1982a).

Mechanic (1978), Fimian and Cross (1986), & Pines, Aronson and Kafry (1981) are among the few researchers who have considered the effects of burnout in students at secondary and tertiary levels. Although demands made on students may differ both quantitatively and qualitatively from those made on individuals in the workforce they draw several comparisons between students' and those in the helping professions, including work overload (emotionally taxing work), lack of autonomy, lack of rewards, pressure to perform and conform to the requirements determined by the environment.

Students may have high expectations in regard to success and obtaining good jobs prior to entering a tertiary institution. There are expectations from both the student and his or her parents to excel in academic study. Expectations include, achieving high grades, fully understanding course content and the ability to obtain suitable employment once the qualifications they seek have been obtained. Students who have previously been top of the class at college prior to entering university may be faced with the prospect of having to compete with a number of students with similar or greater academic capabilities. They will also be faced with greater autonomy and need for self reliance to a level likely to exceed their previous experience. This pressure and the high expectations for a student to perform could lead to burnout. Additional pressures include problems outside of the academic environment, living on a low income, and having to obtain loans or working part time to finance their studies. Moreover, these changes occur within a relatively short period of time and the secondary school system may provide little preparation for this transition. The stress problem may be compounded by the student looking towards a career and the need for tertiary qualifications.

Social support is an important factor that is useful in the reduction of the symptoms of experienced burnout. Mechanic (1978) considers that the role of social support is important in reducing the effects of burnout. Social networks are helpful in providing

information, assistance, socio-emotional release and support. Although social networks can provide support when needed they can be complex at times. Individuals who provided tangible assistance and reassurance could also prove to be a source of anxiety.

This paper addresses burnout in the academic setting while dealing with the influence on this factor by the constructs' social support and life events. The roles of parents, friends, peers and lecturers, and tutors in providing support will be considered. The quality and quantity of support available and the relationship between source, type, and the kind of demands that students encounter are also important factors.

Burnout

Because it represents a relatively under-researched area this thesis will focus on burnout in tertiary students. Burnout is a multi-dimensional construct that comprises of several factors; emotional exhaustion, depersonalisation, lack of personal accomplishment, and physical and emotional withdrawal that can result from exposure to a high level of negative stress or the individuals perception of the situation being beyond their control. Zastrow (1984) suggests that a high level of negative stress could lead to burnout and considers burnout to be closely related to the following psychological states; alienation indifference, apathy, cynicism, discouragement, mental and physical exhaustion and being overwhelmed by stress.

The term "burnout" was first used by Freudenberger (1974) to describe the stress responses shown by staff members in free clinics and halfway houses. Freudenberger (1977) defined burnout as "To fail, wear out, or become exhausted by excessive demands being made on energy, strength, or resources". Maslach (1976) defined burnout as distancing, becoming cynical, adopting negative attitudes or becoming detached. Maslach and Pines (1977) defined burnout as loss of concern, physical and emotional exhaustion, cynicism, and dehumanisation.

Other definitions of burnout include "Painful and personally destructive response to excessive stress" (Mattingly 1977), and "Progressive process of fatigue and depletion of personal resources" (Mitchell, Jones & Pfeiffer 1977).

Cherniss (1980) considers burnout to be a process that develops over time. The assumption is made that there is a causal sequence of antecedent conditions to which there are psychological reactions.

Veninga and Spradley (1981) define burnout as "a debilitating psychological condition brought about by unrelieved work stress". This form of negative stress results in depleted energy reserves, lowered resistance to illness, increased dissatisfaction, pessimism, and increased absenteeism at work. When symptoms

appear in a more severe form serious steps need to be taken before the experienced stress becomes burnout.

Pines, Aronson and Kafry (1981) state that "Burnout is a social-psychological concept and thus different from a concept such as clinical depression". The difference between burnout and depression is that when a person is suffering from depression the individual and their personal history are considered to be the source of the symptoms and are the focus of the therapy. In burnout the focus is on symptoms such as emotional exhaustion, depersonalisation, physical and emotional exhaustion and physical and emotional withdrawal.

It is clear from the above definitions that there is no universal definition of this construct. However, although there has been some disagreement to what constitutes burnout, Maslach (1982b) & Jackson, Schwab and Schuller (1986) have identified three psychological factors that many theorists would agree to be the most important factors present in burnout. The first psychological factor identified is **emotional exhaustion**.

Emotional exhaustion results from taking part in extensive and emotionally involving activities. When demands are incompatible, continued attempts to meet these demands will become emotionally distressful and exhaustion will occur over time (Jackson, Schwab, & Schuller 1986; Greenglass & Burke 1990). A situation that could lead to emotional exhaustion may focus on the student's and significant others expectations of academic performance and the inability to meet these demands. Demands may be greater than at secondary school and the student will be having to do the majority of work on their own. This in combination with having to compete with others who have an academic ability of the same level or perhaps even greater will lead to problems. Presentation of work, more critical thinking, etc may also compound feelings of emotional exhaustion.

The second psychological factor prevalent in burnout is **physical and emotional withdrawal**. An inability to tolerate the demands from others may lead to physical

or emotional withdrawal. Avoidance takes place so the individual need not deal with additional demands or stressors. Pines, Aronson, and Kafry (1981) describe physical distancing as the need to get away from other people, to work alone, or to become emotionally withdrawn when physical distancing is impossible. All of these factors would lead to reduced interactions with others.

Physical withdrawal may occur after a period of intense human interaction and a lack of privacy. Physical distancing may take place by taking longer lunch breaks, leaving work early, avoiding eye contact or by taking days off.

Emotional withdrawal takes place when physical distancing is impossible. A detachment in this way is used to avoid over involvement, e.g., in a counselling environment where a counsellor may dissociate from their client's problems. A student who is suffering from emotional withdrawal may have a tendency to work alone, avoid going to lectures and will reduce contact with other students to a minimum. Because of these factors the student may lose or reduce their access to individuals who previously provided both informational and/or social support. Study problems such as missing lectures or deadlines will also increase feelings of stress.

The third psychological factor identified in burnout is feelings of **low personal accomplishment**. Seligman (1975) in his studies of learned helplessness, has shown that people who have been put in situations where their continued efforts have failed to produce results tend to develop symptoms of stress and depression. Feelings of powerlessness in the workplace can lead to impaired motivation, lowered self-esteem, negative emotions, and inability to learn and adapt to changes (Potter, 1987). If a student is used to a high degree of direction, having more autonomy and having to take more responsibility for themselves may trigger feelings of helplessness and decreased motivation. A student's inability to understand a certain paper may lead to feelings of frustration. Especially so if the student is continuously being given low grades for their efforts. The secondary school system may have provided little preparation for academic study.

Maslach and Jackson (1981) also identified **depersonalisation** as a characteristic symptom of burnout. Depersonalisation is characterised by feelings of detachment and estrangement from oneself. Maslach (1976) defines depersonalisation as the treating of people like objects. Depersonalisation can be an excessive detachment with too little concern for others. This leads to a callous and uncaring attitude towards other individuals. Depersonalisation is considered to be the initial burnout phase and the one in which significant increases would occur before any substantial reduction in feelings of personal accomplishment.

Causes and Symptoms of Burnout

Freudenberger (1977) has identified specific processes at work that tend to have a cumulative effect. Burnout will not usually occur in reaction to one specific event but occurs over a period of time as a response to a number of low-intensity ongoing events.

Maslach (1982a) considers burnout to be an individual internal psychological state that includes domains of feeling, attitude, motivation, and expectations which as a consequence, lead the individual to believe that burnout is a negative experience. Burnout differs from depression in that the individual finds themselves overwhelmed by a certain situation or is continuously exposed to a highly stressful environment. Depression nevertheless could be one of the outcomes associated with burnout.

Maher (1983) has identified some of the factors that cause burnout;

- (i) An excessively large or difficult workload e.g., A student undertaking levels of study that they are not capable of while working part-time.
- (ii) Long hours or long periods of time without adequate time off e.g., Pressure to achieve high grades may require the student to spend long hours in study without any time for recreation.
- (iii) Ambiguous role demands and too many secondary duties - Is not applicable to the academic environment.
- (iv) Lack of control over outcomes e.g., Grades obtained for academic study may be subjective and based on the quality of the subject being taught.
- (v) Monotony e.g., Having to undertake compulsory papers that include subjects which the student has no interest or repetition of topics that are being delivered.
- (vi) Isolation and/or poor relationships with colleagues, superiors or clients e.g., Could be a result of spending too much time in study.
- (vii) Lack of preparation for dealing with stress e.g., Not having been previously taught skills prior to university. These include time management, relaxation methods, planning, and a balance of activities.

(viii) Personality changes, e.g.; Unrealistic expectations and feelings of guilt - Result of the above factors.

Blostein, Elridge, Kitty, and Richardson (1985) established a multi-dimensional analysis of the concept of burnout. The purpose of their study was to look at various sources of burnout and how different indicators were related to each other. Most of these can also be applicable to the academic environment.

Factors included in the above study comprised of

(i) Alienation - A sense of being trapped, distrust, feeling unappreciated, powerlessness, difficulty with conflicting demands, cynicism, depression or sadness, feeling of being troubled, feeling that major change is necessary, difficulty dealing with other individual's problems, low productivity, worthlessness, anxiety, no energy to think, helplessness, impatience, irritability, lack of control, emotional exhaustion, problems concentrating, and feelings of being pulled in all directions.

(ii) Feelings about clients - Postponing client contact, difficulty listening to clients' problems, lack of fulfilment, feelings of intolerance, reluctance to go to work, and doubts about beliefs and values (Not applicable to the academic environment).

(iii) Feeling overstimulated - Inability to relax, overstimulation, problems sleeping, major changes in sexual interest, and problems with concentration.

(iv) Feeling overwhelmed - The need to be alone, no time for oneself, feeling pulled in all directions, tiredness, helplessness, exhaustion, and difficulty with conflicting demands.

(v) Physical problems - Physical aches and pains, colds and flu, headaches, gastrointestinal problems, physical exhaustion, and high blood pressure.

(vi) Lack of intimacy - Lack of intimate relationships, feelings of emptiness, alienation from others, feelings of rejection, and feeling unappreciated.

Results of the above study were useful in confirming the multi-dimensional nature of burnout. These six factors accounted for 52% of the total variance of the indicators involved in burnout. The factor that explained the greatest amount of variance was **physical problems**.

In an organisational setting, relationships between co-workers, staff, and managers are often shaped by the content or structure of the job and/or the organisational culture. There are parallels in the academic setting. The student is shaped by the culture of each tertiary institution, their relationships with other students, and in the relationship between the student and his or her lecturer/supervisor. Providing help in the understanding of the subject being taught will be of help to the student. Lecturers, tutors and course controllers all need to be approachable and have the ability to provide support to students or lead them in the right direction for the help they require.

Individuals can experience burnout differently and may experience a number of indicators that could comprise of a single factor or combinations of different factors. Some individuals' reactions to burnout are primarily somatic while others reactions could be more emotional. This is dependent on how the individual deals with stress, whether they have had a previous burnout episode or on the degree of social support available. It is important for an individual to recognise the danger signals present in themselves and in others. Individuals working closely may become more aware of signs that may indicate symptoms of burnout in their colleagues. Peer groups could be used as a monitoring device for burnout.

When an individual is suffering from burnout, it is rarely kept secret from colleagues, family members or others who are in close proximity. If people are burning out, whether they know it or not, others around them are usually quite aware of it (Pines, Aronson, & Kafry 1981). Others who are in close proximity could provide support or direct those in need of help to the appropriate channels.

Pines, Aronson, and Kafry (1981) recognise the timing, manifestations, and consequences of burnout or tedium depend on both characteristics of the individual and the environment in which the individual functions. In some individuals an episode of burnout may last only a few days, or at the most, weeks and the individual may be able to recover without help. Other times an episode of burnout

may last for months or years without a solution or recovery. Individual differences present potential mediating factors that influence susceptibility to burnout.

Academic and Social Demands and Burnout in University Students

Demands are made on students socially and academically. Students may suffer from emotional exhaustion, depersonalisation, low personal accomplishment and physical and emotional withdrawal because of these demands.

Pines, Aronson and Kafry (1981) discovered that students level of tedium was higher than that of business people, scientists, human service workers and artists. Students perceived themselves as having less variety, their work being less significant and less innovative than professionals. Students also perceived themselves as having less freedom and less influence on decisions that affected their lives. There were fewer opportunities for self expression and course work and theses had a tendency to differentiate opportunities from capabilities. Students were also under more pressure to prove themselves than professionals. Competition was considered to be the cause of isolation of students from each other and lead to loneliness and superficial relationships.

It has been argued that students are more susceptible to the environmental determinants of burnout. For example, Pines, Aronson and Kafry (1981) and Meir & Schmeck (1985) suggest that university students suffer stress from high levels of academic and social demands that can lead to burnout.

Although burnout in students shares some of the same factors as burnout in other disciplines there are also noticeable differences from individuals employed in an industrial setting. Students may be more prone to experiencing stress during the transition from high school to university where the academic demands may be greater and competition more pronounced. Demands that are made on students include an overload of assignments, competition among students, pressure to conform, examination stress and the expectation to perform work to a certain standard (Fisher 1994).

How a student will cope with these demands may be dependent on individual differences and their ability to deal with change. Previous entry qualifications could also be a determinant to whether they are successful at university. Additional factors could include changes in government policy in the areas of student loans and decreases in university funding which may lead to a decrease in resources available.

D'Aurora and Fimian (1988) investigated the phenomena of student stress and burnout between American children and youth. Their study identified that if levels of stress from the outside environment and/or those imposed by school life have become excessively high over periods of time, this stress can manifest itself in signs of physiological, behavioural, and/or emotional disorders. These symptoms, if unattended too within a reasonable period of time can then produce excessive stress and without intervention could lead to burnout.

D'Aurora and Fimian (1988) described the demands that a high school student may face and have grouped these into three categories;

Student Distress - which is considered to be the most prominent category, focuses on factors such as changes in location, nonacceptance by peers, inability to make friends easily, inability to learn in school, inadequate leisure time, and poor grades. Changes in location may involve leaving behind family and friends which could lessen the student's support network considerably. Having to make new friends may also be a consideration. In some instances e.g., international students, having to become part of a new and different culture may also prove stressful.

Nonacceptance of a student by their peers may result in a lack of social support and/or help in their studies from other students. An inability to make friends easily may lead to physical withdrawal and the student may choose to work alone. Inability to learn may result in poor grades, this leading to failure of paper/s. This could also be a more prominent problem for students from overseas if no support groups or other students they can communicate with are present. Having inadequate leisure time may mean that a student, rather than relaxing or doing something that they enjoy,

would have to spend more time studying. What is perceived by the student as excessive demands and not meeting up to their or a significant other's expectations could eventually lead to physical and emotional exhaustion. Poor study skills or bad time-management may effect the amount of time available for leisure and relaxation.

Those who have scored highly on student distress have reported that they did not have enough time to relax during the day and felt that they were not important in the high school setting. They also reported that they were not excited about learning, and were unsure of what was expected from them at the high school level. They had difficulties talking with their teachers and thought their teachers did not really care how well they did in school. These students felt uncomfortable in their classes, did not make friends easily and were not easily accepted by other students. They also had difficulty following up interests outside of school (Fimian 1986). The above factors that result in student distress could also be applicable to tertiary students.

Social/Academic Problems - which include teachers or lecturer's power over students, favouring some students over others, parental expectations, being fidgety, procrastination, having to deal with excessive or ambiguous information and becoming fatigued.

A student may feel that they have no control over a situation and endure feelings of helplessness if they perceive the amount of power a lecturer or tutor has over them to be too great. Favouring certain students over others may result in a dislike of a student by his or her peers. Parental expectations could mean that the student has to work harder. Procrastination may result in the student not meeting deadlines. Having to deal with excessive or ambiguous information could lead to confusion and may affect their grades. At a tertiary level students may often be expected to work with contradictory material.

Those who have scored highly on social/academic problems have reported problems with repetition of school work, poor memory, and having classmates who got better treatment than themselves. They also perceived teachers as having too much power

over them, expecting too much of them in school and having too much information to deal with on a daily basis.

Poor Instructional Relations and Lack of Support from Authorities - which includes repetitious class work, difficulty conversing and communicating with the teacher, loneliness, and excessive interruptions during the classroom routine. A tertiary student may face the same situation during lectures.

Repetitious class work could lead to boredom and fatigue. Difficulty conversing and communicating with the tutor could result in the recording of incorrect information and feelings of confusion about what is expected from the student. Loneliness may result in withdrawal from others and a tendency to work alone. Excessive interruptions during the classroom routine may affect the quality of work and the flow of the information that is being taught. The above issues would also be applicable to university students.

D'Aurora and Fimian (1988) conclude that student stress consists of a complex array of factors involving one's environment, their perception of that environment and the ability to deal with both. Too much stress for too long a period of time was considered to promote a number of unhealthy and maladaptive ways of dealing with stressful problems.

The academic environment is similar to the work environment in that it demands work of an acceptable standard to be completed within a required time frame. Professionals can be dismissed if they do not perform. In contrast to this it is the student's grades that may suffer if performance is not up to standard. If an undergraduate student fails to perform they may be declined admission to university the following academic year to complete their studies. A postgraduate may not be able to obtain honours' if they do not submit work of a required standard over a reasonable period of time. This may result in the student being unable to proceed any further in their academic career or into the workforce at the level desired.

A student may develop feelings of low personal accomplishment when they have continual problems understanding the content of a particular paper. This could be determined by the ability of the student or how the paper is presented. The outcome of this may be present in the receiving of low grades throughout the duration of the paper. Students may be given grades that would not allow them to complete the paper or fail the subject being undertaken. This may further increase the student's feelings of low personal accomplishment.

Fimian and Cross (1986) and Maslach and Jackson (1981) consider students who have burned out to experience significantly more emotional exhaustion, distance themselves from their peers and teachers, and feel considerably less accomplished than their non-burned out peers. Pressures felt by students include having to achieve certain grades, sitting tests and examinations, competition with other students, overload of assignments, and interpersonal relations which includes romantic relationships, friendships, and relationships with family and roommates. Other pressures could include finances, health, work, career planning, meaning of life, self-actualization, loneliness, and boredom. Mediating factors such as ability to cope and availability of social support can help alleviate the above to a point that the student can function more effectively in the academic environment.

Social Support

Mechanic (1978) considers social support to be a crucial factor in the stress and burnout process. Having another person to confide in helps to significantly reduce the effects of stress both physically and psychologically (Cohen & Wills 1985). Students may find support from other students who may be going through the same experiences. A great deal of support can be provided by family and friends. Lecturers, tutors, and other individuals employed by the university can also give support through providing help in understanding content being taught and most universities offer a counselling service. The students' association in each university may also be able to provide other types of support for students if necessary.

Cobb (1976) reviewed an extensive body of literature that indicates that supportive interactions among people help protect against the negative health consequences of stress. Social support is considered to protect people under stress from a variety of pathological states; these include depression, alcoholism, social breakdown and death. Having a social support network can also help reduce the amount of medication required and increase the recovery rate.

Pines, Aronson and Kafry (1981) and Maslach and Pines (1977) found a reduction in the symptoms of experienced burnout for individuals who had effective social networks or support systems. When feeling stress individuals often turned to others for advice, comfort, tension reduction, help in achieving distance from the situation or in intellectualising it, while also offering a sense of shared responsibility.

Burnout was found to be less severe when individuals were allowed to express their feelings, have feedback given, and have support provided by others.

Winefield, Winefield, and Tiggemann (1992) have indicated that support helps those who are stressed and what stressed people need is more support. This is because of the implication that increasing the amount of support available to stressed individuals will aid to their coping under certain situations.

Beehr and McGrath (1992) focused on the role of social support in reducing the anxiety that resulted from stress. Social support was considered to alleviate anxiety in three ways;

Firstly, social support is considered to have a direct negative effect on anxiety. If anxiety within a certain environment is high, the receipt of appropriate forms of social support would serve to reduce the anxiety directly.

Secondly, there is the buffering effect. This looks at how social support interacts with stress producing events conditions and events. Dean and Lin (1977) suggest that certain life events may increase social support and that social support moderates the impact of life events and therefore acts as a buffer. The buffering effect identifies a stronger link between stress, and the effects of stress when an individual experiences a lower level of social support. High levels of stress producing events and conditions and low levels of social support results in higher levels of anxiety. High levels of stress producing events and conditions in combination with high levels of social support lead to lower levels of anxiety.

The third effect of social support suggests that the level of social support is hypothesised to have a direct negative effect on the magnitude of the stress producing events and conditions that occur. McGrath and Beehr (1990) identify social support in this context working much like a preventive intervention. Social support reduces the magnitude of stress producing events and conditions below what they would have been if social support was not present. In doing so this reduces the amount of anxiety perceived by the individual.

Etzion (1984) considers social support as having main effects on both stress and burnout and that high amount of social support can directly reduce burnout by adding positive need-fulfilling elements into an individual's life. Being able to talk to other individuals about problems can help diffuse the situation if the source of support is effective. Social support can also moderate the impact of stress on burnout helping people suffering from high stress to cope better (House 1981).

It has also been found that the development and maintenance of social relationships beyond an individual's need may prove stressful in itself. Thoits (1995) has indicated that acute stressors may cause support mobilisation in the short term but chronic stressors may erode perceived and received support over time. Burnout tends to reflect the experiences of chronic demands and by definition, can result in behaviour that may limit support access or utilisation.

The Foundation of the Social Support Network

"A person's social network or social support system can be viewed as a coping resource, to be cultivated, maintained, and used or not used in many different ways. This resource can be drawn upon for emotional support, which contributes to the feeling that one is loved or cared about, for tangible support, which involves direct assistance in terms of service or material goods, and for informational support, which includes information and advice" (Palmer & Kalin 1985).

Social supports are considered to be an individual's access to other individuals, groups, or organisations that can provide help in dealing with life's problems. These may include family, friends, peers or others in an individual's circle of associates.

An individual who possesses family, friends and a group of significant others may or may not receive support in times of trouble. The individual may also be asked for support in return and this may be dependent on the number of people in the individual's immediate circle of associates and the level or the frequency of involvement he or she has with them.

A support network can be useful for discussing concerns or problems with other individuals. Help can be given in practical ways like lending money or doing something for another person. Advice can be given about how to solve problems. A support person could also help the anxious person by chatting about other things or by telling jokes and trying to make the individual see that there is a positive side of things.

Fondacaro and Heller (1983) and Heller and Swindle (1983) have found that social competence is important for the initiation and the maintenance of relationships in the support network. Network functions and perceived intimacy/support are also considered to be distinct dimensions of social support and these can be differentiated from social competence.

While social support is generally held to offer benefits to those capable of assessing it, this may not always be the case. While membership of a large social network increases the number of available confidantes, it also increases the number of demands made on an individual to provide reciprocal support. Also it cannot be assumed that the quality of the support provided will always enhance well-being or academic performance. Peer pressure to engage in social activities may in fact compound academic problems.

Thoits (1995) identifies social support as functions performed for the individual by significant others such as family members, friends, and co-workers. Social support allows individuals to believe that they are being cared for, loved, esteemed, and valued and that they belong to a communication network that requires mutual obligation. Worth considering is the relationship between demands and the kind of support required, as well as the relationship between demands, support and providers e.g., friends could help in some situations and lecturers in others. The nature of the support provided could change. This being determined by the type of problem/s encountered and the person who is best suited to provide help with it.

Mitchell and Trickett (1980) have identified the functions served by social networks and social support systems as outlined by other authors (see table 1).

Table 1**Functions Served by Social Networks & Social Support Systems.**

Brim (1974)	Caplan (1974)	Tolsdorf (1978)	Walker et.al (1977)	Weiss (1974)
Concern	Emotional Support	Support	Emotional Support	Attachment
Assistance	Task-oriented assistance	Advice	Material aid and services	Exchange of services
Similar values	Communication of evaluation and expectation	Feedback	Maintenance of a social identity	Guidance
Desired interaction	Sense of belonging	Access to new social contacts	Social integration	New social contacts
Trust		Diverse information	Sense of alliance	
			Reassurance of worth	
			Opportunity to provide nurturance	

Kaplan, Cassel, and Gore (1977) have listed a summary of support mechanisms;

(i) Appraisal opportunities - the chance to evaluate what is happening.

(ii) Normative fit - the comfort, consensus and complementarity an individual feels in shared supportive norms.

(iii) Persuasion - the opportunity to tell the "other" that his or her dissonant cognitions can be made consistent and rewarding.

(iv) Group solidarity - the feeling of "we-ness" that comes from social binding encounters.

- (v) **Intimacy needs** - the opportunity for the individual to share the most personal thoughts.
- (vi) **Role-self rewards/approval** - the self-esteem that comes from approved feedback for roles well performed, e.g., as a friend.
- (vii) **Dependable social networks** - the set of dependable others that are needed to provide social support.
- (viii) **Tangible support** - concrete events that help, e.g., praise.
- (ix) **Love/interaction with significant others** - especially with spouse and friends.

Pines, Aronson and Kafry (1981) have identified six functions of a social support system;

- (i) **Listening** - An individual may need one or more persons who will actively listen to them and who will not give them unnecessary advice or be judgemental (family or friends).
- (ii) **Technical Appreciation** - Acknowledgement of work performed and affirmation of competence. The person giving the appreciation must meet two important criteria; (a) he or she must be an expert in their field and (b) he or she must be someone who the individual trusts (lecturers & tutors).
- (iii) **Technical Challenge** - Critical colleagues challenging an individual's way of thinking and encouraging them to attain greater heights, greater creativity, more excitement and involvement in their work.(family, friends or fellow students).
- (iv) **Emotional Support** - People who are willing to be on an individual's side in a difficult situation even if they are not in agreement with what the individual is doing (family, partner or spouse).
- (v) **Emotional Challenge** - Friends or family challenging an individual and questioning if they are doing their best to fulfil their goals and overcome their obstacles. Emotional challenge differs from technical challenge in that friends or family do not have to be experts in a particular area of expertise in order to offer the opportunity for the individual to grow emotionally (friends & family).
- (vi) **Differentiating Support Functions** - The ability to discriminate the above support functions from each other and to think of social support as comprising of separate functions.

It is useful to realise how many of the six functions different people are expected to fulfil. The individual must also be able to identify which of the functions are the most appropriate for certain individuals.

Palmer and Kalin (1985) suggest that in having a social support system, dependant on whether or not one draws on it, may contribute to whether an individual feels challenged and committed rather than threatened or alienated. This may be related to the individual's wellbeing and health.

Fondacaro and Heller (1983) considered social support and social competence among male college freshmen. Different modes of social support were considered;

Network functions - which accounted for 37.1 % of the variance in social support and included items such as multiplexity, emotional support, informational support, problem support, material support and companionship support.

Perceived intimacy/support - which accounted for 20.6% of the variance in social support and included network intimacy, close intimates, intimacy with parents, and perceived support from family and friends.

Social competence - which accounted for 11.4% of the variance in social support and included dating competence, assertiveness, and heterosexual intimacy.

Residual - which accounted for 16.1% of the variance in social support and consists of two redundant variables; the proportion of males in an individual's network (positive loading) and the proportion of females in one's network (negative loading).

Findings in perceived intimacy/social support suggest that an individual's perception of being supported is strongly associated with the quality and the closeness of members within the individual's network. However, the individual's cognitive appraisal that their support needs are being met by network members appears to be separate from whether it is reported that he or she turns to network members for emotional support, information, material aid, problem-solving assistance or companionship.

Students and Social Support

Mechanic (1978) suggests that student stress and burnout can be minimized by having an adequate support network. Problems in making friends and emotional withdrawal may prove detrimental in establishing an adequate support network. The support network is usually comprised of parents, friends, peers, and fellow students but could also include lecturers or tutors who would provide expert help with studies.

A student may have a support network that consists of a large number of fellow students. Because of the size of this network, the individual may get involved in helping other students with their problems, this involvement in itself could be stressful.

Having another student to confide in or participating in activities with other students may alleviate feelings of stress and having time out may help reduce emotional exhaustion. There may be a tendency for students undertaking the same paper to work in groups. This may also lead to friendships where the students will have social gatherings or take part in areas of another student/s life thus, entering the student's immediate circle of friends.

Rubio and Lubin (1986) used a person-environment interactional analysis to identify the effects of stress on college students. Personal characteristics such as stimulus screening tendency, self-disclosure tendencies, integration of the student with others and environmental factors (life events) were considered to be important determinants of a student's mental health. Social support and integration, although not correlated both related significantly to depression and overall mood disturbance. The greater the level of social support the lesser the feelings of depression.

When a student moves away from home, the support they had been given by parents may now be provided by close friends who may also be other students. The role of friendship as a source of activities, influence and support increases dramatically. Sullivan (1953) considers friendship to serve a number of related functions. Friends

may offer a consensus in the validation of interests, hopes and fears while alleviating feelings of self-worth. They also provide affection and the opportunity for intimate disclosure.

Hartup (1992) suggests that friendship provides three functions;

- (i) Emotional security and support.
- (ii) A context for growth in social competence.
- (iii) A prototype for later relationships.

Younger students are likely to talk to their parents about school & career goals but with friends (and possibly fellow students) they are more likely to talk about the problems they may encounter with dating, sexuality, personal interests, experiences, and goals. The friendship relationship allows the individual to discover their own power to construct ideas and receive validation from their peers (Seiffge-Krenke 1995).

Robins, Lese, and Herrick (1993) in their study on social support and college freshman adjustment have found significant interactions that provide evidence of the beneficial aspects of relationships providing a sense of belonging and appraisal support during times of stress. A moderator of the above being the personality construct. The first significant interaction suggests that individuals who were highly goal directed could benefit more from having relationships with people whom they can share activities with. The second significant interaction indicates that at times of stress individuals who were less goal-directed would benefit by having relationships in which they can discuss their problems.

Pines, Aronson and Kafry (1981) undertook a study involving 290 students and 241 professionals between the ages of 17 and 87 years old. Subjects were asked to describe their relationships with family, friends, fellow students, co-workers and acquaintances. Findings in the above study indicated that all social relations were negatively and significantly correlated with life tedium. The highest correlations were for co-workers and friends. These suggested that the higher the quality of the

relationship the lesser the amount of tedium that is experienced. The availability of support in times of need was negatively and significantly correlated with the effects of tedium. The greater the amount of support the lesser the feelings of tedium.

Winefield (1993) indicates that there are no significant sex differences in study satisfaction or the availability and adequacy of social support received from teachers, fellow students, or family and closest friends. There were also no significant differences in the frequency of encouragement for their study from parents, partners, peers, or from fellow students. An interesting finding in the above study indicates that undergraduates reported lower study satisfaction and less social support from staff and fellow students.

Table 2 Social Supports of Mature Male and Female Students (N=111; average age = 24.1 years).

	Females (n=54)	Males (n=55)	t
Social support by source:			
Teacher availability	11.40	12.51	1.63
Teacher adequacy	9.37	10.67	1.77
Students' availability	10.65	10.40	0.39
Students' adequacy	11.00	11.37	0.51
Confidant availability	16.79	16.22	0.75
Confident adequacy	15.06	14.11	1.33

Source Winefield (1993).

Stokes (1983) attempted to predict satisfaction with social support networks. A sample of 21 undergraduate psychology majors was chosen. These students solicited subjects who were at significant points in their lives. Fellow classmates and relatives were not chosen. Results in this study indicate that while larger networks have the potential for giving support they may also bring increased demands and increased potential for damaging interactions. It is considered that the "bigger the better" mentality does not necessarily take into account the pressures and the responsibilities that may result from the maintenance of a large number of relationships.

A support network of seven confidants were seen as a satisfactory number. Any increases in the number of confidants after this number were not associated with increased satisfaction of support.

Individuals have a tendency to seek various types of support from their social network when suffering from chronic stress. A social support network could be perceived as being either being helpful or not be meeting certain support expectations. When expectations are not met people have a tendency to experience more stress and depression and to report minimal satisfaction with their support network. There may also be a feedback loop where people who are asking for more help may increase the likelihood of having more upsetting experiences of unmet expectation and more stress.

Beehr and McGrath (1992) conclude that social support represents a potentially crucial moderator of the stress resulting from demands in work situations and that empirical evidence sheds some light on these relations but much is left in the dark and remains unclear and unknown.

For many young people the transition to university may be a hard one. It is a time of personal upheaval and a time to develop independence and other social skills. Some young people may experience adjustment problems such as academic difficulty while others will make this transition with relative ease. Many students have also reported family concerns and interpersonal difficulties in various social contexts.

Social support is a crucial factor in coping with stress and burnout it provides nourishment to self-esteem, positive affirmation, dependency relatedness, and clarification of expectations when needed. Having someone to confide in reduces the effect of stress both physically and psychologically. Social support is seen to provide positive need-fulfilling elements to an individual's life. The negative factors of social support include failure of social supports meeting expectations, inferior quality of support, having to provide reciprocal support to others and not having an equal distribution of relatives and non relatives.

The Present Study

The present study focuses on burnout in the student population and the relationship of social support in alleviating feelings of emotional exhaustion, depersonalisation and lack of personal accomplishment. There will be an emphasis on social/academic problems, instructional relations, and student distress. Five hypotheses will be examined;

Hypothesis One; High levels of social/academic problems and low levels of instructional relations will result in lower levels of personal accomplishment.

This hypothesis suggests that the greater the number of problems of an academic nature combined with poor instructional relations and lack of support from lecturers or tutors to result in lower levels of academic accomplishment. This will be evident in low grades or withdrawal from paper/s.

Hypothesis Two; High levels of social/academic problems and low levels of instructional relations will lead to a high level of depersonalisation.

This hypothesis suggests that the greater the number of problems of an academic nature in combination with poor instructional relations with lecturers and tutors will result in depersonalisation, feelings of detachment and developing a callous attitude towards others.

Hypothesis Three; High levels of social/academic problems, low levels of instructional relations, and distress will lead to a high level of emotional exhaustion.

This hypothesis suggests that the greater the number of problems of an academic nature in combination with poor instructional relations with lecturers or tutors will lead to a high amount of emotional exhaustion. Emotional exhaustion will occur because the student will find difficulty in performing work given to an acceptable level. Demands will become incompatible and attempts to meet these demands will become emotionally distressful and exhaustion will occur over time.

Hypothesis Four; High levels of social support from family and friends would lead to an increase in personal accomplishment and a decrease in depersonalisation and emotional exhaustion.

This hypothesis suggests that high levels of social support received from family and friends will lead to lower levels of anxiety. Because of these factors the student will see an increase in personal accomplishment and a decrease in other factors related to burnout, e.g., Depersonalisation, emotional exhaustion.

Hypothesis Five; High levels of social support from other students will have the opposite effect, leading to a decrease in personal accomplishment and an increase in depersonalisation and emotional exhaustion.

This hypothesis suggests that high levels of social support from students will result in a decrease in personal accomplishment and an increase in other factors associated with burnout. This may eventuate because the student may have a reciprocal arrangement with other students and there is an obligation to give support in return. Because of the stressful nature of the academic environment support needs may be greater.

Method

Subjects

Subjects comprised of 117 Massey University students which included both postgraduate and undergraduate students who were doing papers and also students undertaking Masters and Doctoral theses. The group was comprised of a wide range of ages of both male and female students. The gender distribution of the sample was 35% male and 64% female. All students undertaking this study were enrolled internally at Massey University Turitea campus.

Table 3 - Status

Value Label	Value	Frequency	Valid Percent	Cum Percent	Percent
Postgraduate	1	35	29.9	29.9	29.9
Undergraduate	2	66	56.4	56.4	86.3
Thesis Only	3	16	13.7	13.7	100.0
		-----	-----	-----	
	Total	117	100.0	100.0	
Valid cases	117	Missing cases	0		

Table 4 - Levels of Study (number of papers)

Value Label	Value	Frequency	Valid Percent	Cum Percent	Percent
	0	13	11.1	11.1	11.1
	1	10	8.5	8.5	19.7
	2	10	8.5	8.5	28.2
	3	5	4.3	4.3	32.5
	4	27	23.1	23.1	55.6
	5	17	14.5	14.5	70.1
	6	8	6.8	6.8	76.9
	7	11	9.4	9.4	86.3
	8	13	11.1	11.1	97.4
	9	3	2.6	2.6	100.0
	Total	117	100.0	100.0	
Valid cases	117	Missing cases	0		

Table 5 - Ages of Students

Value Label	Value	Frequency	Valid Percent	Cum Percent	Cum Percent
18-20	1	30	25.6	25.6	25.6
20-25	2	51	43.6	43.6	69.2
25-30	3	18	15.4	15.4	84.6
30-35	4	7	6.0	6.0	90.6
35-40	5	4	3.4	3.4	94.0
40-45	6	3	2.6	2.6	96.6
45-50	7	3	2.6	2.6	99.1
Over 50	8	1	.9	.9	100.0

Total		117	100.0	100.0	
Valid Cases	117		Missing cases	0	

Table 6 - Gender

Value label	Value	Frequency	Valid Percent	Cum Percent	Cum Percent
Male	1	41	35.3	35.3	35.3
Female	2	75	64.1	64.7	100.0
		1	.9	Missing	

Total		117	100.0	100.0	
Valid cases	116		Missing cases	1	

Data Collection

A total of 250 questionnaires were distributed throughout the university and 117 completed questionnaires were returned. Contact was made with students during lecture times, by leaving questionnaires with lecturers to give to students, or by approaching students personally.

A representative sample of university students was used. Students from psychology, veterinary science, religious studies, science, business studies, social policy, and sociology departments were chosen to participate in this study. Participation was voluntary and students who agreed to participate were given three questionnaires to complete. An information sheet that gave a brief overview of the study was provided. This included ways of contacting the researcher if additional information was needed.

By agreeing to participate in the present study it was assumed that the student had given their consent. Students were also asked to return the completed questionnaires to the Psychology department office to collect for data entry. Response rates were approximately 40% as was expected.

Measures

The questionnaires used in this study are reproduced in Appendix.

The *Student Stress Inventory*, the *Maslach Burnout Inventory*, and the *Student Life Event Questionnaire* are assessment instruments that were used for measuring the effects of burnout and stress in the student population. The *Multi-Dimensional Social Support Scale* was used to measure the degree of social support that is being given.

Stress

The Student Stress Inventory (SSI) was developed by Fimian (1986) for the purpose of measuring stress in academic life. The Student Stress Inventory was comprised of 42 questions. Participants were asked to circle the most appropriate alternative of choices that are offered.

Similarities were seen in the demands that were made on secondary school and university students with the later being at a greater degree. This was considered the best measure of student stress as it covered items such as social/academic problems, and instructional relations between the student and those teaching them.

This form of the SSI was developed using a 1-to-4 point Likert scale: 1 = Strongly Disagree, Disagree", 2 = "Disagree", 3 = "Agree", 4 = "Strongly Agree". Using this measure, students can be rated on the degree that each academically-related item has upon student stress levels. This questionnaire factorises items in to five subscales.

Subscale I: Emotional Manifestations.

This subscale was comprised of 10 items. These items identified the extent to which the students responded to stress encountered in the academic environment. Emotional reactions encountered included feeling cranky, scared, worried, anxious, pressured, angry, unable to deal with the environment and unable to make up one's mind.

Subscale II: Student Distress.

This subscale was comprised of 14 items. Students who score highly on this subscale have reported that they did not have time to relax and enjoy the day; felt that they were not important in school; were not excited about things that they had learned; were not sure of what was expected of them; felt that those teaching them did not care how well they were doing; were not physically comfortable in classrooms; had problems interacting with others.

Subscale III: Behavioural Manifestations.

This subscale was comprised of 6 items. This subscale represented the ways in which students behave in response to a large number of demands. Behaviours included; acting defensively with others; allowing friendships to fall apart; bad mouthing classmates, teachers, or school staff, bullying or picking on others; talking back to teachers; and calling in sick.

Subscale IV: Physiological Manifestations.

This subscale was comprised of 6 items. This subscale included items such as: eating more or less than usual; breaking out in a cold sweat; feeling itchy all over; losing their voices, or having their voices "crack" on them; feeling their hearts pounding or racing; and getting stomach cramps.

Subscale V: Social/Academic Problems.

This subscale was comprised of 6 items. The item content of this subscale identified numerous social and academic problems that contributed to the overall stress experienced by the student. High scorers on this scale have identified: repetitious class work; forgetting things that have been taught; classmates getting better

treatment; those in teaching positions having too much power over them; parents expectations being too high; and having too much information to deal with on a daily basis. This questionnaire was not used to identify the presence or absence of classroom stress, but to indicate the degree of strength by which it has been experienced.

For the purposes of this study only Subscale II (student distress) and Subscale V (social/academic problems) from the Student Stress Inventory were used as other subscales were not considered to be relevant to the hypotheses.

Burnout

For the purposes of this study the revised *Maslach Burnout Inventory* (MBI) (Maslach & Jackson 1986; Fimian 1986) has been used in combination with the Student Stress Inventory.

The MBI is a 23-item scale that isolates three dimensions of burnout. Emotional exhaustion, lack of personal accomplishment, and depersonalisation are each measured by a separate subscale.

Subscale I: Emotional Exhaustion assesses feelings of being emotionally overextended and being exhausted by one's work. (Item n=9; $\bar{x} = 2.2$; SD = 1.3; Alpha = .86).

Subscale II: Lack of Personal Accomplishment assesses feelings of competence and achievement in one's work. (Item n=8; $\bar{x} = 3.9$; SD = 1.2; Alpha = .76).

Subscale III: Depersonalisation measures an unfeeling and impersonal response towards recipients of one's service, care, treatment or instruction. (Item n=5; $\bar{x} = 2.0$; SD = 1.3; Alpha = .63).

Maslach and Jackson (1986) identify burnout as a continuous variable which ranges from low through to moderate and high degrees of experienced feeling.

The 9 items used in the Emotional Exhaustion subscale identify feelings of being emotionally exhausted by one's work. The 8 items used in the (Lack of) Personal Accomplishment subscale identifies feelings of competence and successful achievement in their work. The 5 items used in the Depersonalisation subscale identify unfeeling and impersonal response towards recipients of one's care or service.

High scores on the Emotional Exhaustion and Depersonalisation subscales and low scores on the Personal Accomplishment subscales indicate a high level of burnout. An average level of burnout is identified by average scores on the three subscales. Low scores on the Emotional Exhaustion and Depersonalisation subscales and high scores on the Personal Accomplishment subscale indicates a low level of burnout. A 1-to-4 point Likert scale is used to measure each of the three aspects of burnout in this questionnaire.

Powers and Gose (1986) administered the MBI to a sample of 72 university students. Internal consistency estimates of the reliability for each subscale were determined by using Cronbach's alpha. The alpha estimates for the frequency dimensions were for exhaustion (.86), depersonalisation (.63), and for personal accomplishment (.72). Reliability estimations for the intensity dimension for each subscale were exhaustion (.84), depersonalisation (.54), and for personal accomplishment (.79).

Life Events

The Student Life Events Questionnaire (SLEQ) is based on the Holmes-Rahe Survey of Recent Events and identifies a number of life events which are considered to descend in severity. Scores lower than 60 identify that the individual's life has been unusually free from stress. Scores between 60-80 are average for the ordinary wear and tear of life. Scores of over 100 indicate that pressures are great and the individual is under serious stress. The higher the score the greater the strain. The scores relate to both changes in lifestyle or responsibility. People who experience events that change their life patterns greatly are more likely to become ill in some way. There is differentiation between minor and major changes, although one may

need to take into consideration individual differences which should be considered to be important.

Social Support

The Multi-Dimensional Support Scale (MDSS) was used to measure the extent to which students are receiving support from family, close friends, peers, and people that have authority over them.

The MDSS was designed by Neuling and Winefield (1988) and was first used with cancer patients. Winefield, Winefield and Tiggemann (1992) modified the MDSS to measure social support and wellbeing in young adults.

The modified version of the MDSS used Winefield, Winefield and Tiggeman (1992) was used in the present study.

The MDSS is divided into three sections, consisting of either 6 or 7 questions each. Section A considers relationships between family and close friends and has a total of 7 questions. Section B considers other people the same age as the participant who are similar to them in their vocation and has a total of 6 questions. Section C looks at relationships between the participant and those that have some form of authority over them; e.g., lecturers and tutors. This section has a total of 6 questions.

A statistical analysis was conducted using SPSS Version 7.0 using multiple regression with the stepwise method. Multiple regression was used to develop an equation that summarises the relationship between a dependent variable and a set of independent variables. It is also used to identify the subset of independent variables that are most useful for predicting the dependent variable and to predict values for a dependent variable from the values of independent variables. Stepwise selection of independent variables allows one to examine variables at each step for entrance or removal based on removal criterion. The most influential variable is considered first, then less influential variables are included, while those with minimal influence are eliminated completely (Norusis 1985).

Ethical Issues

This study was first approved by the Massey University Ethics Committee and then questionnaires were distributed to students by the lecturers of their respective classes or by approaching students personally.

Students were asked to complete the questionnaires in their own free time and return them to the Massey University Psychology Office. Students had been given the right to refuse to participate and the right to not answer any question/s asked in this study.

The survey was conducted in accordance with guidelines for ethical research as defined by the Massey University Human Ethics Committee. The nature of this study involved the participant's returning the completed questionnaires unnamed. This allowed the individual's identity to remain confidential.

Results

Table 7 shows a correlation matrix that identifies the extent that certain variables interact with other variables.

Support from friends and family (HELPA) is highly positively correlated with support from peers (HELPB)[.4375]. There is a high positive correlation between support from peers (HELPB) with support from lecturers or tutors (HELPc)[.2601].

Distress correlates highly with support from lecturers or tutors (HELPc)[- .3842]. The correlation in this instance is negative showing the lower the amount of support from lecturers/tutors the greater the amount of distress the student may suffer.

Distress is also seen to correlate highly with lack of personal accomplishment (LACKOFPA)[.5663], social/academic problems (ACPROBS)[.2922], and depersonalisation (DEPERS)[.4383]. The correlation between all the above variables and distress is positive, suggesting the greater the feelings of depersonalisation, lack of personal accomplishment, and/or emotional exhaustion the greater the feelings of distress.

Distress also correlates positively with emotional exhaustion (EMOTEX)[.3562] suggesting that the greater the distress the higher the amount of emotional exhaustion felt by the student.

Social/academic problems (ACPROBS) correlates moderately with lack of personal accomplishment (LACKOFPA)[.4560], depersonalisation (DEPERS)[.2686], and emotional exhaustion (EMOTEX)[.4260]. This suggests the greater the number of social or academic problems the more the student feels a lack of personal accomplishment and also experiences feelings of depersonalisation and emotional exhaustion.

Lack of personal accomplishment (LACKOFPA) correlates highly with support from peers (HELPB)[- .2731] and support from lecturers and tutors (HELPc)[- .2553]. The

correlation in both instances is negative showing that the lesser the amount of support from peers and lecturers or tutors the greater the lack of personal accomplishment perceived by the student.

Depersonalisation (DEPERS) correlates highly with support from authorities (HELP)[-.3960]. The correlation in this instance is negative suggesting the lesser the amount of support from lecturers/tutors the greater the feelings of depersonalisation.

Lack of personal accomplishment (LACKOFPA) correlates with depersonalisation (DEPERS)[.5790] and emotional exhaustion (EMOTEX)[.6451]. This shows that the more the student feels they are lacking in personal accomplishment the greater the feelings of depersonalisation and emotional exhaustion. These correlations provide no implications for causality between variables.

Hypothesis 1; High levels of social/academic problems in combination with low levels of support from authorities will result in lower levels of personal accomplishment.

There was a significant linear relationship between Lack of Personal Accomplishment and the predictor variables Social/Academic Problems and Support from Authorities $F(2,112) = 17.58$, $p<.01$ which accounted for 23% of the variance in Lack of Personal Accomplishment.

The Standardised Beta Coefficient for Social/Academic Problems was .422; for Support from Authorities it was -.190. This indicates that the greater the number of social/academic problems a student may incur the lower their feelings of personal accomplishment; While the more support from authorities they received the greater their feelings of personal accomplishment. Based on the size of the Beta coefficients, social/academic problems are twice as influential as support from authorities within the model tested.

Hypothesis 2; High levels of social/academic problems in combination with a low level of support from authorities leads to high levels of depersonalisation.

There was a significant linear relationship between Depersonalisation and the predictor variables Social/Academic Problems and Support from Authorities $F(2,112) = 14.66$, $p<.01$ which accounted for 20.7 % of the variance in Depersonalisation.

The Standardised Beta coefficient for Support from Authorities was -.361; for Social/Academic Problems it was .228. This indicates the greater the level of support from authorities the lesser the feelings of depersonalisation; while the greater the level of social/academic problems the student experiences the greater their feelings of depersonalisation.

Hypothesis 3; High levels of social/academic problems and high levels of student distress in combination with a low level of support from authorities leads to a high level of emotional exhaustion.

There was no significant linear relationship between Support from Authorities and Emotional Exhaustion ($p= 0.557$). There was a significant linear relationship between Emotional Exhaustion and the predictor variables Social/Academic Problems and Student Distress $F(2,112) = 18.36$, $p<.01$ which accounted for 24.7% of the variance in Emotional Exhaustion. The Standardised Beta coefficient for Social/Academic Problems was .358; for Student Distress it was .253. This indicates the greater the number of social/academic problems and the greater the amount of student distress experienced the greater the feelings of emotional exhaustion.

Hypothesis 4; High levels of social support from family/friends would lead to an increase in personal accomplishment and a decrease in depersonalisation and emotional exhaustion.

(a) There was no significant relationship between Emotional Exhaustion and Support from Family ($p= 0.673$).

- (b)** There was a marginally significant linear relationship between Lack of Personal Accomplishment and Support from Family $F(1,115) = 3.80$, $p<.05$ which accounted for 3.2% variance in Lack of Personal Accomplishment. The Standardised Beta coefficient was -.179 indicating that the more support from family and friends the greater the feelings of personal accomplishment.
- (c)** There was a significant linear relationship between Depersonalisation and Support from Family $F(1,115) = 4.51$, $p<.05$ which accounted for 3.8% variance in Depersonalisation. The Standardised Beta coefficient was -.194 indicating the more support from family and friends the lower the feelings of depersonalisation.

Hypothesis 5; High levels of social support from other students will lead to a decrease in personal accomplishment and an increase in depersonalisation and emotional exhaustion.

- (a)** There was a highly significant linear relationship between Depersonalisation and the variable Support from Peers $F(1,115) = 6.56$, $p<.01$ which accounts for 5.5% variance in Depersonalisation. The Standardised Beta coefficient was -.235, indicating the lower the amount of support from peers the greater the feelings of depersonalisation.
- (b)** There was a highly significant linear relationship between Emotional Support and the variable Support from Peers $F(1,115) = 2.59$, $p>.05$ which accounted for 2.3% variance in Emotional Exhaustion. The Standardised Beta coefficient was -.150 indicating the lower the amount of support from peers the greater the feelings of emotional exhaustion.
- (c)** There was a highly significant linear relationship between Lack of Personal Accomplishment and Support from Peers $F(1,115) = 9.03$, $p<.01$ which accounted for 7.5% variance in Lack of Personal Accomplishment.

The Standardised Beta coefficient was -.273 indicating the lower the amount of support from peers the lower the feelings of personal accomplishment.

The descriptive statistics for the prevalence of student life events in the present study are shown in Appendix E.

In the present study 33% of the students who took part experienced a major change in sleeping habits. This may have been due to an increase in the amount of time spent on study. Because stress affects an individual's pattern of sleep it may be shorter or the individual may find themselves waking up often during the night. Social life could also be a consideration as younger students have more freedom to go out at nights than when they were living with their parents.

There was a decrease in the amount of time spent on sport and recreation (31%). This would also indicate that the student would spend a greater amount of time on study. This in itself may be a source of stress to the student as having time out from study will help reduce stress. Reduction in the amount of time spent in sporting activities could be another negative factor reducing the amount of time spent on recreational activities and with friends and/or support persons.

A major change in both financial position and living conditions was also encountered by 30% of students who undertook the present study. 10% of students have reported a change from a permanent job to becoming a full-time student. Many students who had previously been working full-time would be receiving less money on the student allowance. Those who have been granted a student loan would have the added burden in having to pay the loan back with additional interest once their studies had been completed.

Changes in living conditions will be influenced by a change in financial position and will greatly affect younger students who were previously living at home. Students may have to support themselves and find that their social support network may now only consist of friends and peers.

A major change in working hours/conditions was reported by 22% of students. This could either reflect a reduction in hours of employment and/or an increase in the amount of time students spent studying.

A major change in eating habits was reported by 20% of students. This would include younger students, who having moved away from their family have to fend for themselves. Students may choose to eat more fast food or prefer snacking while studying. Not having an adequate diet could make students more susceptible to the effects of stress and exhaustion.

Outstanding personal achievement has been reported by 19% of students who participated. This would be determined by receiving good grades and passing examinations. Achievements outside of the academic environment may have also been reported.

Death of a family member or fiancee' was reported by 11% of students. This may be more prevalent for older students. Death of a family member, unlike the other factors above rates relatively high on the stress scale. Death of a close friend was reported by 3% of students There were no reports of death of a spouse or a live in lover. Failing examinations have been reported by almost 10% of the students who participated in this study.

TABLE 7

Correlation Coefficients

	HELPA	HELPB	HELPc	DISTRESS	ACPROBS	LACKOFPA	DEPERS	EMOTEX
HELPA	1.0000							
HELPB	.4375**	1.0000						
HELPc	.1101	.2601**	1.0000					
DISTRESS	-.0751	-.1983*	-.3842**	1.0000				
ACPROBS	.0317	-.1080	-.1549	.2922**	1.0000			
LACKOFPA	-.1787	-.2731**	-.2553**	.5663**	.4560**	1.0000		
DEPERS	-.1941*	-.2351*	-.3960**	.4383**	.2686**	.5790**	1.0000	
EMOTEX	-.0394	-.1502	-.1079	.3562**	.4260**	.6451**	.3916**	1.0000

* - Signif. .05 ** - Signif. .01 (2-tailed)

n=117

Discussion

This discussion will consider the results of the hypotheses chosen for the present study. Conclusions will be made from these findings and considerations for future research will be identified.

Factors to be considered will include **(a)** The amount and types of support available **(b)** difficulties at exam time **(c)** how attendance at university creates potentially stressful life events due to substantial changes in the environment.

How support can affect the wellbeing of an individual has already been identified in the main body of this study. Also identified was how poor levels of support from family and friends, other students and lecturers or tutors could result in lack of personal accomplishment, emotional exhaustion, and depersonalization.

A combination of these factors in higher degrees and for prolonged periods of time can lead to burnout. Therefore it is important to be aware of the warning signs and make the changes or adjustments that are necessary to eliminate or lessen these symptoms. Changes may require finding an adequate level of support from family, friends and peers. Counselling may also be necessary in some instances.

Those in a teaching position need to be aware of the symptoms of burnout in both students and themselves and have knowledge in how to deal with them. Access to lecturers, tutors and heads of departments would also be of help when problems arise.

The first hypothesis in the present study considered how social and academic problems combined with poor levels of support from tutors and/or lecturers affect the student's level of personal accomplishment. There was a level of support for this hypothesis in the present study and this indicates that the extent of academic problems encountered and the quality of support from lecturers and tutors were important factors in providing the student with a sense of personal accomplishment. This would be reflective in grades and the ability of the student to understand material that was presented. It is expected that the higher the grade received the greater the feelings of personal accomplishment.

The approachability and availability of the lecturer or tutor for each subject would also be an important factor, especially when problems are encountered. The quality of teaching and content of what is being taught may also be an important factor. Papers that are taught badly are bound to leave the student with feelings of confusion, a lack of motivation and lead to further distress. The individual differences between students are also a consideration. These include factors such as study skills, time-management, the ability to write autonomously, ability to critically appraise, and general capabilities such as preparation and the ability to learn.

The second hypothesis in the present study considered how social and academic problems combined with low levels of support from tutors and/or lecturers can lead to feelings of depersonalization. There was support for this hypothesis also. Depersonalization may occur because of the student not being able to understand a particular subject. Not being given adequate help or inability to seek help may lead to feelings of bitterness. Depersonalization is indicative of social withdrawal possibly resulting from a loss of social support or vice versa in that depersonalization results in the loss of social support. High demands may lead to withdrawal and feelings of depersonalization. By not attending to these demands, the intensity of burnout symptoms may increase leading to emotional exhaustion. Having the capability to act on advice and help that has been given is also advantageous for the student. Social skills and ethnicity may be determinants to whether the student can receive an adequate level of support.

The third hypothesis the present study considered how social and academic problems in combination with a high amount of distress and a low level of support from tutors and/or lecturers affect the student's level of emotional exhaustion. Findings in this study support this hypothesis. A high level of stress can be emotionally taxing. The inability to understand a certain concept may also prove to be exhausting. Attempts to meet demands may become emotionally distressful if support is not provided from those in authority and those that are relied on to provide help. Emotional exhaustion has been linked to thwarted goals or having to re-appropriate future ambitions. This can contribute to the development of depersonalization as the individual insulates

themselves from the environment and other activities. Individual differences are also applicable to this scenario.

The fourth hypothesis in the present study considered how levels of support from family and friends influenced the levels of three burnout variables; lack of personal accomplishment, depersonalization, and emotional exhaustion. There was a level of support for this hypothesis in the present study. Support from parents may not only be financial. They could also provide emotional support or suggest ideas for subjects chosen and career paths to be followed. Parents can provide both expert help and knowledge that are founded in their own life experiences. Advice can be given in how to deal with problems of a similar nature.

The literature suggests that having a reasonable number of friends allows the student access to emotional security, and support. Having friends enables the individual to discover their ability to construct ideas and have these ideas validated by their peers (Hartup 1992). This would be dependent on whether support provided is appropriate in both content and quality in comparison to the extent of the problem. Support needs may not be met if advice is inappropriate or incomprehendable by the individual concerned.

The fifth hypothesis in the present study considered how levels of support from other students influenced the levels of three burnout variables; lack of personal accomplishment, depersonalization, and emotional exhaustion. Limitations in sample and methodology preclude being able to reject this hypothesis under the present circumstances. Other students provided support that could have reduced or even eliminated the effect of the three burnout variables; lack of personal accomplishment, depersonalization, and emotional exhaustion. Rather than proving to be a stressor, support from other students was found to reduce feelings of stress and the symptoms of burnout. Students may have formed friendships that allowed them to work in partnership with others either by working in pairs or in groups. Support may have been high in the form of *network functions* in providing informational support and support with problems. Other students could have also provided high levels of

emotional support and companionship support (Fondacaro & Heller 1983). Students can empathize with others going through the same experiences and could offer insight and help in problem solving.

The present study has identified that establishing a viable support system is one of the most effective ways of avoiding or diminishing burnout. Social support systems are considered to be mediating variables that act as buffers and supports to individuals in their social environments. These variables reduce the effects of a stressful environment and help slow down the tedium cycle (Pines, Aronson and Kafry 1981).

Other findings identify how important social support is in lessening the factors that lead to burnout. Common denominators suggest that a high level of support from family and friends and support from other students reduce factors that are related to burnout. It is assumed that a healthy support network that comprises of an equal proportion of family, friends, and other students will be the most effective way of lessening the symptoms of burnout.

Being involved in academic study is a source of considerable discomfort for a number of students. Factors that contribute to student stress are intense involvement, the importance of the situation, competitive interaction, social comparison and long hours in study helping to maintain a level of anxiety. Examinations are considered by students to be the most stressful time of the year.

The present study shares similarities to the findings of Green (1989) and has found a positive correlation between psychological stress and burnout. Burnout is also considered to be linearly related to psychological demands. These demands include social and academic problems, instructional relations and factors encountered in the external environment.

Factors that were considered in the present study comprised of;

- (i) The degree to which the situation imposes demands on students that exceed their ability to cope or manage.

An individual's skills and abilities may not be sufficient to meet real or perceived demands. Students who have poorer qualifications prior to attending university may have more difficulty in understanding the concepts that are being delivered. Having to work alone may be an additional factor that relates to a difficulty in understanding.

There are requirements for students less than 20 years of age in regards to admission to university. Older students do not have to fulfil these requirements. Having not studied for a period of time, some adult students may find it difficult coping during the first year of study. The mature student could also have a tendency to be more motivated and be able to plan their work better. The quality of the student's academic work may not meet his or her expectations, needs, values, or the demands of others. The student may have problems in perceiving how certain subjects relate to real life situations. Expectations may not be met if a certain paper had been taught poorly.

- (ii) The amount of stress perceived is based on the quality and quantity of the demands that are encountered in terms of both academic and social demands. This could be dependent on the individual differences and/or external variables. Individuals have different stress tolerance levels. What may be perceived as stressful for one person may not be for another. Some students may have the ability to work under pressure for long hours without suffering any detrimental effects. Personality variables such as whether the individual is an extravert or an introvert may also be determinants as extraverts have a tendency to work in a team environment, make friends easily and have interests that involve others. In contrast, introverts have a tendency to work alone, are not easily influenced by others, may not make friends easily and may choose activities that do not involve others (Eysenck 1959).

Winfield (1993) indicates that there are no significant sex differences in a student's perception of availability and adequacy of support received from those in authority.

Differences in coping have been identified between genders. Females have a tendency to cope better in a number of stressful situations (Greenglass, Burke, & Ondrack 1990). Coping skills will also differ between each individual.

Positive action against stress and the symptoms of burnout may result in positive change. Experienced symptoms may be acting as a warning device that leads to making necessary changes in an environment that is proving stressful. Individuals that experience a low level of burnout are in a good position to identify problem areas in their life and make the necessary changes.

(iii) The individual's response to stress. This can be either negative or positive. As already mentioned each individual has different ways of dealing with stress. Older students may be more capable in dealing with the symptoms of stress and burnout. This could be due to the development of skills and having a variety of life experiences. Some individuals could have previously experienced a complete burnout episode. A significant correlation has been found between stressful life events and academic performance and individual differences resulted in different ways of dealing with stress Fontana & Dovidio (1984.)

(vi) The outcomes of stress and burnout. The outcome of stress and burnout can be either positive or negative. The episode in itself may suggest that changes need to be made in an individual's life.

Social support is a dynamic variable that is influenced by life events. Whether the amount of social support received will increase or decrease is dependent on the life event that is experienced. The impact of life events is considered to be a causal factor of stress which in time could lead to burnout. There is a highly significant relationship between life events, physical illness and psychological impairment. Life events are correlated with stress related variables such as anxiety, tension, distress, aggression, paranoia, depression and excessive alcohol consumption. Research has found that only undesirable events have been substantially correlated with stress-related variables. This occurs because undesirable events require greater adjustment than desirable ones (Dean & Lin 1977 & Vinokur & Selzer 1975).

Students who seek treatment for depression and psychological distress also report experiencing more life events during the past year than students who have not had prior or ongoing psychological treatment. College students that are in their late teens to early twenties age group are in a high risk group for life change and depression (Rubio & Lubin 1986).

Life events can provide additional demands to an already stressful workload. Life events can prove to be time consuming and may result in lateness of handing in assignments or work being performed at a lower standard. Depending on the life event experienced the student may have to take time away from study. This reducing the amount of time spent in class and involvement with other students.

Barnes (1993) considered the impact of life events on first year extramural psychology students. A great number of traumatic life events were offered as reasons for requesting an extension for an assignment or withdrawing from papers. First year psychology students had not experienced more major life events than other students. When data for extramural, internal and non-students were compared some differences did become apparent. All students were more likely to experience a change in their sleeping habits. Age related life events indicated that students over the age of 50 years old were more likely to have spent time overseas than younger students. They were also more likely to have had a close friend die. Students over the age of 40 years old were also more likely to have had a son or daughter leave home than younger students. Younger students with children may have been burdened with the responsibility of providing as they were still dependent on them.

First year students were more likely to have had a change in their eating habits than students who had been at university for longer periods. A decrease in financial state was also more significant for first year students. Students who were sole parents were more likely to experience a change in the number of family gatherings, experience more troubles with in-laws, to have a son or daughter leave home, to have a close friend die, to have a change in health of a family member, or have had a family

member try to commit suicide. Students who were sole parents and students living alone were more likely to report an outstanding personal achievement.

The number of life events experienced was not related to gender, income, occupation, age or the year of study. Those who lived with children did however, experience significantly more life events than those who only lived with adults or those who lived alone.

Mechanic (1978) considers negative stress to be a determinant in whether a student passes or fails their examinations. Many students were under the belief that if anxiety could be maintained at a comfortable level their academic performance would remain at a level that would allow them to pass their examinations.

Mechanic (1978) has identified changes students encounter as examinations approach;

- (i) Not having enough time to study (95%)
- (ii) An increase in the amount of time spent in study (82%)
- (iii) Modification of an intended reading list (77%)
- (iv) A decrease in social and leisure time activities (77%)
- (v) An increase in anxiety levels (73%)
- (vi) A decrease in time and effort spent on course work (68%)
- (vii) An increase in time spent talking about examinations with other students (55%)
- (viii) Doubts that going into their chosen field was the right decision (55%)
- (ix) An extensive change in reading plans for examinations (45%)

The factors identified above have implications for students, lecturers and student services. Students have to adapt to these changes and often in a short period of time. Having to deal with these changes could prove to be a stressor in addition to an already heavy academic workload.

Changes in the student's lifestyle and working out a suitable timetable may be helpful in preventing further burnout episodes. Having time out may allow the student to gather their thoughts, develop time management skills and make necessary changes to study more effectively. Having the knowledge in how to deal with the

symptoms when they present themselves may lessen the impact and allow the student to function better.

Self awareness allows an individual to identify their energizers. An individual can do are to develop new interests, exercise regularly, eat well, and learn and practice relaxation techniques. Contact with other people can be beneficial in providing social support and getting one's mind off the problem. Participation in activities such as sport or other interests that take the student's mind off study may also be of help.

Limitations of the Present Study.

The present study did not include students who have dropped out throughout the year. Because the present study took place towards the end of the academic year there was consideration for students who may have been under a great amount of stress but through perseverance decided to continue their studies.

The present study was undertaken a few weeks before the final examinations. This would have been a good time to measure experienced burnout. However, the findings may have been compounded by general anxiety which could have been picked up by the burnout instrument. Also because students were focused on their examinations the response rate may have been lower than if the study was undertaken earlier in the year.

By not undertaking a longitudinal study it is not known how timing may have affected the results. Also unknown is the extent of the problems encountered and if the majority of students had a tendency to work in pairs, groups or alone.

The response rate of female students was almost double that of male students. Differences in response rate may be due to females being more efficient in completing questionnaires or perhaps being more subservient than males.

Responses from students in the 35-year and over age group were also low. Response rate being less than half that of the 18-20 year age group. The response rate of the 20-25 year old age group being almost five times that of the 35-year and over age group. Findings indicate that those in the 20-25 year age group included a large number of postgraduates. These students could have been more responsible when it comes to completing questionnaires. The response rate could be reflected by the ratio of students in the university population that are in these age groups. This may need to be determined by finding out whether the sample in this study differs substantially from the overall student population.

Because of the size of the sample there can be no direct link to whether students had experienced burnout more or less between disciplines. Course content is another factor that could not be evaluated because of the small sample size. Future research could look at a larger sample that could be categorized by departments. Research could take into account results from different universities throughout New Zealand and compare these with results obtained from teachers colleges, medical schools, law schools and technical institutes. Findings could identify which disciplines are the most demanding and highlight demographic factors not apparent when conducting research in a single institution.

Counselling and Treatment of Students Suffering from the Symptoms of Burnout

Gold, Bachelor & Michael (1989) have indicated that the use of the Maslach Burnout Inventory or modified forms of this test can be used as an indicator for the possible need for counselling. The MBI helps indicate the factors of burnout that are affecting the individual, e.g., emotional exhaustion, lack of personal accomplishment or depersonalization.

Counselling if undertaken correctly can help alleviate some of the anxiety and stress that leads to a further manifestation of the behaviours that lead to burnout. The student counselling service at Massey University has found that the majority of students who require counselling for stress or burnout approach the counselling service around exam time (May and October) or when a large number of assignments are due at once. The number of students who require counselling increases each year but statistics for student burnout are not kept by the student counselling service.

Similarly, the Palmerston North branch of Youthline has identified an increase in the number of calls that relate to suicide and depression. Each year 1-2% of crisis calls refer to stress being the main area of concern. Calls occurred most frequently around October and November of each year. The majority of students who contacted Youthline stated that they felt pressured with stress in regard to examinations. Students also felt pressured by the expectations of their parents and by those who were teaching them. A number of students expressed dissatisfaction with the quality of their relationships with parents, siblings and partners around exam time. The main area of support was from peers who understood and were experiencing the same pressures as themselves.

Intervention used by the student counselling service focuses on results, themes, understanding processes, and forming interventions. Unresolved issues may be present and it is up to the individual to make changes to their existing system. Methods used by the student counselling service involve working through ideas with students.

Factors that are considered to be significant when counselling students included;

Life in General - The student may need to consider their present relationships, quality of life and if things are moving positively. Relationships may be strained, especially around exam time. Practising relaxation techniques may be necessary. Conflict resolution may also be of help. Major changes in financial position and poorer living conditions result in a poorer quality of life.

Procrastination - The student must learn not to procrastinate but make decisions and to act on them. Procrastination may result in assignments being hurried at the last moment. This could result in lower grades and a high amount of stress in the period prior to submission of the assignment. Procrastination may also be present around exam time.

Organisation - Being organised may reduce the amount of time spent on certain projects and eliminate the repetition of work. Time may be wasted due to poor organisation. The focus should be on important issues, less relevant ones should be addressed at a later date or perhaps not at all.

Time Management - allowing time for both study, recreational activities, being able to submit assignments on time and studying for exams. This goes hand in hand with organisation. A large number of students experienced a major change in sleeping habits. Effective organisation and time management may reduce amount of time spent studying and allow the student to have a reasonable amount of sleep. More time may be available for sport or recreational activities if time management is effective.

Health - What are the student's living habits? Are there any changes that could be made so that the student could lead a healthier lifestyle? Poor sleeping habits, living conditions, and eating habits may take their toll on a student's health. Having the correct amount of sleep and an adequate diet may help the student in reducing stress.

Balance - A balance between work and recreational activities. Allocations of time for both study and relaxation, sport, etc. may be necessary. A large number of

students reported a reduction of participation in sport and recreational activities. Not having this balance could result in a decrease of social support and an increase in the amount of time spent studying. This could then result in emotional exhaustion.

Planning - Keeping a diary so the student is aware of when assignments are due and allowing time to complete them. Planning allows the student to work on their assignments steadily over a longer period of time. This results in avoiding having to rush the assignment a few days before the submission date or studying for exams the night before.

Social Collapse - Awareness of relationship problems due to stress or burnout. This again may be related to over-work and be present in students that are in flatting situations or friends and peers who are also undertaking academic studies. Less time may be spent with family or friends due to irritability and/or disagreements.

Living Arrangements - Are these stressful? Are there personality clashes? Finding effective ways to deal with stressed-out student flatmates or not taking it out on family members during exam time may result in a more pleasant environment.

Communication - The ability to feel comfortable in discussing problem areas and nominating suitable people to act as support persons. A number of students feel uncomfortable about approaching counsellors as perhaps that this shows a weakness of character. They must be shown that going for counselling is necessary and intervention can lead to positive change. Availability of, and empathy from a suitably qualified counsellor are important.

Control - Determining how much control the student has over their life. Making decisions in regard to dropping activities that are not considered to be important and making lifestyle changes where necessary. Students may see a loss of control in regard to grades that they are given for papers that they are studying. Students need to be aware that if they feel their marks are low or that they are not understanding

a particular concept the course controller or the head of a department is approachable and is there to help them.

Awareness - Acknowledging that stress is not always negative and can be controlled. Learning how to deal with stress when it arises can eliminate factors such as emotional exhaustion, lack of personal accomplishment, and depersonalization. Once these symptoms are experienced, they may be controlled to a greater degree in the future.

Individual differences and personality factors are also a major consideration when determining the best method of intervention to be used. A lot of pressure is felt by many students in having to achieve high grades.

Stress outside the academic environment may be felt by students who are employed in low skilled jobs. Many students work in supermarkets or fast food stores which require speed and efficiency. Because of this students find that they are not treated well by their employers.

Student counsellors suggest that living away from home is a potential stressor and flatmates could either provide social support or create stress. Around exam time students sharing accommodation may have a tendency to become irritable and at a time when social support is really needed it may not be available.

Counsellors also suggest that life events beyond the student's control may also create stress. A number of students may have to take care of a sick relative or even attend a funeral of a family member. Because of this the student, may lose quality learning time. If the course being taught is in block mode the student may miss quality time in the classroom. Extensions are not seen as being the answer as this may cause a pile up of work which may have to be completed to a lower standard than the student is capable of.

Counselling may take up to three or four sessions and is dependent on individual personality factors and how much time the student has available. This could be

especially difficult around exam time so the student may have one or two visits prior to examinations and then return after the completion of exams for follow-up session/s.

Counselling services should be aware of the demands that are made on students and provide methods of relaxation and time management techniques. Throughout the year there may be different factors causing stress. At the beginning of the academic year it may involve having to find accommodation in a new area, leaving family and friends and making new friends. Throughout the year the student may be faced with having to submit assignments within a specific time frame. Competition with other students will also be prevalent and the student may have to push themselves harder than they would have had to at secondary school. Towards the end of the academic year there will be the pressure of examinations or having to finish a thesis or honours project by a required date.

It may be the responsibility of each department to determine how well papers are being taught. Considerations made by course controllers could take into account the structure of courses or changes in the method of delivering the material. Paper clashes may result in examinations, tests, or assignments being due all at once.

Students need to be made aware of the support structure that is available;

- (i) Tutors, lecturers, course controllers or head of departments.
- (ii) Student counselling services
- (iii) Liaison people
- (iv) Financial help
- (v) Budget advice
- (vi) Support groups

Implications for Future Research.

The present study was of a quantitative nature so findings are limited. Further studies of a qualitative nature may provide more in-depth information and identify what the student feels when experiencing a burnout episode.

Because of the diversity in the number of papers being offered by each institution a larger sample would be required to identify the prevalence of burnout in students in different departments. If results show that stress and/or burnout of students is greater in one department (or possibly a certain paper) than the others steps should be taken in determining what the stressors are and make the necessary adjustments.

A longitudinal study would allow the researcher to identify when the most stressful times of the year are and also consider how the student is coping with demands that are being made. A longitudinal study would also identify students that have dropped out. If students remained anonymous, this procedure would not be possible. The student's name and contact phone number may need to be given in the first part of the study. Contact with these students could be made through the enrolments department of any given institution.

Students differ in their capabilities, social skills, ability to make friends and to organise their time. Using a larger student population in future studies would take into account the prevalence of stress/burnout in different demographic areas.

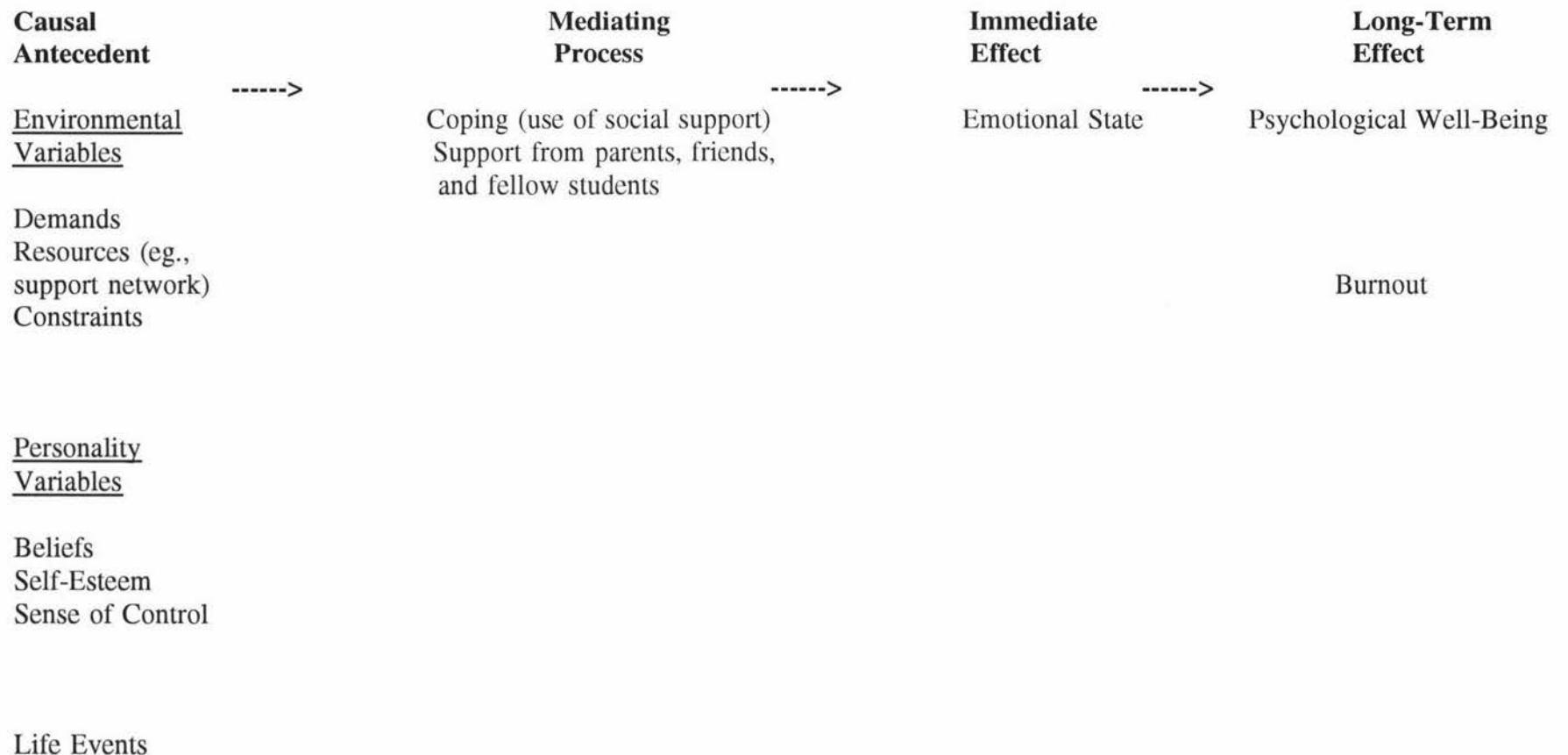
Summary

Self awareness of the symptoms of burnout by the student may be the first step in stopping the process of stress and aid in the prevention of burnout. Because other people are more aware of the symptoms they should try and help the individual in question. Referral to a counsellor and providing them with support will help them in their time of need.

In helping students one must realize and understand the stress process and how without intervention, symptoms such as emotional exhaustion, depersonalization and lack of personal accomplishment can lead to a full blown burnout episode.

Students do not live in a vacuum and may be affected by stressors and demands that occur outside the academic environment. There are no ideal set of conditions and most students will suffer negative stress in one form or another. Teaching departments need to interact with students, be aware of the provision for exams, and the design of courses. Issues that need to be understood include how to recognize burnout in students, what to do?, and how to help? Making students aware of student counselling facilities and access to those teaching each course may be of great help to the student in the reduction of stress and elimination of burnout during their university study.

Figure 1 - Model Illustrating the Process of Student Burnout



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APPENDIX A
Information Sheet

INFORMATION SHEET

My name is David Collins and I am a postgraduate student at Massey University. My research focuses on student stress and burnout within the university environment. Burnout can be identified as a state where an individual perceives themselves to have failed and experiences a sense of being worn out or exhausted by excessive demands made on energy, strength, or resources. This research is being undertaken for a Masters Degree in Psychology with the supervision of Associate Professor Douglas Paton and Associate Professor Judy Brook from the Massey University Psychology Department.

Objectives of the Research

This study is being undertaken with a view to increasing our understanding of the prevalence of burnout amongst university students. By identifying the factors that contribute to burnout the results of this study may lead to the development of study skills courses and the development of systems to facilitate the identification of students experiencing burnout and ensure they can receive appropriate assistance.

While this research aims to enhancing the quality of life for students at Massey, this should not be taken to imply an immediate benefit to you as a participant in the research.

You are invited to take part in this study, and participation is voluntary. If you wish to participate please complete the enclosed questionnaires and return them to the box, placed outside the Psychology Department Office, Level two, Psychology Building.

Questionnaires

You will be asked to complete three measures; The Student Stress Inventory, which is used to measure the extent of perceived stress within the academic environment, the Student Life Events Questionnaire, which is used to measure the impact of both positive and negative events on students, and the Multi-Dimensional Social Support Scale which is used to measure the amount of support that is being provided by family, close friends, peers and authority figures e.g., lecturers and tutors.

Rights of the Participant

You have the right to decline to participate in this study. By agreeing to take part in this study it is assumed that your informed consent has been given.

If you choose to take part in this study, you can -

- * refuse to answer any particular questions or any single questionnaire
- * ask any further questions about the study at any time during participation.
- * provide information on the understanding that your name or any identifying feature will not be used or disclosed to any one at any time.
- * be given access to a summary of the findings of the study when it is concluded.

If you have any additional questions or concerns about any aspects of this study or would like to obtain a copy of the findings you can contact, Douglas Paton, ph 350 6151 or myself through the Massey University Psychology Department - ph 350 4118.

Thank you

David Collins.

APPENDIX B

Student Stress Inventory incorporating the Maslach Burnout Inventory

STUDENT STRESS INVENTORY

Please indicate how accurate you feel these statements relate to yourself by circling the most appropriate alternative.

1. I feel accepted by other students.

Strongly Disagree Disagree Agree Strongly Agree

2. I easily make friends and have outside interests.

Strongly Disagree Disagree Agree Strongly Agree

3. Classmates care about what I think and feel.

Strongly Disagree Disagree Agree Strongly Agree

4. The information that the teacher gives helps me do better.

Strongly Disagree Disagree Agree Strongly Agree

5. I am important at university.

Strongly Disagree Disagree Agree Strongly Agree

6. My lecturers like me.

Strongly Disagree Disagree Agree Strongly Agree

7. I feel comfortable in the classroom/university setting.

Strongly Disagree Disagree Agree Strongly Agree

8. It is easy for me to talk to my tutors/lecturers

Strongly Disagree Disagree Agree Strongly Agree

9. I am excited about what I learn at university.

Strongly Disagree Disagree Agree Strongly Agree

10. I am learning a lot at university.

Strongly Disagree Disagree Agree Strongly Agree

11. I am comfortable with ways that lecturers teach.

Strongly Disagree Disagree Agree Strongly Agree

12. I know what is expected of me at university.

Strongly Disagree Disagree Agree Strongly Agree

13. I have time to relax and enjoy the day when at university.

Strongly Disagree Disagree Agree Strongly Agree

14. Past school history matters to my lecturers.

Strongly Disagree Disagree Agree Strongly Agree

15. I don't remember all that I learned at university.

Strongly Disagree Disagree Agree Strongly Agree

16. Some teachers have too much power over me.

Strongly Disagree Disagree Agree Strongly Agree

17. My parents expect too much from me at university.

Strongly Disagree Disagree Agree Strongly Agree

18. I have too much information to deal with daily.

Strongly Disagree Disagree Agree Strongly Agree

19. I do the same things in classes every week.

Strongly Disagree Disagree Agree Strongly Agree

20. Some of my classmates get better treatment than I do.

Strongly Disagree Disagree Agree Strongly Agree

21. I feel emotionally drained a lot of the time.

Strongly Disagree Disagree Agree Strongly Agree

22. I feel burned out from university.

Strongly Disagree Disagree Agree Strongly Agree

23. I feel used up.

Strongly Disagree Disagree Agree Strongly Agree

24. I feel at the end of my rope.

Strongly Disagree Disagree Agree Strongly Agree

25. I feel that I am working too hard at university.

Strongly Disagree Disagree Agree Strongly Agree

26. I feel frustrated at university.

Strongly Disagree Disagree Agree Strongly Agree

27. I feel fatigued in the morning.

Strongly Disagree Disagree Agree Strongly Agree

28. Being with people stresses me.

Strongly Disagree Disagree Agree Strongly Agree

29. Being with people strains me.

Strongly Disagree Disagree Agree Strongly Agree

30. I do not feel that I am positively influencing others.

Strongly Disagree Disagree Agree Strongly Agree

31. I can not easily create a relaxed atmosphere with tutors or lecturers.

Strongly Disagree Disagree Agree Strongly Agree

32. I cannot easily understand how lecturers feel.

Strongly Disagree Disagree Agree Strongly Agree

33. I don't feel exhilarated after working with my tutors.

Strongly Disagree Disagree Agree Strongly Agree

34. I don't feel effectively with tutors problems.

Strongly Disagree Disagree Agree Strongly Agree

35. I haven't accomplished worthwhile things while being at university.

Strongly Disagree Disagree Agree Strongly Agree

36. I don't deal with emotional problems.

Strongly Disagree Disagree Agree Strongly Agree

37. I don't feel energetic.

Strongly Disagree Disagree Agree Strongly Agree

38. I feel I treat my tutors or lecturers impersonally.

Strongly Disagree Disagree Agree Strongly Agree

39. Tutors blame me for problems.

Strongly Disagree Disagree Agree Strongly Agree

40. I don't really care what happens to my lecturers or tutors.

Strongly Disagree Disagree Agree Strongly Agree

41. I have become more callous towards people.

Strongly Disagree Disagree Agree Strongly Agree

42. I worry that the academic environment is hardening me.

Strongly Disagree Disagree Agree Strongly Agree

Please read the following statements and indicate by circling the most appropriate alternative on how you have felt in the **last week**.

43. I felt worried.

Strongly Disagree Disagree Agree Strongly Agree

44. I felt pressured.

Strongly Disagree Disagree Agree Strongly Agree

45. I felt scared.

Strongly Disagree Disagree Agree Strongly Agree

46. I felt that I didn't know where to turn.

Strongly Disagree Disagree Agree Strongly Agree

47. I felt angry.

Strongly Disagree Disagree Agree Strongly Agree

48. I felt anxious.

Strongly Disagree Disagree Agree Strongly Agree

49. I felt that I was unable to deal with my studies.

Strongly Disagree Disagree Agree Strongly Agree

50. I felt cranky.

Strongly Disagree Disagree Agree Strongly Agree

51. I felt that I could not make up my mind.

Strongly Disagree Disagree Agree Strongly Agree

52. I felt that I wanted to put things off for another day.

Strongly Disagree Disagree Agree Strongly Agree

53. I started to pick on someone else.

Strongly Disagree Disagree Agree Strongly Agree

54. I talked back to my tutors or lecturers.

Strongly Disagree Disagree Agree Strongly Agree

55. I bad mouthed classmates, lecturers, tutors, etc.

Strongly Disagree Disagree Agree Strongly Agree

56. I acted defensively with others.

Strongly Disagree Disagree Agree Strongly Agree

57. I allowed my friendships to fall apart.

Strongly Disagree Disagree Agree Strongly Agree

58. I called in sick.

Strongly Disagree Disagree Agree Strongly Agree

59. I felt itchy all over.

Strongly Disagree Disagree Agree Strongly Agree

60. I broke out in a cold sweat.

Strongly Disagree Disagree Agree Strongly Agree

61. I got stomach cramps.

Strongly Disagree Disagree Agree Strongly Agree

62. I ate more or less than usual.

Strongly Disagree Disagree Agree Strongly Agree

63. I lost my voice or had it "crack" on me.

Strongly Disagree Disagree Agree Strongly Agree

64. I felt my heart pound or race.

Strongly Disagree Disagree Agree Strongly Agree

APPENDIX C
Student Life Events Questionnaire

STUDENT LIFE EVENTS QUESTIONNAIRE

Read each of the events listed below and circle the number next to any event which has occurred in your life recently. There are no right or wrong answers. The aim is just to help identify which of these events you have experienced lately and which you think is still affecting you.

- 1.** Death of a spouse or live-in lover
- 2.** Divorce
- 3.** Marital separation or separation from a live in partner
- 4.** Death of a close family member or fiance/ee
- 5.** Major personal injury/illness (requiring hospitalisation)
- 6.** Marriage
- 7.** Being sacked from permanent job (before becoming a student)
- 8.** Reconciliation with spouse or partner after separation
- 9.** Major change in health or behaviour of a close family member
- 10.** Pregnancy
- 11.** Sexual difficulties
- 12.** Charged with a serious criminal offence
- 13.** Arrival of a new family member
- 14.** Setting up home with a partner
- 15.** Failing examinations
- 16.** Voluntary changing course
- 17.** Major change in financial position
- 18.** Death of a close friend
- 19.** Change from a permanent job to a student
- 20.** Major change in number of arguments with spouse or lover
- 21.** Obtaining a mortgage
- 22.** Having a mortgage company request payment of a loan
- 23.** Son or daughter leaving home
- 24.** Trouble with inlaws or parents of live-in partner
- 25.** Outstanding personal achievement
- 26.** Wife or live-in partner starting work outside home
- 27.** Major change in living conditions
- 28.** Major change in personal habits
- 29.** Committing a crime for which you have not been caught
- 30.** Trouble with Head of Department/Tutor etc
- 31.** Major change in working hours/conditions
- 32.** Change of house/flat
- 33.** Change of college
- 34.** Major change in type/amount of sport/recreation
- 35.** Major change in church activities
- 36.** Major change in social activities
- 37.** Borrowing money for a purchase or to repay a debt
- 38.** Major change in sleeping habits
- 39.** Major change in the number of family get-togethers
- 40.** Major change in eating habits
- 41.** Holiday (travel to a different location for at least a week)
- 42.** Minor legal problem

APPENDIX D

The Multi-Dimensional Social Support Scale

The Multi-Dimensional Support Scale

Below are some questions about the kind of help and support you have available to you in coping with your life at present. The questions refer to three different groups of people

who might have been providing support to you **IN THE LAST MONTH**. For each item, please circle the alternative which shows your answer.

A. Firstly think of your family and close friends, especially the 2-3 who are most important to you.

1. How often did they really listen to you when you talked about your concerns or problems?

Never Sometimes Often Usually/Always

2. How often did you feel that they were really trying to understand your problems?

Never Sometimes Often Usually/Always

3. How often did they try to take your mind off your problems by telling jokes or chatting about other things?

Never Sometimes Often Usually/Always

4. How often did they really make you feel loved?

Never Sometimes Often Usually/Always

5. How often did they help you in practical ways, like doing things for you or lending you money?

Never Sometimes Often Usually/Always

6. How often did they answer your questions or give you advice about how to solve your problems?

Never Sometimes Often Usually/Always

7. How often could you use them as examples of how to deal with your problems?

Never Sometimes Often Usually/Always

B. Now, think of other people of your own age that you know, who are like you in being employed, unemployed, or studying.

1. How often did they really listen to you when you talked about your concerns or problems?

Never Sometimes Often Usually/Always

2. How often did you feel that they were really trying to understand your problems?

Never Sometimes Often Usually/Always

3. How often did they try to take your mind off your problems by telling jokes or chatting about other things?

Never Sometimes Often Usually/Always

4. How often did they help you in practical ways, like doing things for you or lending you money?

Never Sometimes Often Usually/Always

5. How often did they answer your questions or give you advice about how to solve your problems?

Never Sometimes Often Usually/Always

6. How often could you use them as examples of how to deal with your problems?

Never Sometimes Often Usually/Always

C. Lastly, think about the people in some sort of authority over you. If you are employed this means your supervisors at work. If you are unemployed this means your local Income Support Service or New Zealand Employment Service staff. If you are a fulltime student, it means your lecturers and tutors.

1. How often did they really listen to you when you talked about your concerns or problems?

Never Sometimes Often Usually/Always

2. How often did you feel that they were really trying to understand your problems?

Never Sometimes Often Usually/Always

3. How often did they try to take your mind off your problems by telling jokes or chatting about other things?

Never Sometimes Often Usually/Always

4. How often did they fulfil their responsibilities towards you in helpful practical ways?

Never Sometimes Often Usually/Always

5. How often did they answer your questions or give you advice about how to solve your problems?

Never Sometimes Often Usually/Always

6. How often could you use them as examples of how to deal with your problems?

Never Sometimes Often Usually/Always

APPENDIX D

Student Stress Inventory and Maslach Burnout Inventory items association to each construct

SSI item numbers

Factor I: Student Distress

- 1/ I feel accepted by other students.
- 2/ I easily make friends and have outside interests.
- 3/ Classmates care about what I think and feel.
- 4/ The information that the teacher gives helps me do better.
- 5/ I am important at university.
- 6/ My lecturers like me.
- 7/ I feel comfortable in the classroom/university setting.
- 8/ It is easy for me to talk to my tutors/lecturers.
- 9/ I am excited about what I learn at university.
- 10/ I am learning a lot at university.
- 11/ I am comfortable with the way that lecturers teach.
- 12/ I know what is expected of me at university
- 13/ I have time to relax and enjoy the day when at university
- 14/ Past school history matters to my lecturers

Factor II: Social/Academic Problems

- 15/ I don't remember all that I learned at university.
- 16/ Some lecturers have too much power over me.
- 17/ My parents expect too much from me at university.
- 18/ I have too much information to deal with daily.
- 19/ I do the same things in classes every week.
- 20/ Some of my classmates get better treatment than I do.

MBI item numbers

Factor I: Emotional Exhaustion

- 21/ I feel emotionally drained a lot of the time.
- 22/ I feel burned out from university.
- 23/ I feel used up.
- 24/ I feel at the end of my rope.
- 25/ I feel that I am working too hard at university.
- 26/ I feel frustrated at university.
- 27/ I feel fatigued in the morning.
- 28/ Being with people stresses me.
- 29/ Being with people strains me.

Factor II: (Lack of) Personal Accomplishment

- 30/ I do not feel that I am positively influencing others.
- 31/ I cannot easily create a relaxed atmosphere with tutors or lecturers.
- 32/ I cannot easily understand how lecturers feel.
- 33/ I don't feel exhilarated after working with my tutors.
- 34/ I don't feel effectively with tutors problems.
- 35/ I haven't accomplished worthwhile things while being at university.
- 36/ I don't deal with emotional problems.
- 37/ I don't feel energetic.

Factor III: Depersonalisation

- 38/ I feel I treat my tutors or lecturers impersonally.
- 39/ Tutors blame me for problems.
- 40/ I don't really care what happens to my lecturers or tutors.
- 41/ I have become more callous towards people.
- 42/ I worry that the academic environment is hardening me.

APPENDIX E
Descriptive Statistics (SLEQ)

Descriptive Statistics

	N	Sum	Mean
LV38 Major change in sleeping habits	105	35.00	.3333
LV34 Major change in type/amount of sport/recreation	105	31.00	.2952
LV17 Major change in financial position	105	30.00	.2857
LV27 Major change in living conditions	105	30.00	.2857
LV32 Change of house/flat	105	29.00	.2762
LV36 Major change in social activities	105	25.00	.2381
LV37 Borrowing money for a purchase or to repay a debt	105	23.00	.2190
LV31 Major change in working hours/conditions	105	23.00	.2190
LV40 Major change in eating habits	105	21.00	.2000
LV9 Major change in health or behaviour of a close family member	105	20.00	.1905
LV25 Outstanding personal achievement	105	20.00	.1905
LV41 Holiday (travel to a different location for at least a week)	105	17.00	.1619
LV28 Major change in personal habits	105	15.00	.1429
LV20 Major change in number of arguments with spouse or lover	105	13.00	.1238
LV4 Death of a close family member or fiance/ee	105	12.00	.1143
LV39 Major change in the number of family get-togethers	105	11.00	.1048
LV19 Change from a permanent job to a student	105	10.00	9.524E-02
LV14 Setting up home with a partner	105	10.00	9.524E-02
LV42 Minor legal problem	105	10.00	9.524E-02
LV15 Failing examinations	105	10.00	9.524E-02
LV24 Trouble with inlaws or parents of live-in partner	105	9.00	8.571E-02
LV35 Major change in church activities	105	7.00	6.667E-02
LV16 Voluntary changing course	105	7.00	6.667E-02
LV11 Sexual difficulties	105	7.00	6.667E-02
LV13 Arrival of a new family member	105	6.00	5.714E-02
LV3 Marital separation or separation from a live in partner	105	6.00	5.714E-02
LV30 Trouble with Head of Department/Tutor etc	105	6.00	5.714E-02
LV2 Divorce	105	6.00	5.714E-02
LV33 Change of college	105	6.00	5.714E-02
LV8 Reconciliation with spouse or partner after separation	105	5.00	4.762E-02
LV21 Obtaining a mortage	105	4.00	3.810E-02
LV6 Marriage	105	3.00	2.857E-02
LV18 Death of a close friend	105	3.00	2.857E-02
LV7 Being sacked from permanent job (before becoming a student)	105	2.00	1.905E-02
LV26 Wife or live-in partner starting work outside home	105	2.00	1.905E-02
LV29 Committing a crime for which you have not been caught	105	2.00	1.905E-02
LV10 Pregnancy	105	1.00	9.524E-03
LV5 Major personal injury/illness (requiring hospitalisation)	105	1.00	9.524E-03
LV12 Charged with a serious criminal offence	105	1.00	9.524E-03
LV23 Son or daughter leaving home	105	1.00	9.524E-03
LV22 Having a mortage company request payment of a loan	105	.00	.0000
LV1 Death of a spouse or live-in lover	105	.00	.0000
Valid N (listwise)	105		