

THE UNIVERSITY OF CALGARY  
Stress, Demands, and Ways of Coping:  
A Determination of Gender Differences

by

Wendy E. Johansson

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SUBMITTED TO THE FACULTY OF GRADUATE STUDIES  
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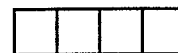
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The undersigned certify that they have read, and recommend to the Faculty of Graduate studies for acceptance, a thesis entitled, "Stress, Demands, and Ways of Coping; A Determination of Gender Differences" submitted by Wendy E. Johansson in partial fulfillment of the requirements for the degree of Master of Science.

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## ABSTRACT

The majority of empirical findings in gender differences in stress and coping support the notion that females experience higher levels of stress compared to males, females experience more interpersonally-oriented demands and engage in more emotion-focused coping compared to males, and males experience more work-related demands and engage in more problem-focused coping compared to females. However, methodological problems may account for many of these differences.

The purpose of this study was to explore the nature of gender differences in stress levels, demands, and ways of coping across time, while addressing some of the methodological problems of earlier studies, particularly linking demand with coping. Results showed that males and females reported similar levels of stress. However, females reported relationship and accommodation demands more frequently than males and males reported other and personal needs demands more frequently than females. Females engaged in more emotion-focused coping than males when demand was not taken into consideration. However, when demand was held constant, there were no significant gender differences found.

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## Chapter 1

### Introduction

There is strong support for the general conviction that social and psychological factors are important in health, illness, and well-being. There is also a growing conviction that the ways people cope with stress has an effect on their psychological, physical, and social well-being (Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986). The prime importance of the processes of appraisal and coping with demands and stress is that they affect adaptational outcomes such as social functioning, morale, and somatic health (Lazarus & Folkman, 1984). Furthermore, it has been observed that the frequency of stress-related disorders in the general population has increased over the past 50 years (Hiebert, 1991). Therefore, it seems that the impact of stress on individuals and society at large is quite high as well as costly in terms of health care. As a result of these factors, there has been a burgeoning interest in research in the area of stress over the past few decades and, more recently, in the area of coping as well.

Current theory and research support a transactional conceptualization of stress (Hiebert 1988; Lazarus & Folkman, 1984). From this perspective stress is viewed as an integrated, multidimensional response, involving at least the physiological, cognitive, and behavioral systems, occurring when individuals perceive or appraise the demands of a situation to exceed their coping resources and thereby

endangering their well-being (Hiebert, 1988; Lazarus & Folkman, 1984). The emphasis of the transactional perspective is on individual perceptions or appraisals of a demand, and the concomitant appraisal of coping sufficiency, rather than on the demand itself.

#### The Problem

Despite the growing interest in coping and the growing conviction that the ways in which people cope with demands affects their psychological, physical, and social well-being, little is known about how coping plays a mediating role in stress and there is little coherence in theory, research, and understanding (Folkman & Lazarus, 1980; Lazarus & Folkman, 1984). With respect to the nature of coping, there are two key controversies in the literature. First is the question of whether individual ways of coping are dispositional or situational in nature (Carver, Scheier, & Weintraub, 1989; Lazarus & Folkman, 1984). Lazarus and Folkman (1984) suggest that findings on this issue are mixed. By and large, past research has tended to focus on one point in time to determine the degree of stability of people's coping repertoires. This approach is more likely to yield results which support a dispositional view of coping traits. Thus, it is uncertain whether people tend to cope in the same way regardless of the situation they encounter (dispositional view) or whether coping attempts vary according to the characteristics encountered (situational view).

Second, and related to the situational versus

dispositional controversy, is the issue of gender differences and ways of coping. There is also a lack of consensus in this area and again the empirical evidence is mixed. Some studies have found significant gender differences (e.g., Allen & Hiebert, 1991; Carver et al., 1989; Folkman & Lazarus, 1980; Stark, Spirito, Williams, & Guevremont, 1989) and some have not (e.g., J. Brown, O'Keefe, Sanders, & Baker, 1986; Folkman & Lazarus, 1985; Hamilton & Fagot, 1988). The apparent coping differences found in some studies may actually reflect the possibility that males and females face different demands, more numerous demands, or a greater variety of demands, and that apparent differences in coping strategies may reflect an adjustment of coping strategies to meet different demands, rather than differences in coping style per se (Folkman & Lazarus, 1980). That is, results indicating gender differences may actually be a function of situational coping with differential demands. It also may be that studies that have not found any significant gender differences may have restricted the measurement of coping to demands that male and female subjects had in common (e.g., academic demands) which could mask the existence of situational gender differences. Thus, it remains uncertain whether males and females tend to cope in different ways by virtue of a preference for a particular coping strategies or exposure to different demands.

In order for counsellors to deal effectively with clients, it would be useful to know if males and females tend

to cope differently with the same demands and if they do cope differently, to understand the nature of those differences. Ultimately, by clarifying the issues of gender differences and situational versus dispositional coping, counsellors and educators will be able to develop more effective programs to teach individuals with deficient coping skills better ways of dealing with the demands they face and the stress they experience.

### The Current Study

The purpose of the current study is to explore the nature of gender differences with respect to stress levels, demands, and ways of coping across time. This is useful and important, given that many of the studies in this area do not examine all three variables. Most studies only look at one or two variables and typically only in isolation.

### Overview

The preceding objective will be addressed in the chapters to follow. Chapter two reviews the relevant research literature related to the current conceptualization of stress and coping as related to gender differences. Chapter three outlines the methodology and procedures used in the study. Chapter four contains the research results followed by chapter five which includes a discussion of the results and addresses the conclusions and implications of the study.



## Chapter 2

### Literature Review

#### Transactional Model

The nature of stress and coping has diverse theoretical and methodological roots. However, the burgeoning research interest in stress has resulted in increased knowledge and empirical evidence that has shown that earlier conceptualizations of stress are inadequate (Hiebert, 1988). Currently, the empirical literature largely supports a transactional model of stress and coping (Lazarus & Folkman, 1984).

#### Stress and Demands

According to the transactional model of stress and coping, the person and the environment are viewed as being in a dynamic, mutually reciprocal, bi-directional relationship (Allen & Hiebert, 1991; Folkman, Lazarus, Gruen, & DeLongis, 1986; Moos, 1984; Parkes, 1986). In fact the transactional view defines stress as a relationship between a person and environment that is appraised by the person as taxing or exceeding his or her resources and as endangering his or her well-being (Lazarus & Folkman, 1984).

This definition of stress is process-oriented and relational. The transactional view of stress distinguishes a demand from a stressor rather than equating the two. It is only when a demand is perceived to exceed coping resources that it becomes a stressor. Therefore, stress does not result from a demand per se but from a perceived imbalance

between a demand and coping resources for handling the demand satisfactorily. In this respect, the emphasis is on people's perceptions of situations and their coping resources (Hiebert, 1988). The cause and consequences of psychological stress can be understood through examining two critical cognitive processes that mediate the person-environment relationship: appraisal and coping (Lazarus & Folkman, 1984).

### Appraisal

In order to understand variations in stress and coping among individuals under comparable conditions, the cognitive processes that mediate the encounter and the reaction, and the factors that affect the nature of this mediation, must be taken into account. Cognitive appraisal has been defined as an evaluative process that determines why and to what extent a particular transaction, or series of transactions, between the person and environment is stressful (Lazarus & Folkman, 1984).

Lazarus and Folkman (1984) have identified three types of cognitive appraisal: primary appraisal, secondary appraisal, and reappraisal. Primary appraisal is an evaluation of the outcome and the effect on well-being of the stressful transaction; it is the determination of what is at stake. Secondary appraisal is an evaluation of what might be done including a consideration of coping options, the likelihood of a particular coping option succeeding (outcome expectancy), and the likelihood of the person being able to apply the coping option effectively (efficacy expectation).

Finally, reappraisal is a changed appraisal on the basis of new information which follows an earlier appraisal of the same encounter.

Primary appraisal results in a judgment of the transaction as irrelevant, benign-positive, or potentially stressful. If a transaction is appraised as potentially stressful, there is a further evaluation of whether the transaction is one of harm/loss, threat, or challenge (Lazarus & Folkman, 1984). An appraisal of harm/loss refers to injury or damage already done and an appraisal of threat refers to a potential for harm or loss. Challenge refers to an opportunity for growth, mastery, or gain (Lazarus & Folkman, 1984).

Cognitive appraisal processes are influenced and shaped by an array of person and situation factors. The primary person factors that influence appraisal are commitments and beliefs. People's commitments express what is important or what has meaning for them. Any encounter that involves a strongly held commitment will be evaluated as significant with respect to well-being to the extent that the expected outcome harms or threatens that commitment (Folkman, 1984).

People's beliefs are personally formed or culturally shared cognitive configurations. They are preexisting notions about reality which serve as a perceptual lens. There are two major categories of beliefs that are particularly relevant to appraisal: beliefs related to personal control and beliefs related to existential concerns.

Beliefs about control and the extent to which people feel confident of their powers of mastery over the environment, may have a substantial influence on whether or not an encounter or transaction is appraised as a threat or a challenge. Existential beliefs are beliefs that enable people to create meaning out of life or damaging experiences and to maintain hope. These types of beliefs may help to sustain coping efforts (Lazarus & Folkman, 1984).

There are many situation factors that interact with person factors to influence appraisal. These may include novelty, predictability, event uncertainty, ambiguity, and temporal factors. The extent to which individuals have not had any previous experience with a situation, that is, the extent to which a situation is novel, affects the appraisal individuals may arrive at. A relatively novel situation may be stressful if there is a previous association with harm, danger, or mastery. Relatively novel situations may also be associated with lack of predictability and uncertainty. Situations which are less predictable are associated with appraisals of harm/loss, threat, or challenge. Having a sense of predictability is associated with having a sense of control. Event uncertainty, which is the likelihood of an event's occurrence or its probability, influences appraisal. Another related situation factor that influences the appraisal process is ambiguity. A situation is ambiguous to the degree that the information necessary for appraisal is unclear or insufficient. The greater the ambiguity, the more

influence person factors have in determining the meaning of the encounter (Folkman, 1984; Lazarus & Folkman, 1984).

The temporal factors of imminence, duration, and uncertainty are situation factors that influence the appraisal process. Imminence refers to the interval of time during which an event is anticipated. The more imminent an event is, the more intense the appraisal may become, particularly if harm, danger, or mastery are anticipated. Closely related to imminence is the factor of duration which is the length of time a stressful event persists. Finally, temporal uncertainty refers to not knowing when an event is going to occur (Lazarus & Folkman, 1984).

### Coping

According to the transactional model, coping is defined as the process through which individuals attempt to manage the demands they face, as well as the emotions the demands may generate. Thus, coping encompasses constantly changing cognitive and behavioral efforts to manage specific demands that are appraised as taxing or exceeding the resources of the person (Lazarus & Folkman, 1984). Coping as a concept is typically equated with adaptational success. This results in a confounding of coping with its outcome. To avoid this confound, this definition of coping includes efforts to manage demands, regardless of outcome. This means that no one coping strategy is potentially inherently more effective than any other (Lazarus & Folkman, 1984).

Despite the ground swell of interest in coping, little

is known about how coping plays a mediating role between demand, stress, and the effect on well-being. A large part of the empirical research in coping has been undertaken with pathological populations or with a focus on unusual or special events and attention has not been given to the ways normal populations cope with the ordinary demanding events of their day-to-day lives (Folkman & Lazarus, 1980; Lazarus & Folkman, 1984).

Recently, there have been several divergent approaches for assessing coping behaviors and strategies (e.g., Billings & Moos, 1984; Carver et al., 1989; Lazarus & Folkman, 1984; McCrae, 1984; Pearlin & Schooler, 1978) which makes synthesis of research difficult (Endler & Parker, 1990). However, one of the more widely recognized distinctions of coping is problem-focused and emotion-focused coping (Lazarus & Folkman, 1984). Problem-focused coping, which is also referred to as direct coping or task coping, encompasses strategies that are directed at managing or altering the demand or situation causing the stress. This would include strategies such as problem-solving, planning, active coping, suppression of competing activities, restraint, or seeking social support for instrumental reasons. Problem-focused coping may also include strategies that are directed inward, such as motivational or cognitive change, shifting level of aspiration, reducing ego involvement, finding alternative channels of gratification, developing new standards of behavior, or learning new skills (Lazarus & Folkman, 1984).

Emotion-focused coping, also referred to as palliative coping, encompasses strategies that are directed at regulating the emotional response to the situation. This would include strategies such as seeking social support for emotional reasons, focusing on and venting of emotions, positive reinterpretation and growth or positive reappraisal, positive self-talk, denial, wishful thinking, acceptance, relaxation, exercise, or turning to religion. Emotion can be regulated either by lessening emotional distress (e.g., avoidance, minimization, distancing, selective attention, positive comparison) or by increasing emotional distress (e.g., self-blame, self-punishment) (Lazarus & Folkman, 1984).

Both problem-focused coping and emotion-focused coping are used to deal with most types of demands (Carver et al., 1989; Folkman & Lazarus, 1980; Folkman, Lazarus, Dunkel-Schetter et al., 1986; Lazarus & Folkman, 1984). The relative proportions of each vary according to how the encounter is appraised (Folkman, 1984). Problem-focused coping tends to predominate when people feel that something constructive can be done and emotion-focused coping tends to predominate when people feel that the stressor is something that must be endured or accepted (Carver et al., 1989; Folkman & Lazarus, 1980; Folkman, Lazarus, Dunkel-Schetter et al., 1986; Lazarus & Folkman, 1984).

Carver et al. (1989) found that subjects who saw their situation as amenable to change reported engaging in more

problem-focused coping strategies such as active coping, planning, suppression of competing activities, and seeking of social support for instrumental reasons. Subjects who saw their situation as something to get used to reported higher levels of emotion-focused coping strategies such as acceptance and denial. The feeling of generally being able to do something is positively associated with positive reinterpretation and growth, active coping and planning and inversely associated with denial, behavioral disengagement, and focusing on and venting of emotions. Similarly, Folkman, Lazarus, Dunkel-Schetter et al. (1986) found that subjects used more problem-focused coping strategies such as accepting more responsibility, confrontive coping, and planful problem-solving, as well as positive reappraisal, in encounters appraised as changeable and more emotion-focused strategies such as distancing and escape-avoidance in encounters appraised as having to be accepted.

Emphasizing the positive is one form of emotion-focused coping that seems to be closely associated with problem-focused coping (Folkman & Lazarus, 1985). The consistency with which positive reappraisal and problem-focused coping appear in combination across studies suggests that positive reappraisal may facilitate problem-focused coping (Folkman, Lazarus, Dunkel-Schetter et al., 1986; Lazarus & Folkman, 1984). Thus, emotion-focused coping may facilitate or impede problem-focused coping. Emphasizing the positive aspects of a stressful encounter may facilitate problem-focused coping



and self-blame and/or wishful thinking may impede problem-focused coping (Folkman & Lazarus, 1985).

'Context', or the nature of the demand, may differentially influence the use of problem-focused and emotion-focused coping (Allen & Hiebert, 1991; Folkman & Lazarus, 1980). The work context may be associated with higher levels of problem-focused forms of coping and health related demands may be associated with higher levels of emotion-focused forms of coping. The family context has not been found to have a clear impact on the use of either problem or emotion-focused coping which may be due to the heterogeneity of family episodes (Folkman & Lazarus, 1980). Similarly, Vitaliano et al. (1990) found that coping differs across different types of demands and is similar in samples within the same type of demand.

According to the transactional perspective, the level of stress people feel when coping with demands affects the types of coping strategies used. At higher levels of perceived stress, emotion-focused forms of coping begin to predominate (Lazarus & Folkman, 1984). Also, greater distress has been related to greater reported effectiveness of avoidance, an emotion-focused strategy. Conversely, the perceived effectiveness of problem-focused coping tends to be greater when stress levels are lower (Lazarus & Folkman, 1984).

As well, certain factors that influence the appraisals that people make affects the types of coping strategies people use. The greater the stake, the higher the potential

for emotion in the encounter (Folkman & Lazarus, 1985) and the greater the threat, the more primitive, desperate, or regressive emotion-focused forms of coping tend to be and the more limited the range of problem-focused forms of coping used. It seems that excessive threat tends to interfere with cognitive functioning and therefore cognitive types of coping. Carver et al. (1989) found that the higher the rated importance of the event, which reflects the commitments individuals hold, the more subjects reported focusing on and venting emotions, engaging in denial, and seeking social support for both emotional and instrumental reasons.

Novelty, a situation factor that influences appraisal, has been related to the use of coping strategies. Frequent events that are not reported as stressful are typically handled with problem-solving, and on the other hand, events reported with low to medium frequency are reported as the most stressful and are usually approached with a low proportion of problem-solving behavior (Hamilton & Fagot, 1988).

#### Situational and Dispositional Influences in Coping

The role that individual differences play in the coping process is somewhat controversial. There are two main approaches that appear in the literature: the dispositional view and the situational view. According to the dispositional view, there are stable coping styles or dispositions that people bring with them to the stressful situations they face. That is, people have a preferred set

of coping strategies that remain relatively fixed across time and circumstances (Carver et al., 1989). On the other hand, some researchers maintain a situational view of coping which emphasizes that coping shifts in nature as a stressful encounter changes (Folkman & Lazarus, 1985). With this view, variability in coping is at least partially a function of people's cognitive appraisal in specific stressful encounters (Folkman, Lazarus, Dunkel-Schetter et al., 1986), a function of coping resources, which are primarily a property of the person, and a function of coping constraints (Lazarus & Folkman, 1984).

Dispositional view. The dispositional model attempts to link coping strategies with personality traits based on the assumption that preferred ways of coping derive from more traditional personality dimensions. For example, some researchers have attempted to link coping strategies with traits such as self-esteem, hardiness, Type A behavior pattern, trait anxiety, neuroticism, extroversion, and optimism. In contrast, the situational model attempts to observe how coping changes as a result of changes in time, person, and situation factors.

On the dispositional side, Carver et al. (1989) found that self-esteem and hardiness were positively associated with positive reinterpretation and growth, active coping and planning and inversely associated with denial and behavioral disengagement. Conversely, they found that trait anxiety was inversely associated with active coping and positively

correlated with denial, behavioral disengagement and focusing on and venting of emotions.

It has also been found that Type A behavior is positively associated with active coping and planning and inversely associated with behavioral disengagement (Carver et al., 1989). However, Endler and Parker (1990) found that Type A was moderately positively correlated with emotion-focused coping and not correlated with problem-focused coping.

McCrae & Costa (1986) found that neuroticism was associated with more use of hostile reaction, escapist fantasy, self-blame, sedation, withdrawal, wishful thinking, passivity, and indecisiveness and extroversion was correlated with rational action, positive thinking, substitution, and restraint. As well, Endler and Parker (1990) found that neuroticism was strongly related to emotion-focused coping and extroversion was not related to emotion-focused coping or avoidance.

Some research has found that the trait of optimism affects the use of coping strategies. Optimism has been associated with active coping, more elaborate and complex strategies, and seeking social support and inversely correlated with focusing on emotions, emotional expression, and with disengagement from the goal (Scheier & Carver, 1985). Similarly, optimism has more recently been positively associated with positive reinterpretation and growth, active coping and planning and negatively associated with denial and

behavioral disengagement (Carver et al., 1989). In sum, although several researchers have correlated personality traits with the use of coping strategies, there is still some disparity according to which trait is associated with which strategy.

Situational view. On the situational side, many researchers have tried to examine coping as a process that changes as other factors change such as demand or time. Folkman and Lazarus (1980) measured demands and coping with subjects interviewed seven times at four week intervals and concluded that context differentially influences the use of coping strategies. Folkman, Lazarus, Gruen et al. (1986) found that coping variables shifted over time reflecting their sensitivity to conditions in the environment. Folkman and Lazarus (1985) measured coping at three stages of a midterm examination and found that as the situation changed and the encounter unfolded, subjects changed their ways of coping. Similarly, Folkman, Lazarus, Dunkel-Schetter et al. (1986) interviewed subjects once per month over 6 months and found that appraisal and coping changed depending on the demands subjects encountered. Vitaliano et al. (1990) examined the degree to which individuals with similar types of problems coped similarly using four subject groups experiencing similar demands. They found that individuals within similar demand categories displayed similar coping patterns whereas individuals in different demand categories displayed different coping patterns. Other researchers have

also found similar results (e.g., Hamilton & Fagot, 1988; Parkes, 1986).

It should be recognized that there is both stability and change with respect to coping but the majority of research has focused on the dispositional aspects of coping. Typically, coping traits and styles have dominated coping measurement. However, this approach to the assessment of coping as a trait or style has had modest predictive value with respect to actual coping processes. Unidimensional traits tend to underestimate the complexity and variability of actual coping efforts and do not adequately reflect the multidimensional quality of coping processes in real situations (Lazarus & Folkman, 1984). Process measures in a specific context may be better predictors. Test-retest reliabilities and correlations of some coping instruments suggest that self-reports of coping tendencies are relatively stable although it appears that they are not as stable as personality traits (Carver et al., 1989). However, the observed stability in coping may be a function of stable demands rather than coping predispositions. That is, if the situations measured do not change, as in a single measurement design, there would not be any change in coping methods to observe but the coping could still be situational in nature. Overall, coping patterns are not greatly determined by person factors nor are they determined entirely by situation factors (Folkman & Lazarus, 1980); coping responses are a result of a confluence of person, environment, and situation factors

(Parkes, 1986). Accordingly, the transactional view asserts that coping is best understood as being determined by the relationship between the person and the environment rather than by independent person or situation factors (Folkman & Lazarus, 1980).

Given that coping responses are a result of a confluence of person, environment, and situation factors, problem-focused coping strategies such as confrontive coping, seeking instrumental social support, and planful problem-solving may be strongly influenced by the situational context. Emotion-focused forms of coping, such as positive reappraisal, may be influenced more by personality factors than other coping strategies (Folkman, Lazarus, Gruen et al., 1986).

#### Implications for Methodology

The transactional view of stress and coping has some implications for assessment and methodology. First, to allow the assessment of coping as a situational phenomenon, multiple measures, or a longitudinal design, is necessary to observe shifts in demands and corresponding shifts in coping over time (Martocchio & O'Leary, 1989).

Second, to allow the possibility that coping may be context specific, assessments of coping should only compare the coping processes of individuals that are facing the same or similar demands. Research on stress and coping has tended to focus on individual differences in coping without regard to variations in demand or individual context. In fact, many studies compare ways of coping amongst individuals facing

different demands. However, it is necessary to compare ways of coping with the same demand to observe valid differences. Otherwise, when examining differences, it is difficult to determine whether it is the nature of the stressor or the characteristics of the individual that are responsible for the observed differences in coping. Individual differences in coping with a laboratory constructed stressor can be attributed to person variables because the stressor is common to all subjects. However, individual differences in coping with varying demands will reflect person variables as well as the different types and number of demands experienced by the subjects (Hovanitz & Kozora, 1989).

#### Gender Differences in Stress and Coping

The empirical evidence supporting the existence of gender differences in stress and coping is mixed. Many researchers have found gender differences although several have not. Notably, however, the evidence is weighted in favor of those who have found significant gender differences. Still, the differences that have been found may be due to the nature of the coping measures used and/or the types of situational stressors examined (Miller & Kirsch, 1987; Parkes, 1990). Some of the empirical support that indicates women cope differently than men has typically compared men and women in different contexts (e.g., Billings & Moos, 1984; Pearlin & Schooler, 1978; Stone & Neale, 1984). Therefore, the apparent differences found may reflect differences in context rather than gender differences in stress and coping.



### Stress Levels

With respect to gender differences and stress levels, the most common finding is that females report higher levels of stress compared to males (R. Brown, et al., 1986; Davidson & Cooper, 1986; Greenglass, 1988; Hamilton & Fagot, 1988; Parks & Pilisuk, 1991; Scott & Alwin, 1989; Thoreson, Kardash, Leuthold, & Morrow, 1990). However, some studies have found that males and females do not differ in their reported stress levels (Hovanitz & Kozora, 1989; Leana & Feldman, 1991; Martocchio & O'Leary, 1989; Miller, 1990), a few have found that males experience higher levels (Greenglass, Burke, & Ondrack, 1990; Long & Gessaroli, 1989), and a few have found that males are higher than females or females are higher than males depending on the context (Scott & Spooner, 1989; Zuckerman, 1989). It is worth noting, however, that due to the self-report nature of the data, these studies cannot account for the possibility that females, compared to males, may have a greater willingness to self-disclose and as a result female stress levels may appear higher when they actually are not.

Of the studies that compared males and females in similar contexts, several of them found that females reported more stress compared to their male counterparts. These findings were reported for college students (Hamilton & Fagot, 1988), college faculty (R. Brown, et al., 1986), adult caregivers of parents with Alzheimer's disease (Parks &

Pilisuk, 1991), parents, (Scott & Alwin, 1989) and managers (Davidson & Cooper, 1986; Greenglass, 1988; Scott and Spooner, 1989). Conversely, in a meta-analysis, Martocchio and O'Leary (1989) did not find any differences in stress levels between men and women in a work setting. Leana and Feldman (1991) also compared males and females in the same or similar job classifications, facing similar demands and did not find any differences.

The evidence to support the contention that males experience higher stress levels is not very strong. Long and Gessaroli (1989) found that male teachers reported more stress than female teachers. However, they suggested that this may be due to the incongruence of sex-role expectations and occupational role. Greenglass et al. (1990) also found that men reported higher work stress levels. However, although they compared males and females employed by a school board, position was not controlled for, and there were more men in their sample in higher level positions compared to women.

Other findings suggest that gender differences in stress level may be context specific. Zuckerman (1989) compared male and female college students and found that males and females reported similar stress levels although females reported significantly greater stress in family relationships as well as concern about their mental health. Similarly, Scott and Spooner (1989) compared male and female managers and found that females rated home and personal life issues as

more stressful and males reported work-related issues as more stressful. However, they did not distinguish between males whose wives worked outside the home or males whose wives did not work outside the home.

### Demands

The most common finding with respect to gender differences in demand is that males experience more demands related to work or occupation (Folkman & Lazarus, 1980; Stark et al., 1989) and females experience more demands related to interpersonal relationships (Anderson & Leslie, 1991; Folkman & Lazarus, 1980; Long, 1990; Stark et al., 1989). Folkman and Lazarus (1980) compared middle-aged males and females over a 1 year period and found that males experienced more work related demands and that females experienced more demands related to family and health. However, they did not control for family and employment demographic variables. Similarly, Stark et al. (1989) compared male and female high school students and found that males experienced more school demands and females experienced more interpersonally oriented demands. They found that males tended to rank their demands in the order of school, parents, friends, and girlfriend whereas, females tended to rank their demands in the order of parents, boyfriend, friends, and school.

In research investigations comparing males and females in similar contexts, the finding that males tend to report more occupational related demands is less common. Long (1990) compared male and female managers, while controlling

managerial level and type, and found that females experienced more interpersonally related demands but did not find any significant difference with respect to work related demands. Hamilton and Fagot (1988) compared male and female undergraduate students and found that females reported the same demands as males as well as demands specific only to females (e.g., dissatisfaction with weight).

Davidson and Cooper (1986) compared male and female managers from various levels of management and types of industry and did not find that males experienced more work related demands or that females experienced more interpersonally related demands. However, they did find that females experienced more numerous demands. They also found, as did Hamilton and Fagot (1988), that females experienced demands that males did not (e.g., discriminatory-based pressures in the workplace).

Anderson and Leslie (1991) reported a somewhat contradictory finding. They compared males and females within couples of different statuses (e.g., dual career, dual job, mixed, and single earner) and found that although females experienced more family demands, females also experienced more employment demands. They posited that this may be due to role overload for women.

Finally, West and Simons (1983) compared adults over 65 years of age and did not find any significant differences with respect to demands. However, this investigation used a life events inventory which may be a less valid measurement

approach than a self-report measure of demands (Lazarus & Folkman, 1984).

With respect to stress levels and demands, only two of the previously reviewed empirical studies measured both of these variables. Both Davidson and Cooper (1986) and Hamilton and Fagot (1988) found that females experienced higher levels of stress compared to their male counterparts. Davidson and Cooper (1986) found that females experienced more numerous demands some of which were female-specific. In this case, the higher stress levels reported by females makes sense theoretically. By contrast, Hamilton and Fagot (1988) did not find any differences in the frequencies of demands reported by males and females despite their finding that females reported demands not reported by males.

To summarize, although the research is mixed, there is substantial support for the contention that females tend to report higher levels of stress compared to males, even when context is accounted for. Despite the fact that some studies have found that males tend to report more demands related to work and females tend to report more demands related to interpersonal issues, when context is accounted for, the differences in work related demands is less marked and there is some support for the contention that females report more numerous as well as female specific demands. However, the research in this area is not prolific. In many studies that examine the nature of stress, coping, and gender differences, demands are not measured and, if measured, are not tested for

gender differences.

### Coping

There is considerable agreement that females tend to use more emotion-focused coping compared to males (Astor-Dubin & Hammen, 1984; Billings & Moos, 1984; Carver et al., 1989; Davidson & Cooper, 1986; Endler & Parker, 1990; Greenglass et al., 1990; Houtman, 1990; Hovanitz & Kozora, 1989; Krause & Keith, 1989; Labouvie-Vief, Hakim-Larson, & Hobart, 1987; Leana & Feldman, 1991; Patterson & McCubbin, 1987; Rohde, Lewinsohn, Tilson, & Seeley, 1990; Stark et al., 1989; Wertlieb, Weigel, & Feldstein, 1987). In each of these studies, the primary form of emotion-focused coping that females tend to use more frequently is seeking social support. However, several studies have not found any differences between males and females with respect to emotion-focused coping and seeking social support (Anderson & Leslie, 1991; J. Brown, et al., 1986; Folkman and Lazarus, 1980; Folkman, Lazarus, Gruen et al., 1986; Hamilton & Fagot, 1988; Littlewood, Cramer, Hoekstra, & Humphrey, 1991; Patterson & McCubbin, 1987).

Additionally, some studies have found that females tend to use other forms of emotion-focused coping such as avoidance (Endler & Parker, 1990; Greenglass, 1988; Labouvie-Vief et al., 1987; Long, 1990; Parks & Pilisuk, 1991), tendencies to focus on and vent emotions (Carver et al., 1989), and positive reappraisal (Long, 1990) more frequently than males. Some studies, however, have not found any gender

differences with respect to avoidance (Carver et al., 1989; Hovanitz & Kozora, 1989; Patterson & McCubbin, 1987), focusing on and venting emotions (Patterson & McCubbin, 1987), or positive reappraisal (Carver et al., 1989; Parks & Pilisuk, 1991). Conversely, Rohde et al. (1990) found that males used more escapism and Stark et al. (1989) found that males used more wishful thinking both of which may be considered emotion-focused coping strategies.

Although it has been postulated that males tend to use more problem-focused forms of coping compared to females, this finding is only moderately supported by empirical studies (Folkman & Lazarus, 1980; Leana & Feldman, 1991; Parkes, 1990; Stone & Neale, 1984; Viney & Westbrook, 1982). In fact, the evidence to the contrary is more substantial; many researchers have not found any differences in the use of problem-focused coping between males and females (Anderson & Leslie, 1991; Billings & Moos, 1984; J. Brown, et al., 1986; Davidson & Cooper, 1986; Endler & Parker, 1990; Folkman, Lazarus, Gruen et al., 1986; Hamilton & Fagot, 1988; Hovanitz & Kozora, 1989; Littlewood et al., 1991; Long, 1990; Parkes, 1990; Parks & Pilisuk, 1991).

In some cases it has been found that females tend to use more problem-focused coping compared to males. Some studies found that females used more information-seeking which may be considered a problem-focused coping strategy (Carver et al., 1989; Wertlieb et al., 1987). Patterson and McCubbin (1987) found that females scored significantly higher on family

problem-solving than males. Additionally, Greenglass (1988) found that females scored higher on the use of instrumental coping which may be considered a problem-focused coping strategy.

Another finding is that males tend to use more alcohol and drugs as a way of coping compared to females (Carver et al., 1989; Davidson & Cooper, 1986). Patterson and McCubbin (1987) also found that males tend to use more humor compared to females.

Some investigations that have not found any differences between males and females in the use of problem-focused coping but have found that females tend to use more emotion-focused forms of coping have concluded that females tend to have a broader repertoire of coping skills and strategies (J. Brown, et al., 1986; Patterson & McCubbin, 1987; Scott & Spooner, 1989).

Only two of the preceding studies have measured all three variables of stress levels, demands, and coping. As previously discussed both Davidson and Cooper (1986) and Hamilton and Fagot (1988) found that females experienced higher stress levels. Davidson and Cooper (1986) found that females reported more numerous demands and they found gender differences with respect to coping. They found that females tended to seek more social support and that males tended to use more alcohol. By contrast, Hamilton and Fagot (1988) found that females experienced more stress but did not differ in frequencies of demand compared to males and they did not



find any differences in coping, either problem-focused or emotion-focused. Both of these studies suggest that differences in coping may be related to differences in demands.

Aside from these two studies, only four of the preceding studies measured both demands and coping. The findings of these studies also suggest that the apparent gender differences in coping may be related to differences in demands. Folkman and Lazarus, (1980) found differences in demand and differences in coping. Males reported more work-related demands and more problem-focused coping. Surprisingly, although females reported more demands related to family and health, there was no difference found with respect to emotion-focused coping.

Similarly, Stark et al. (1989) also found differences in both demands and coping strategies. Males reported more school-related demands but males and females did not differ with respect to problem-focused coping. Females reported more interpersonally oriented demands and they also reported more use of seeking social support. Also, males used more wishful thinking.

Long (1990) also found differences in demand and differences in coping. Females reported more interpersonally oriented demands and they also reported more use of avoidance coping and problem reappraisal. Males and females did not differ with respect to work-related demands or problem-focused coping.

Anderson and Leslie (1991) found that females reported more family and employment demands. However, coping was only measured with respect to family demands. Despite the fact that females experienced more numerous demands in this area, they did not differ from males with respect to the use of coping strategies. These studies also suggest that differences in coping may be related to differences in demand rather than inherent differences due to gender.

All of the studies that measured demands and coping strategies and found differences, examined the differences in coping within the same demand to prevent confounding gender differences in sources of stress with gender differences in coping. This makes the results of these studies pertinent to examining the situational versus dispositional issue more rigorous.

Four other studies that measured coping also examined differences within the same demand even though they did not examine gender differences in demands. These studies assumed a situational approach, and compared subjects within similar contexts. Leana and Feldman (1991) compared males and females in similar contexts by controlling job classification. They found that females tended to seek more social support and males tended to use more problem-focused coping. J. Brown, et al. (1986) compared males and females aged 8 to 18 and found that girls tended to use more cognitive coping, focusing on negative affect, and relaxation compared to boys. Greenglass (1988) compared male and female

managers within social services matched on demographic variables and found that females used more instrumental coping, wishful thinking, and existential coping. Parks and Pilisuk (1991) compared male and female adult children caregivers of parents with Alzheimer's disease and found that females used more fantasy and withdrawal but did not differ from males with respect to problem-focused coping or positive reappraisal. Although these results may be more valid with respect to avoiding confounding sources of stress with differences in coping, they are difficult to evaluate whether the differences in coping are related to differences in demand given that demands were measured but not tested for gender differences.

#### Summary

There is fairly strong support for the contention that females tend to report higher stress levels compared to males. However, some studies have found otherwise. With respect to demands, it has been found that males tend to report more work-related demands and females tend to report more interpersonally-related demands. However, when context is controlled for, the majority of studies do not find gender differences in work-related demands but do tend to find that females report more interpersonally-related demands.

There is substantial agreement that females, compared to males, tend to use more emotion-focused coping, particularly seeking social support, although there is some evidence to the contrary. There is less support for the contention that

males use more problem-focused compared to females. In fact, many studies have not found such differences and some have even found that females use more problem-focused coping. Although very little research has studied gender differences in demand, the evidence that exists suggests that males and females do tend to report different demands and that females tend to report more numerous demands. Interestingly, very few studies have measured both demands and coping and even fewer have measured demands, coping, and stress levels. Therefore, it is difficult to evaluate whether or not the reported gender differences in coping are actually due to gender or really due to differences in either demands or stress levels. Given the preceding, it would be useful to examine gender differences in stress levels, demands, and coping over time in order to evaluate whether observed differences in coping are due to gender or to differences in stress levels and demands.

#### Research Questions

Given the preceding discussion, the following questions guided the current investigation.

1. What differences in stress levels exist between males and females and how do they fluctuate over time?
2. How do the nature of demands experienced by males and females differ over time? Do males experience more work-related demands while females experience more interpersonally-oriented demands as gender role stereotypes would suggest?

3. In what ways do males and females cope differently? How stable are these differences across time? Do males tend to use more forms of problem-focused coping and do females tend to use more forms of emotion-focused coping?

## Chapter 3

### Method

The study was a 2 (gender: male, female) x 4 (time: September, November, February, April) factorial design repeated on the time factor. The dependent variables were demands, stress level, and coping strategies.

### Sample

Subjects were student volunteers from various programs of a provincial technical institute in a medium sized Western Canadian city. The programs included Business Administration, Journalism Arts, Architectural Technology, Computer Technology, and Chemical Technology. These programs were selected because they met a number of inclusion criteria: 2 years in length, comprised of students with grade 12 academic requirements, comprised of both female and male students, and scheduled on a semester or quarterly basis. Students from various programs were approached at the beginning of the academic year and asked to participate in the study via signing a consent form (see Appendix A). Of the 560 signed consent forms returned, 180 were selected for participation in the study via a random sampling procedure stratified on the bases of age and gender.

Of the 180 questionnaire packages distributed, 152 (84.4%) were returned at time one: 70 males and 82 females. The males ranged in age from 18 to 46 with a mean age of 23.9. The females ranged in age from 18 to 48 with a mean

age of 24.0. For males and females respectively, 70.0% and 60.5% were single; 12.9% and 16.0% were cohabiting; 14.3% and 17.3% were married; and 2.9% and 6.2% were separated or divorced. Respectively for males and females, 87.1% and 81.5% did not have any children; 4.3% and 8.6% had one child; 2.9% and 6.2% had two children; and 5.7% and 3.7% had three or more children. Forty seven percent of the males and 37.0% of the females lived with their parents or other relatives; 27.1% and 32.0% lived with their spouse or partner; 14.3% and 17.3% lived with a roommate; and 11.4% and 13.6% lived alone. For males and females, 11.4% and 3.7% were employed 20 to 30 hours per week; 24.3% and 27.2% were employed 10 to 20 hours per week; 12.9% and 11.1% were employed one to 10 hours per week; and 51.4% and 58.0% were not employed part-time. With respect to education, 7.1% of the males compared to 13.4% of the females had completed post secondary diplomas or degrees; 42.9% and 32.9% had some post secondary education; 42.9% and 48.8% had a high school diploma; and 7.1% and 4.9% had less than grade twelve.

At time two, 121 (79.6%) of the 152 questionnaires distributed were returned. Of the 121 questionnaires distributed at time three, 110 (90.9%) were returned. Of the 110 questionnaires distributed at time four, 94 (85.5%) were returned. At the completion of data collection there were complete data sets for 94 subjects, 51 females and 43 males, yielding an overall response rate of 52.2%. The males ranged in age from 18 to 46 with a mean age of 24.9. The females

Table 1Sample Composition by Gender, Age, and Time

Age	Time 1		Time 2		Time 3		Time 4	
	M	F	M	F	M	F	M	F
18 - 19	25	24	19	18	14	17	12	16
20 - 24	18	29	16	24	12	19	12	18
25 +	27	29	22	25	20	19	19	17
TOTAL	70	82	57	67	46	55	43	51

ranged in age from 18 to 39 with a mean age of 23.6. For males and females respectively, 65.1% and 66.7% were single; 16.3% and 11.8% were cohabiting; 16.3% and 17.6% were married; and 2.3% and 3.9% were separated or divorced. For males and females, 83.7% and 84.3% did not have any children; 4.7% and 3.9% had one child; 4.7% and 5.9% had two children; and 7.0% and 5.9% had three or more children. Forty percent of the males and 37.2% of the females lived with their parents or other relatives; 30.2% and 29.4% lived with their spouse or partner; 11.6% and 17.6% lived with a roommate; and 18.6% and 15.7% lived alone. With respect to employment 7.0% of the males and 3.9% of the females were employed 20 to 30 hours per week; 20.9% and 31.4% were employed 10 to 20 hours per week; 16.3% and 11.8% were employed one to 10 hours per week; and 55.8% and 52.9% were not employed part-time. Respectively for males and females, 9.3% and 9.8% had completed post secondary diplomas or degrees; 48.8% and 35.3%



had some post secondary education; 32.6% and 51.0% had a high school diploma; and 9.3% and 3.9% had less than grade twelve.

The samples at time one and time four were compared using t-tests with respect to the demographic variables of gender, age, relationship status, children, living arrangements, hours employed, previous education, and upgrading. The group at time one did not differ significantly from the group remaining at time four.

#### Instruments and Measures

The data for the present study were collected as part of a larger project investigating the interaction between age, gender, and time with respect to stress and coping. Two instruments were used at each of the four measurement points in time: the Inventory of Student Demands (ISD) and the COPE (Carver et al., 1989). This study focused on three dependent measures: general stress level, demands, and coping.

#### The ISD

The ISD was specifically constructed for the purposes of this research project based on other stress and coping questionnaires and the transactional theory of stress and coping (see Appendix B). To test this instrument a pilot study was undertaken with 16 subjects 3 months prior to the main study. The ISD consisted of a series of demographic, open-ended, and Likert-type questions. At the first measurement point only, subjects were asked to indicate their gender, age, marital status, number of children, living arrangements, hours employed part-time, as well as education

background and experience since leaving high school. Subjects were then asked to list their top five demands, rate the level of stress they experienced for each demand, and then complete the remainder of the questionnaire with respect to their greatest demand. The open-ended questions were (a) what it was about the situation that they found demanding, (b) what the consequences would be if the demand was not resolved (c) how they tried to handle the demand, (d) the reasons why they tried to handle the demand that way (e) the criteria they used to gauge the success of their coping attempts and (f) what result they would like from the situation. The Likert-type questions were (a) a rating of general stress level, (b) the degree of personal control they felt over the demand, (c) the effectiveness of their coping attempts, and (d) their confidence in their ability to attain the result using their chosen way of coping.

At the subsequent three measurement points of the ISD, subjects were asked to list their top five demands and elaborate on their top demand according to the same items as the first measurement time. Then the top demand from the previous time(s) was/were listed for them and, if it was different from their current top demand, they were asked to elaborate on the status of that demand according to the same items as well as why that situation was no longer the most demanding one they were facing.

The variables of interest from the ISD for the purposes of this investigation were demands and general stress level.

Demands were obtained by subjects listing their own individual top five demands. General stress level was obtained by subjects rating this variable on a six-point Likert scale from zero to five. Zero indicated 'no stress' and five indicated 'the most stress you ever feel'.

#### The COPE

The COPE (Carver, et al. 1989) is comprised of 60 items which yield 15 coping subscales: Active Coping, Planning, Seeking Instrumental Social Support, Seeking Emotional Social Support, Suppression of Competing Activities, Religion, Positive Reinterpretation and Growth, Restraint Coping, Acceptance, Focus on and Venting of Emotions, Denial, Mental Disengagement, Behavioral Disengagement, Alcohol/Drug Use, and Humor. Each item is rated on a scale from 1, "not used at all", to 4, "used a lot" and subjects were instructed to rate each item according to the top demand they listed on the ISD resulting in a situational measure of coping. Each scale is computed as an unweighted sum of responses to the four items that make up that scale yielding a score ranging from 4 to 16.

The COPE was correlated with several personality instruments to test the convergent and discriminant validity. The pattern of associations that emerged provided useful evidence of both. Additionally, the COPE has theoretical and empirical validity. Carver, et al. (1989) computed Cronbach's alpha reliability coefficients for each subscale which ranged from .62 to .92 with the exception of mental

disengagement which had an alpha of .45. This scale differs from the others in being more of a multiple-act criterion. Thus, the lower reliability is not entirely unexpected.

#### Procedure

Once the sample was selected for the main study at the beginning of the academic year, questionnaire packages were hand delivered to students in class on four separate occasions: September (Time 1), November (Time 2), February (Time 3), and April (Time 4). The subjects returned the questionnaires via campus mail or a drop-off box in the Student Counselling Center. Students who did not return their questionnaires within 1 week were given a telephone reminder.

For the open-ended questions, a content analysis was conducted on ISD responses to develop a classification system (see Appendix C) representative of subject responses (emic categories) yet consistent with the literature (etic categories). A method of constant comparison (Blase, 1986; Washburn, Hiebert, & Phillips, 1990) was then used to code individual responses, with interrater reliability across three trained raters reaching .90 or higher for all response categories. The raters coded individual questionnaires together until they obtained Cohen's Kappa of .90 for five questionnaires in a sequence. Then half the questionnaires were coded independently by the three raters. At that point, the raters completed a midpoint check of interrater reliability by coding five individual questionnaires together

to ensure that Cohen's Kappa was still greater than .90. Once the .90 standard was achieved, the raters coded the remaining questionnaires independently.

## Chapter 4

### Results

The purpose of this study was to explore the nature of gender differences over time with respect to stress levels, demands, and coping. Three sets of analyses were conducted. First, analysis of variance for repeated measures (ANOVAR) was used to determine the effects of gender and time with respect to general stress levels. Second, chi-square analyses were used to determine if there were significant gender differences in the types of demands reported. Finally, multivariate analysis of variance for repeated measures (MANOVAR) was used to determine the effects of gender and time with respect to the coping subscales.

#### Stress Levels

An examination of stress levels across time (see Table 2) shows that at time one, the majority of both males and females rated their overall stress level in the moderate range. However, at times two and three, the majority of both genders rated their overall stress levels in the high range. At time four, more males rated in the moderate range but more females rated in the high range. Only 80 subjects were included in the ANOVAR because this analysis requires complete stress level data for all subjects at all time points. The means and standard deviations of the general stress levels are reported in Table 3. Note, the number of subjects reported in Table 2 is different from Table 3. Table 2 includes all of the subjects who filled out

Table 2Frequencies of General Stress Levels by Gender and Time

General Stress Level Rating	Time 1		Time 2		Time 3		Time 4	
	M	F	M	F	M	F	M	F
0	1	-	1	-	1	-	-	1
1	9	6	3	5	6	5	4	-
2	10	8	7	5	6	4	8	4
3	11	27	9	15	5	15	12	8
4	6	7	12	13	17	12	9	19
5	6	3	8	2	7	6	7	7
Total	43	44	40	40	42	42	40	39
Mean (Std Dev)	2.70 (1.39)	2.84 (1.08)	3.30 (1.32)	3.05 (1.09)	3.24 (1.41)	3.24 (1.19)	3.18 (1.24)	3.67 (1.06)

questionnaires at all four times. Table 3 includes only those subjects who had complete stress level data from time one to time four. The results of the ANOVAR are reported below. There was a significant main effect for time,  $F(3,76)=4.89$ ,  $p<.01$ . Also, there was a significant interaction effect between gender and

Table 3Means and Standard Deviations of General Stress Levels by Gender and Time

	n	Time 1	Time 2	Time 3	Time 4
Males	38	2.74(1.45)	3.34(1.34)	3.24(1.42)	3.26(1.20)
Females	42	2.95(1.25)	3.00(1.06)	3.14(1.22)	3.67(1.12)
Total	80	2.85(1.34)	3.16(1.21)	3.19(1.31)	3.48(1.17)

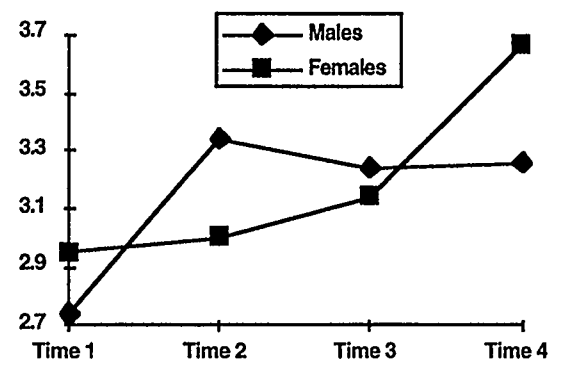


Figure 1. Mean Stress Levels by Gender and Time

time,  $F(3,76)=3.02$ ,  $p<.05$  (see Figure 1). With respect to the main effect for time, post hoc Scheffe tests indicated that the mean stress levels at time one were significantly lower than the mean stress levels at time three  $F(1,78)=4.20$ ,  $p<.01$  and time four  $F(1,78)=14.43$ ,  $p<.01$ . With respect to the interaction effect between gender and time, post hoc Scheffe tests indicated that males reported significantly lower stress levels at time one compared to time two  $F(1,78)=6.22$ ,  $p<.05$ , three  $F(1,78)=4.32$ ,  $p<.05$ , and four  $F(1,78)=4.67$ ,  $p<.05$ . Females reported significantly higher stress levels at time four compared to time one  $F(1,78)=9.89$ ,  $p<.05$ , two  $F(1,78)=8.57$ ,  $p<.05$ , and three  $F(1,78)=5.36$ ,  $p<.05$ . Also, females reported significantly higher stress levels at time four than males reported at time one  $F(1,78)=15.70$ ,  $p<.05$  (see Figure 1). The main effect for gender was not significant.

#### Demands

To explore gender differences with respect to demands,



the frequency of responses in the various demand categories from the ISD, were compiled for males and females from time one to time four (see Table 4). In most cases, academic demands were listed most frequently by both genders. As well, relationship, family, financial, and employment demands were listed quite frequently by both males and females.

As part of the ISD, subjects were asked to report up to five demands they were currently facing. Comparisons were

Table 4

Frequencies of Demands by Gender and Time

Demand n	Time 1		Time 2		Time 3		Time 4		Total Overall	
	M	F	M	F	M	F	M	F	M	F
	70	82	57	67	46	55	43	51	216	255
Academic	78	83	67	71	53	57	50	61	248	272
Relationships	35	62	23	44	14	36	15	27	87	169
Family	34	46	24	34	21	31	20	25	99	136
Finances	34	34	32	39	27	26	17	21	110	120
Employment	25	29	15	24	17	22	16	27	73	102
Personal Needs	24	20	18	15	15	8	11	4	68	47
Accommodation	7	14	5	11	1	7	3	5	16	37
Other	16	7	7	6	8	4	3	1	34	18
Health	6	9	8	6	5	3	7	9	27	27
Time Management	6	4	7	5	5	6	3	3	21	18
Worrying	4	5	3	4	2	4	2	3	11	16
TOTAL	269	314	209	259	168	204	148	186	794	963

\* Note: The decreasing number of demands from time one to time four is a result of decreasing numbers of subjects.

made between males and females using all the demands listed by every subject. Chi-square analyses were used to investigate gender differences in demands. For each analysis, a 2x2 table was constructed contrasting males and females with respect to the demand under investigation and all other demands reported. For example, the first analysis compared the number of male and female reports of academic versus nonacademic demands, and so on. These analyses were conducted at each of the four times (see Table 4). Females reported significantly more relationship demands compared to males at time one ( $\chi^2(1,583)=4.74, p<.05$ ) and time three ( $\chi^2(1,n=372)=6.87, p<.01$ ), but not at time two or time four. There were no significant differences between males and females with respect to academic, family, financial, employment, or personal needs demands at any of the four times.

The remaining demand categories, accommodation, other, health, time management, and worrying, were not reported with sufficient frequency to permit analyses. However, it was of interest to determine the frequency of the various demand categories irrespective of the time they were reported. To do this, each demand category was collapsed over time to arrive at one total for each category (see Table 4). This produced a few significant differences. Females, compared to males, reported proportionately more relationship demands ( $\chi^2(1, n=1757)=15.19, p<.001$ ) and accommodation demands ( $\chi^2(1, n=1757)=4.97, p<.05$ ) more frequently. Males, compared

to females, reported personal needs demands ( $\chi^2(1, n=1757)=9.65, p<.01$ ) and other demands ( $\chi^2(1, n=1757)=8.82, p<.01$ ) proportionately more frequently. Overall, there were no significant gender differences with respect to academic, family, financial, employment, health, time management, or worrying demands.

Further gender comparisons were made to investigate whether males differed from females with respect to reporting academics as their number one demand. Demand categories other than academic demands could not be compared due to the low frequency with which they were reported as number one, even when they were collapsed over time (see Table 5). By far, academic demands were most frequently listed as the top ranked number one demand. There were no significant differences from time one to time four or overall between males and females with respect to listing academics as the number one demand. Financial demands could only be compared overall but there were no significant differences between males and females listing finances as the number one ranked demand.

To assess whether one gender experiences more numerous demands than the other, chi-square analyses were conducted comparing the total number of demands listed with the number of blank spaces subjects left on the ISD if less than five demands were listed. These analyses did not reveal any significant gender differences at each point in time or across all four times overall. Therefore, males and females

Table 5Frequencies of Top Ranked Demand by Gender and Time

Demand	Time 1 (n=70/82)		Time 2 (n=57/67)		Time 3 (n=46/55)		Time 4 (n=43/51)		Total Overall (n=216/255)	
	M	F	M	F	M	F	M	F	M	F
Academic	48	51	43	46	29	30	29	31	149	158
Relationships	4	5	1	1	1	5	-	6	6	17
Family	2	9	-	4	2	3	1	3	5	19
Finances	9	8	9	8	7	6	6	3	31	25
Employment	2	3	-	3	4	3	1	3	7	12
Personal Needs	2	1	-	-	-	1	1	-	3	2
Accommodation	1	-	-	1	-	-	1	-	2	1
Other	-	1	-	1	1	2	-	1	1	5
Health	1	2	2	1	1	2	3	3	7	8
Time Management	1	1	2	-	-	3	1	1	4	5
Worrying	-	1	-	2	1	-	-	-	1	3
TOTAL	70	82	57	67	46	55	43	51	216	255

seem to report similar numbers of demands. It should be noted however, that this analysis may be somewhat misleading since the subjects were limited to listing five demands and were unable to list more if appropriate.

Coping

In order to explore gender differences in coping, a MANOVAR was conducted on the COPE subscales. Given that there were 15 coping subscales across four measurement times

Table 6

Means and Standard Deviations of COPE Subscales

Variable	n	Time 1	Time 2	Time 3	Time 4
<u>Reinterp. &amp; Growth</u>					
Males	42	12.64(2.11)	12.02(2.10)	11.88(2.41)	11.52(2.38)
Females	48	12.50(2.19)	12.48(2.58)	11.90(2.23)	12.38(2.18)
Total	90	12.57(2.14)	12.27(2.37)	11.89(2.31)	11.98(2.30)
<u>Planning</u>					
Males	42	12.36(2.30)	11.81(2.21)	11.81(2.08)	11.38(2.15)
Females	48	11.44(2.87)	11.85(2.59)	11.52(2.55)	11.90(2.56)
Total	90	11.87(2.65)	11.83(2.41)	11.66(2.33)	11.66(2.38)
<u>Active Coping</u>					
Males	42	11.26(2.08)	11.50(2.30)	11.07(2.13)	11.19(2.00)
Females	48	11.23(2.53)	11.46(2.01)	11.63(2.51)	11.73(2.06)
Total	90	11.24(2.32)	11.48(2.14)	11.37(2.34)	11.48(2.04)
<u>Acceptance</u>					
Males	42	10.91(3.01)	11.11(2.72)	9.95(2.24)	10.29(2.83)
Females	48	11.52(2.34)	11.31(2.16)	10.88(2.39)	10.94(2.78)
Total	90	11.23(2.68)	11.22(2.42)	10.44(2.36)	10.63(2.81)
<u>Suppress. Activities</u>					
Males	42	10.36(2.27)	9.98(2.69)	10.29(1.97)	10.52(2.03)
Females	48	9.67(2.36)	9.88(1.90)	10.00(2.23)	10.27(2.23)
Total	90	9.99(2.33)	9.92(2.29)	10.13(2.11)	10.39(2.13)
<u>Instrument Support</u>					
Males	42	9.12(3.04)	8.50(2.84)	9.67(2.66)	9.41(3.04)
Females	48	10.25(2.82)	10.58(2.99)	10.54(3.24)	10.83(3.07)
Total	90	9.72(2.96)	9.61(3.09)	10.13(3.00)	10.17(3.12)
<u>Emotional Support</u>					
Males	42	8.67(3.19)	8.23(3.54)	9.31(3.13)	8.79(3.14)
Females	48	10.63(3.44)	10.67(3.16)	10.10(3.38)	10.50(3.07)
Total	90	9.71(3.45)	9.56(3.53)	9.73(3.27)	9.70(3.20)
<u>Mental Disengage.</u>					
Males	42	9.36(2.56)	9.19(2.57)	9.14(2.35)	9.26(2.88)
Females	48	8.98(2.20)	9.08(2.21)	8.58(2.37)	9.27(2.57)
Total	90	9.16(2.37)	9.13(2.37)	8.84(2.37)	9.27(2.71)
<u>Restraint</u>					
Males	42	9.29(2.62)	8.52(2.03)	9.17(2.55)	8.95(2.51)
Females	48	9.33(2.25)	9.15(2.23)	8.88(2.43)	9.19(2.10)
Total	90	9.31(2.42)	8.86(2.15)	9.01(2.48)	9.08(2.29)
<u>Focus/Vent Emotions</u>					
Males	42	7.86(2.11)	7.91(2.84)	7.95(2.75)	8.43(3.01)
Females	48	10.06(3.35)	9.48(2.81)	9.56(3.33)	9.73(3.25)
Total	90	9.03(3.03)	8.74(2.91)	8.81(3.16)	9.12(3.19)

Humor					
Males	42	8.12 (3.12)	8.31 (3.67)	8.41 (3.24)	8.19 (3.16)
Females	48	7.98 (3.13)	7.67 (2.79)	7.85 (2.87)	8.15 (3.37)
Total	90	8.04 (3.11)	7.97 (3.23)	8.11 (3.04)	8.17 (3.26)
Religion					
Males	42	6.14 (2.98)	5.52 (2.59)	5.74 (3.14)	5.55 (2.78)
Females	48	6.94 (3.74)	6.56 (3.48)	6.63 (3.73)	6.40 (3.23)
Total	90	6.57 (3.41)	6.08 (3.12)	6.21 (3.48)	6.00 (3.04)
Behavioral Disengage.					
Males	42	6.26 (2.07)	5.86 (2.29)	5.74 (1.90)	5.93 (2.11)
Females	48	6.15 (1.90)	5.67 (1.92)	5.29 (1.77)	5.54 (1.71)
Total	90	6.20 (1.97)	5.76 (2.09)	5.50 (1.84)	5.72 (1.91)
Denial					
Males	42	5.52 (2.00)	5.21 (2.09)	5.48 (2.12)	5.43 (1.92)
Females	48	5.21 (2.09)	5.19 (2.01)	4.79 (1.24)	4.92 (1.76)
Total	90	5.36 (2.05)	5.42 (2.27)	5.11 (1.76)	5.16 (1.84)
Alcohol & Drugs					
Males	42	5.12 (2.11)	5.19 (2.48)	5.60 (2.87)	5.60 (2.76)
Females	48	5.06 (2.25)	5.13 (2.25)	5.02 (2.31)	5.29 (2.82)
Total	90	5.09 (2.17)	5.16 (2.35)	5.29 (2.59)	5.43 (2.78)

a MANOVAR was used to minimize Type II error. The means and standard deviations of the coping subscales for all subjects with complete coping data are reported in Table 6. The most commonly used strategies across all four times were positive reinterpretation and growth, planning, and active coping. The four least commonly used coping strategies across all four times by both genders were use of alcohol and drugs, denial, behavioral disengagement, and religion. It can be seen from this table that people's coping attempts do vary across time and perhaps situation. However, since the means of the COPE subscales do not vary dramatically, it appears that there is some stability in the subjects' coping attempts.

The MANOVAR yielded a significant main effect for gender,  $F(15,74)=2.43$ ,  $p<.01$ . Subsequent univariate tests indicated that females scored higher than males with respect

to seeking social support for instrumental reasons,  $F(1,88)=7.96$ ,  $p<.01$ , seeking social support for emotional reasons,  $F(1,88)=8.86$ ,  $p<.01$ , and focusing on and venting of emotions,  $F(1,88)=9.84$ ,  $p<.01$  (see Table 6). Also, there was a significant main effect for time,  $F(45,44)=2.13$ ,  $p<.01$ . Post hoc tests indicated that the mean scores for growth were significantly higher at time one compared to time three  $F(3,264)=7.37$ ,  $p<.001$ , and time four  $F(3,264)=5.55$ ,  $p<.001$ . The mean scores for acceptance were significantly higher at time one compared to time three  $F(3,264)=8.54$ ,  $p<.001$  and time four  $F(3,264)=4.92$ ,  $p<.001$ . Also, the mean scores for acceptance were significantly higher at time two compared to time three  $F(3,264)=8.32$ ,  $p<.001$  and time four  $F(3,264)=4.76$ ,  $p<.001$ . The mean scores for religion were significantly higher at time one compared to time two  $F(3,264)=6.51$ ,  $p<.001$ , time three  $F(3,264)=3.51$ ,  $p<.001$ , and time four  $F(3,264)=8.80$ ,  $p<.001$ . The mean scores for behavioral disengagement were also significantly higher at time one compared to time two  $F(3,264)=4.03$ ,  $p<.001$ , time three  $F(3,264)=10.21$ ,  $p<.001$ , and time four  $F(3,264)=4.80$ ,  $p<.001$  (see Table 6). There was no significant gender by time interaction effect.

#### Coping With Academic Demands

To examine gender differences in coping in response to the same demand, a MANOVAR was used to determine the nature of gender differences in coping with academic demands. Participants were instructed to answer the COPE as it

pertained to their number one demand. Therefore, it was possible to select subjects who listed academics as their number one demand and check for differences in coping when demand remained constant. The only demand category reported with sufficient frequency to conduct a statistical analysis was 'academic demands'. There were 12 males and 17 females who listed academic demands as their number one demand at all four points in time.

The means and standard deviations of the coping subscales for subjects who listed academic demands at each time point are reported in Table 7. In general, the three most commonly used coping strategies for both males and females were planning, positive reinterpretation and growth, and active coping. Suppression of competing activities and acceptance were also used with higher frequency. The four least commonly used coping strategies for both genders were use of alcohol and drugs, denial, religion, and behavioral disengagement.

There was no main effect for gender and there was no interaction effect between gender and time. However, there was a main effect for time with respect to the subscales of restraint, acceptance, denial, and behavioral disengagement. Post hoc tests indicated that the mean scores of restraint were significantly higher at time one compared to time two  $F(3,81)=6.57, p<.001$ , time three  $F(3,81)=6.92, p<.001$ , and time four  $F(3,81)=3.23, p<.001$ . The mean scores for acceptance were also significantly higher at time one



Table 7

Means and Standard Deviations of COPE Subscales for AcademicDemands

Variable	n	Time 1	Time 2	Time 3	Time 4
<u>Planning</u>					
Males	12	12.92(1.93)	12.75(2.60)	12.17(1.80)	12.00(2.05)
Females	17	11.94(2.66)	12.71(2.26)	12.41(1.87)	11.77(2.46)
Total	29	12.35(2.40)	12.72(2.36)	12.31(1.82)	11.86(2.26)
<u>Reinterp. &amp; Growth</u>					
Males	12	12.83(1.99)	12.17(2.41)	12.42(2.54)	12.25(2.42)
Females	17	12.47(2.04)	13.41(2.03)	12.59(1.77)	12.35(1.62)
Total	29	12.62(1.99)	12.90(2.24)	12.52(2.08)	12.31(1.95)
<u>Acceptance</u>					
Males	12	11.33(2.93)	9.75(2.26)	10.08(2.28)	9.67(2.06)
Females	17	11.59(2.35)	11.29(2.20)	10.65(2.85)	11.00(3.28)
Total	29	11.48(2.56)	10.66(2.32)	10.41(2.60)	10.45(2.87)
<u>Suppress. Activities</u>					
Males	12	11.33(2.23)	11.50(2.65)	10.50(1.98)	10.75(2.14)
Females	17	9.88(2.09)	10.29(1.61)	10.35(1.97)	10.06(1.68)
Total	29	10.48(2.23)	10.79(2.14)	10.41(1.94)	10.35(1.88)
<u>Active Coping</u>					
Males	12	11.25(1.55)	12.67(2.10)	11.67(1.30)	11.50(1.17)
Females	17	11.18(2.46)	11.41(2.12)	11.65(2.03)	11.53(1.88)
Total	29	11.21(2.09)	11.93(2.17)	11.66(1.74)	11.52(1.60)
<u>Instrument Support</u>					
Males	12	9.50(2.11)	9.33(2.74)	9.67(2.10)	9.75(2.34)
Females	17	10.88(2.40)	11.00(2.21)	11.77(2.05)	11.11(2.55)
Total	29	10.31(2.35)	10.31(2.54)	10.90(2.29)	10.55(2.52)
<u>Restraint</u>					
Males	12	9.33(2.87)	8.08(1.93)	8.58(3.03)	9.00(2.99)
Females	17	10.18(2.68)	9.12(2.37)	8.71(2.87)	9.06(2.22)
Total	29	9.83(2.74)	8.69(2.22)	8.66(2.88)	9.03(2.51)
<u>Mental Disengage.</u>					
Males	12	8.67(2.19)	8.25(2.30)	8.33(2.10)	8.00(2.00)
Females	17	10.06(2.11)	9.06(2.19)	9.00(2.35)	9.65(2.87)
Total	29	9.48(2.21)	8.72(2.23)	8.72(2.23)	8.97(2.64)
<u>Emotional Support</u>					
Males	12	8.42(2.11)	10.00(3.02)	10.17(3.35)	8.83(1.99)
Females	17	11.06(3.25)	11.29(2.54)	10.59(2.90)	10.35(2.71)
Total	29	9.97(3.09)	10.76(2.77)	10.41(3.04)	9.72(2.52)
<u>Humor</u>					
Males	12	8.00(2.89)	6.25(2.67)	7.50(3.06)	7.67(3.11)
Females	17	8.47(3.68)	8.71(2.97)	8.06(3.19)	8.59(3.48)
Total	29	8.28(3.33)	7.69(3.06)	7.83(3.10)	8.21(3.31)

Focus/Vent					
Emotions					
Males	12	7.92 (2.75)	8.25 (2.90)	8.33 (3.00)	8.33 (2.87)
Females	17	10.65 (2.42)	10.18 (2.72)	9.88 (3.33)	9.82 (3.28)
Total	29	9.52 (2.86)	9.38 (2.91)	9.24 (3.24)	9.21 (3.16)
Behavioral Disengage.					
Males	12	6.50 (2.51)	4.92 (1.38)	4.92 (1.17)	4.75 (1.29)
Females	17	7.06 (2.22)	5.47 (1.77)	5.12 (1.76)	5.82 (2.13)
Total	29	6.83 (2.32)	5.24 (1.62)	5.03 (1.52)	5.37 (1.88)
Religion					
Males	12	6.08 (3.42)	5.75 (3.49)	5.92 (3.78)	5.58 (2.91)
Females	17	7.35 (3.52)	6.88 (3.87)	6.71 (3.64)	6.65 (3.50)
Total	29	6.83 (3.48)	6.41 (3.70)	6.38 (3.65)	6.21 (3.26)
Denial					
Males	12	5.42 (1.88)	5.67 (2.54)	4.83 (1.40)	4.50 ( .80)
Females	17	6.12 (2.93)	5.71 (2.73)	5.12 (1.17)	5.06 (1.95)
Total	29	5.83 (2.54)	5.69 (2.61)	5.00 (1.25)	4.83 (1.58)
Alcohol & Drugs					
Males	12	4.50 (1.24)	5.08 (2.47)	4.75 (1.36)	4.83 (2.29)
Females	17	4.65 (1.50)	4.71 (2.11)	4.59 (1.33)	4.29 ( .99)
Total	29	4.59 (1.38)	4.86 (2.23)	4.66 (1.32)	4.52 (1.64)

compared to time two  $F(3,81)=3.69$ ,  $p<.001$ , time three

$F(3,81)=6.29$ ,  $p<.001$ , and time four  $F(3,81)=5.83$ ,  $p<.001$ .

The mean scores for denial were significantly higher at time one compared to time three  $F(3,81)=4.76$ ,  $p<.001$  and time four  $F(3,81)=6.91$ ,  $p<.001$ . As well, the mean scores for denial were significantly higher at time two compared to time three  $F(3,81)=3.29$ ,  $p<.001$  and time four  $F(3,81)=5.11$ ,  $p<.001$ .

Finally, the mean scores for behavioral disengagement were significantly higher at time one compared to time two  $F(3,81)=20.82$ ,  $p<.001$ , time three  $F(3,81)=26.69$ ,  $p<.001$ , and time four  $F(3,81)=17.56$ ,  $p<.001$ .

### Summary

#### Stress Levels

There were no significant differences between males and females with respect to general stress levels. However, there was a difference between males and females over time

with males scoring lower at time one compared to the other three times and females scoring higher at time four compared to the first three times. Over time, stress levels were lower at time one compared to time three and time four.

### Demands

With respect to demands, females listed relationship demands significantly more often than males at time one and time three. Over all four times, females listed relationship and accommodation demands more frequently than males and males listed personal needs and other demands more frequently than females. There were no significant differences in the remaining seven demand categories. For the number one ranked demand, there were no significant differences between males and females with respect to academics or finances. Finally, one gender did not tend to report more numerous demands than the other.

### Coping

In general, females scored higher than males on the subscales of seeking social support for instrumental and emotional reasons as well as focusing on and venting of emotions. However, when demand was held constant and only coping with academic demands were compared, there were no differences in coping found between males and females. Similarly, there were no interaction effects between gender and time with either coping in general or with coping with academic demands. However there were differences in time. For coping in general, growth was higher at time one compared

to times three and four. Acceptance was higher both at times one and two compared to both times three and four. Both religion and behavioral disengagement were higher at time one compared to the other three times. For coping with academic demands, restraint, acceptance, and behavioral disengagement were higher at time one compared to the other three times. The scores for denial were higher at both times one and two compared to both times three and four.

## Chapter 5

### Summary, Conclusions, and Implications

The results of this study indicate that overall male and female post-secondary technical students do not report significantly different levels of stress. However, stress levels did change across time and the nature of that change was different for males and females. Males and females did not differ significantly in their report of work-related demands although females did report more relationship and accommodation demands and males did report satisfying personal needs and other demands more frequently. As well, there were no significant gender differences, in the number of demands reported or in reporting academics or finances as the number one demand. Therefore, although the frequency of demands was similar, the pattern was different (i.e., relationships, personal needs, etc.). Furthermore, given the divergent pattern in demands, it would be anticipated that coping attempts between males and females would also be different.

With respect to coping, females reported a greater usage of emotion-focused coping strategies when demand was not taken into consideration. However, when demand was held constant, these differences did not appear. With respect to problem-focused types of coping, there were no significant gender differences. Finally, the subscales of positive reinterpretation and growth, religion, behavioral disengagement, acceptance, restraint, and denial did change

significantly over time for the sample as a whole. This suggests that at least some of the gender differences in coping found in previous studies may be the result of differential demands versus differential coping predispositions.

### Conclusions

#### Stress Levels

With respect to stress levels, the findings of this study are in agreement with several others (e.g., Hovanitz & Kozora, 1989; Leana & Feldman, 1991; Martocchio & O'Leary, 1989; Miller, 1990) that did not find any significant gender differences in stress levels. This is in contrast to the more common finding that females tend to report significantly higher levels of stress compared to males.

Generally speaking, stress levels were significantly higher at time three and time four compared to time one. However, the patterns of change differed over time for males and females, with males showing a significant increase from time one to time two and then leveling off, while female stress levels remained steady from time one to time three and then increased significantly from between time three and time four. This may suggest that for males the discrepancy between coping and demand became more apparent early in the academic term. As the demands shifted or coping skills increased, males were able to meet demands more adequately resulting in a decreasing stress level over time. On the other hand, females may have found their coping repertoires

sufficient to meet encountered demands for the first three measurement times and only became overtaxed in the final stages of the academic year.

### Demands

With respect to demands, the findings of this study are comparable to the findings of Long (1990) who also found that males and females did not differ significantly in their report of work-related demands but that females tended to report more interpersonally-oriented demands. The most common finding in the literature is that males tend to report more work-related demands and females tend to report more interpersonally-related demands although this finding is less marked when context is accounted for. Given that the subjects in this sample were in a shared context (i.e., academic setting) it is not surprising that there were no differences in academic or employment demands. It is curious however, that females reported relationship demands more frequently than males only at times one and three and not at times two and four. It may be that at time two and time four, which occurred late in the academic semesters close to final exams, academic demands were more numerous or more salient than relationship demands.

The differences in demands reported by males and females is in a somewhat stereotypical direction. Besides relationship demands, females also reported more accommodation demands. This demand category included household duties as well as seeking or moving from one

accommodation to another. Besides 'other' demands, which is difficult to interpret, males also reported satisfying personal needs demands more frequently than females. This demand category included items such as recreational activities, physical fitness, leisure and socializing, and relaxation. It is interesting to note that when differences in demand were found, they were in a somewhat stereotypical direction. This may suggest a prominent socialization effect between male and female differences in demand.

In this study, although significant gender differences in demand were found, there were no significant gender differences in stress levels. It may be that although females reported relationship and accommodation demands more frequently and males reported satisfying personal needs and other demands more frequently, these differences offset one another in the ratings of general stress level resulting in similar stress levels. Also, it may be that females possessed adequate skills for coping with relationship and accommodation demands and therefore, did not find them stressful but merely demanding. Likewise, in a similar fashion, males may have developed better skills for coping with personal needs and other demands. The fact that there were no significant gender differences in stress levels is also congruent with the findings that males and females did not differ with respect to academic, employment, financial, time management, family, health, or worrying demands, with respect to the number of reported demands, or with the



reporting of the top ranked demand. As well, there were no demands listed that were specific to females or males as in some other studies (e.g., Davidson & Cooper, 1986; Hamilton & Fagot, 1988). Thus, the current data do not support the stereotypic picture that many previous studies report. This finding emphasizes the importance of designing research studies that can assess differences across all dimensions of the time, demand, stress, and coping situation.

#### Coping

Although it has been commonly thought that males tend to engage in more problem-focused coping strategies compared to females, this idea has only marginal support in the literature (e.g., Folkman & Lazarus, 1980; Leana & Feldman, 1991; Stone & Neale, 1984). In fact, there is stronger support in favor of no gender differences with respect to problem-focused coping (e.g., Anderson & Leslie, 1991; Davidson & Cooper, 1986; Hamilton & Fagot, 1988). The findings of this study are congruent with the latter.

There is support for the contention that females tend to report more use of emotion-focused coping strategies, particularly seeking social support (e.g., Astor-Dubin & Hammen, 1984; Davidson & Cooper, 1986; Leana & Feldman, 1991). In this study, when coping measures were compared without consideration of demand, the findings were in agreement with this contention. That is, females reported a greater use of seeking social support for both instrumental and emotional reasons and focusing on and venting emotions.

However, when coping measures were compared within the same demand (i.e., academic demands), these differences disappeared. This supports the idea that differences in coping may be related to differences in demands rather than inherent gender differences in coping strategies. It may be that females tended to seek social support more frequently to cope with relationship demands which females also expressed more frequently. Thus, while past studies would purport that females tend to seek more social support or other emotion-focused coping strategies regardless of the nature of the demand, these data suggest that males and females tend to cope in the same way when they encounter similar demands.

With respect to coping in general, the use of several coping strategies decreased significantly over time. The use of acceptance was higher at time one and time two compared to time three and time four. The use of behavioral disengagement and religion were higher at time one compared to the three subsequent times. Finally, the use of positive reinterpretation and growth was higher at time one compared to time three and four. With respect to coping with academic demands, the use of acceptance, behavioral disengagement, and restraint were all higher at time one compared to all subsequent times. As well, the use of denial was higher at time one and time two compared to time three and time four. It may be that the use of these strategies decreased over time due to their lack of effectiveness in dealing with specific demands. Also, given that stress levels were higher

for both males and females at time four, it may be that the subjects were using these coping strategies less frequently and thus their stress levels increased as a result. As well, these shifts seem to suggest that coping may be somewhat situational in nature rather than solely dispositional.

#### Implications

The above conclusions suggest some implications for program planning and counselling. With respect to program planning, the increase in stress levels over the course of the academic year suggests a need for some type of intervention, such as workshops focused on increasing coping skills (e.g., study skills, time management) or decreasing stress levels (e.g., stress management). Perhaps these types of resources should also be provided within the core curriculum since many students already seem to be facing more demands than they can deal with and would not be likely to increase them by taking workshops.

With respect to counselling, the results of coping suggest several ideas. First, counsellors need to be aware of gender biases. They need to be aware of the gender biases that are purported in the research literature as well as their own gender biases. Counsellors need to avoid falling into the trap of thinking that women are emotion-focused and not problem focused and men are problem focused and not emotion focused. From the results, it can be seen that females seem to be engaging in just as much problem-focused coping as males and males seem to be engaging in just as much

emotion-focused coping as females. Second, counsellors should always check for deficits in clients' coping repertoires; different demands require different types of coping. Both males and females are challenged by a wide range of varying demands, both work-oriented and interpersonally-oriented. Finally, counsellors need to consider the system of variables versus addressing each variable in isolation. That is, they need to examine demand, coping, and stress levels in relation to one another. It would be useful to look at all the various demands an individual is facing, specifying which demand(s) is the most problematic, assess which types of strategies the individual has already implemented or tried to implement, and their respective effectiveness, check for gaps in the individual's coping repertoire, determine the more appropriate coping strategies for the specific demands, and then teach new skills.

#### Strengths and Limitations

One strength of this investigation was the longitudinal nature of the study. A great majority of the research in this area utilizes only one measurement point in time. The use of four measurement points in this study allowed for some exploration into the situational versus dispositional points of view and their relationship to gender differences.

Another strength of this study was the procedure used to code the data from the ISD. The use of three independent raters provided inter-rater reliability and introduced a

greater degree of trustworthiness in the data. Building a coding taxonomy from the participants responses allowed the data to be accurately representative of subject responses rather than forcing the responses into a predetermined structure.

Finally, another strength of this study was the use of a normal sample focusing on their day to day lives. A large part of the research in the area of coping has been undertaken with pathological populations or with a focus on unusual or special events and attention has not been given to the ways normal populations cope with the ordinary demanding events of their day to day lives (Lazarus & Folkman, 1984).

One limitation of this study was the self-report nature of the data. As with most studies of coping, the results were dependent on the subjects' ability to accurately remember, correctly describe, and honestly report how they dealt with demands. The extent to which subjects are inaccurate in self-reporting limits the generalizability of findings (Rohde et al., 1990). For example, people sometimes report being unaware of stress until a demand is removed or ameliorated and they experience a sense of relief. This study did not attempt to measure stressors that people may not have been aware of.

With respect to the report of demands in particular, subjects were asked to list up to five demands that they were currently facing. This may have been restricting since many subjects may have faced more demands than they were able to

list. Therefore, this analysis was not an exhaustive treatment of demands. However, this approach is still deemed more effective than a life events inventory approach (Lazarus & Folkman, 1984).

#### Future Research

Very few studies that have examined gender differences have measured stress, demands, and coping and very few have linked coping with specific demands. It would be useful for future investigations to measure at least these three variables or even extend this research by including additional variables such as coping resources, coping effectiveness, or appraisal variables and link these to demands and coping.

It was extremely useful in this study to examine gender differences in coping within the same demand category (i.e., academic demands). Without this distinction, apparent differences in gender may be misleading. In this study, in particular, if differences in coping had been examined without linking academic demands to coping, the overall conclusion would have been that females tend to engage in more emotion-focused coping compared to males, a result that is clearly not supported when all of the data are considered. Therefore, it would be very important for future investigations to link coping to specific demands and to compare coping within other demand categories besides academic demands, particularly relationship demands.

With respect to measuring demands, there are a few

considerations worth noting. Perhaps with larger samples, future researchers will also be able to compare all demand categories at each point in time. This would allow the determination of the stability of demands and the stability of the demand coping relationship across time. It would also be beneficial to compare all demand categories on the top ranked demand, and it may be more fruitful to avoid limiting the number of demands subjects may list and leave this open.

Finally, it would be useful to examine gender differences among subjects in other contexts, besides an academic setting, using all three measures of stress levels, demands, and coping.

#### Final Conclusions

Male and female post-secondary technical students appear to experience some differences in demands while reporting similar levels of stress and ways of coping. In contrast to a great deal of the empirical literature, it appears that in similar situations, facing academic demands, male and female students cope very similarly.

This study provides strong support for the situational view of coping and the transactional model of stress and coping. More specifically, it highlights the importance of examining variables together versus in isolation. This is particularly relevant to linking demand with ways of coping with a consideration of subjects' context. Clearly, as it can be seen from the results of this study, when demands are linked with coping, the results become very different.

Results that many researchers have construed as gender differences may actually be situational differences. If demands are not linked to coping then results purporting gender differences may be seriously confounded with situational differences. It is essential for future researchers to examine coping within specific demand situations in order to make conclusive statements about gender differences. The most important result of this study were the findings with respect to coping. When coping was measured in general, without consideration of demand, females tended to engage in more emotion-focused forms of coping. However, when coping was measured with a consideration of demand, there were no significant gender differences found. What appeared to be a gender difference in the first instance actually turned out to be a situational difference.



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Appendix A  
Student Consent Form

I agree to participate in the COPING WITH DEMANDS study during the 1991-92 academic year.

I understand that at 4 times during the year, I will be asked to fill out questionnaires related to life demands and coping. All information will be strictly confidential. Only the principal researcher, Nancy Arthur, and members of the research team will have access to the information. I understand that my participation is voluntary and has no bearing on my academic standings while enrolled at SAIT. Further, I understand that I may stop participating for any reason during the year. At any time during the study, I may contact the principal researcher, Nancy Arthur, at SAIT Counselling Services, Heritage Hall, M331, 284-8821, for further information.

As of September 1, 1991, my age is 18 years or older.

\_\_\_\_\_  
Please print name

\_\_\_\_\_  
Please sign name

\_\_\_\_\_  
Name of academic program

\_\_\_\_\_  
Date

\_\_\_\_\_  
Telephone number

\_\_\_\_\_  
Current Mailing Address

THANK YOU FOR OFFERING TO PARTICIPATE IN THE PROJECT



## Appendix B

INVENTORY OF STUDENT DEMANDS - September, 1991

Name \_\_\_\_\_

Telephone \_\_\_\_\_

SAIT Program \_\_\_\_\_

**Personal Data**

Please try to answer all questions. CIRCLE the number that represents your response, only one response for each question. Thank you.

Example:

1. Place of residence.
 

1. Fort McMurray	5. Medicine Hat
2. Edmonton	6. Lethbridge
3. Red Deer	7. Other
④. Calgary	

This respondent lives in Calgary.

1. Sex.
  1. Male
  2. Female
2. Age \_\_\_\_\_
3. Relationship Status
  1. Single
  2. Cohabitation
  3. Married
  4. Separated/Divorced
  5. Widowed
4. Children
  1. No children
  2. 1 child
  3. 2 children
  4. 3 children
  5. 4 children or more
5. Living Arrangements
  1. With parents
  2. With spouse
  3. With partner
  4. With other relatives
  5. With roommate(s)
  6. Living Alone

6. Hours employed per week while attending SAIT
1. 0 hours - not employed
  2. 1-10 hours
  3. 10-20 hours
  4. 20-30 hours
7. Previous Education
1. Less than grade 12
  2. High school diploma
  3. Some post secondary education
  4. Completed post secondary diploma or degree
8. In what year did you complete the required courses for SAIT admission?
1. 1991
  2. 1990
  3. 1984-1989
  4. 1980-1985
  5. Prior to 1980
9. If you upgraded for SAIT entrance through adult education courses or attended another post-secondary school in the previous 2 years, was it:
1. Full-time (taking 3 courses or more at school)
  2. Part-time (taking less than 3 courses at once)
  3. Not applicable
10. Experience since leaving high school. For this question, circle as many responses that are applicable to you. Indicate the length of time spent in that category by circling the appropriate number in the corresponding right hand column, according to the following:

1. 0-6 months
2. 6 months - 1 year
3. 1-2 years
4. 2-5 years
5. 5 years or more

1. Employed part-time	1	2	3	4	5
2. Employed full-time	1	2	3	4	5
3. Traveled	1	2	3	4	5
4. Educational upgrading	1	2	3	4	5
5. Parented full-time	1	2	3	4	5
6. Unemployed	1	2	3	4	5
7. Other: Please specify	1	2	3	4	5

---

11. Rate the degree of stress that you are currently experiencing generally in your life.

0	1	2	3	4	5
no stress					the most stress you ever feel

Life Demands:

12. Please rank up to 5 current demands in your life. Place the most demanding beside Rank 1, the second most demanding beside Rank 2, etc. In the column on the right, rate each demand from 0 - 5 according to the degree of stress you are currently experiencing.

0	1	2	3	4	5
no stress					the most stress you ever feel

DEMAND	RELATIVE STRESS					
#1	0	1	2	3	4	5
#2	0	1	2	3	4	5
#3	0	1	2	3	4	5
#4	0	1	2	3	4	5
#5	0	1	2	3	4	5

PLEASE ANSWER THE FOLLOWING QUESTIONS USING THE #1 RANKED DEMAND FROM QUESTION #12.

13. How long have you been experiencing this demand?  
\_\_\_\_\_
14. What is it about the situation that you find demanding?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



24. How do you intend to deal with this demanding situation in the near future?

---

---

25. Indicate with an "X" whether or not you have used any SAIT resources to deal with the demand. In the column on the right, please rate the usefulness of each resource that you used, on a 0 (low) - 5 (high) scale.

SAIT RESOURCE	YES/NO	USEFULNESS					
1.Counselling Services		0	1	2	3	4	5
2.Employment Services		0	1	2	3	4	5
3.Learning Skills Centre		0	1	2	3	4	5
4.Campus Recreation		0	1	2	3	4	5
5.Learning Resources Ctr		0	1	2	3	4	5
6.Campus Health		0	1	2	3	4	5
7.SAIT Instructors		0	1	2	3	4	5
8.Residence Staff		0	1	2	3	4	5
9.Chaplains		0	1	2	3	4	5
10.Registrar's Office		0	1	2	3	4	5
11.Student Association		0	1	2	3	4	5
12.Other (Please specify)		0	1	2	3	4	5

26. What specifically about the resources did you find useful / not useful?

SAIT RES #	CHARACTERISTIC THAT MAKES IT USEFUL/NOT USEFUL

27. In the next month, what do you anticipate will be the most demanding situation in your life?

---

---

28. In what way(s) are you going to try to deal with this demanding situation?

---

---

## Appendix C

Inventory of Student Demands  
Coding Taxonomy

## List of 5 Life Demands:

In the next month, what do you anticipate will be the most demanding situation in your life:

Any sarcastic/question with a question/non-answers coded as blanks.

Given two demands per one response that is unclear, use the first demand unless one of the two demands has been previously coded, then select the other.

## 01 Academic

- 011 Unspecified (Includes Education)
- 012 Achievement
- 013 Time
- 014 Exams
- 015 Course load/Homework/Studying/Schoolwork
- 016 Adjustment/Adaptation to student role
- 017 Instructors
- 018 Academic Institutions - Admin./Bureaucracy
- 019 Program/Career Choice (unsure if in right program)

## 02 Relationships

- 021 Unspecified (Who)
  - 0211 Unspecified (What)
  - 0212 Time
- 022 Significant Other
  - 0221 Unspecified (What)
  - 0222 Time
  - 0223 Ex-Significant Other/Current Breakdown
- 023 Spouse
  - 0231 Unspecified (What)
  - 0232 Time
  - 0233 Ex-Spouse/Current Breakdown
- 024 Friends
  - 0241 Unspecified (What)
  - 0242 Time (includes socializing)
- 025 Other acquaintances (e.g., roommates, coworkers)
  - 0251 Unspecified (What)
  - 0252 Time
  - 0253 Offering Assistance

- 03 Employment (Employment is coded only with respect to self as opposed to others. Employment seeking is actually currently looking versus desiring.)
  - 031 Unspecified
  - 032 Seeking
  - 033 Job responsibilities
- 04 Family
  - 041 Unspecified
  - 042 Time
  - 043 Children's needs
  - 044 Family member's employment
  - 045 Family pressures - nonacademic
  - 046 Parents
  - 047 Siblings
  - 048 Grandparents
  - 049 Death of family member
- 05 Health
  - 051 Unspecified
  - 052 Mental Health/Happiness
  - 053 Physical Disability
- 06 Finances
  - 061 Unspecified
  - 062 Having sufficient funds/Paying bills/Savings
  - 063 Providing for family
- 07 Accommodation (House refers to Accommodation and home refers to Family if the response is unclear or vague.)
  - 071 Unspecified
  - 072 Household duties
  - 073 Seeking
  - 074 Moving/Adjusting to new home/Leaving old home
- 08 Time Management
  - 081 General
  - 082 Competing activities (must have reference to time)
- 09 Role Conflict
  - 091 Unspecified
- 10 Satisfying Personal Needs (require a personal referent or a personal activity.)
  - 101 Unspecified
  - 102 Recreation (i.e., activities)
  - 103 Physical fitness
  - 104 Leisure and socializing (including Relaxation/Making Friends/Fitting in.)
  - 105 Sleep/Insomnia
  - 106 Time for self/Time alone
  - 107 Dieting
  - 108 Independence
- 11 Worrying
  - 111 Unspecified
  - 112 Future
- 12 Other (including pets)
  - 121 Unspecified



**What is it about the situation that you find demanding:**

- 01 Academic
  - 011 Quantitative overload (includes pacing and scheduling)
  - 012 Qualitative (Level of difficulty/Understanding/Competitiveness/Boring)
  - 013 Achievement - external standards (Incl. graduation)
  - 014 Instruction/marking
- 02 Personal Expectations
  - 021 Performance - internal standards (any role not just academic)
  - 022 Motivation
  - 023 Self-confidence
- 03 Time
  - 031 Leisure/Time Alone
  - 032 Studying (Insufficient time to study/Time Mgt.. issue)
  - 033 Family/Friends/Significant Others
  - 034 Commuting /Travel
  - 035 Time Management
- 04 Worry
  - 041 Health
  - 042 Family
  - 043 Future
  - 044 Significant Other
  - 045 Stress/Sense of control
  - 046 Decision-making
- 05 Finances
  - 051 Paying bills/Debts/Getting a loan/Lack of funds
  - 052 Supporting family/children
  - 053 Unemployment
  - 054 Accommodation
  - 055 Affording Education
  - 056 Affording personal wants/luxuries
  - 057 Budgeting
- 06 Other
  - 061 Unspecified
  - 062 Do not know
  - 063 Nothing/Demand resolved
- 07 Family Pressures
  - 071 Parents
  - 072 Relationship Breakdown (Own or someone else)
  - 073 Others
  - 074 Spouse/Significant Other
  - 075 Children's problems
- 08 Employment (current)
  - 081 Qualifications
  - 082 Availability/Seeking
  - 083 Qualitative Factors
- 09 Lack of Social Support
  - 091 Age Differences

- 092 New Friends
- 093 No Family/Away from family
- 10 Personal Differences/Conflict
  - 101 Living Arrangements
  - 102 Significant Other

**Length of Time:**

- 1. 0-2 weeks
- 2. 2-4 weeks
- 3. 1-3 weeks
- 4. 3-6 months
- 5. 6-9 months
- 6. 9-12 months
- 7. Over 1 year

If this situation is not resolved what are the consequences:

- 01 Academic
  - 011 Failure to pass
  - 012 Program/Course withdrawal
  - 013 Quantitative overload
  - 014 Repeat courses/Take evening classes
  - 015 Low grades
  - 016 Miss classes
  - 017 Lack of understanding/comprehension
- 02 Future
  - 021 Goals
  - 022 Change plans
- 03 Relationships
  - 031 Deterioration/Break-up/Inadequate social life
  - 032 Other's behavior
  - 033 Disappointing/hurting others
- 04 Health
  - 041 Stress (depression or loneliness), Mental Health
  - 042 Physical (includes death)
- 05 Personal
  - 051 Failure (internal standards)
  - 052 Disappointment
  - 053 Withdrawal/Rejection
  - 054 Self-esteem/Identity
  - 055 Moodiness/Unhappiness
- 06 Finances
  - 061 Debt incurred
  - 062 Lack of funds for school expenses
  - 063 Fewer purchases
  - 064 Lower standard of living
- 07 Time
  - 071 Competing Priorities (including giving something up)
- 08 Accommodation
  - 081 Homeless
  - 082 Moving
- 09 None
  - 091 Unspecified (including situation was resolved)
  - 092 Ambiguity - does not matter
- 10 Employment
  - 101 Dissatisfaction
  - 102 Termination
  - 103 Secure employment
- 11 Other
  - 111 Legal

Describe the main way that you try to deal with this situation:

In what way(s) are you going to try to deal with this demanding situation:

How do you intend to deal with this demanding situation in the near future:

- 01 Satisfying Personal Needs
  - 011 Exercise
  - 012 Rest and Relaxation
  - 013 Find new challenges
  - 014 Unspecified
- 02 Planning
  - 021 Time management
  - 022 Unspecified
  - 023 Budget/finances
  - 024 Organization
  - 025 Anticipation of demand
  - 026 Saving money
  - 027 Career
- 03 Active Coping
  - 031 Unspecified (One step at a time)
  - 032 Secure/seek employment or increase hours
  - 033 SAIT resources
  - 034 Studying (or study harder)
  - 035 Confrontive problem-solving
  - 036 Seeking accommodation
  - 037 Socializing/Recreation
  - 038 Upgrading education
  - 039 Non-SAIT resources
- 04 Acceptance
  - 041 Unspecified
  - 042 Live with it
  - 043 Unpleasant situation
- 05 Mental Disengagement
  - 051 Unspecified
  - 052 Avoidance/ignoring
  - 053 Reduce worry
  - 054 Diversion/Distraction
- 06 Suppression of Competing Activities
  - 061 Unspecified
  - 062 Terminating employment/Decrease hours
  - 063 Reduce socializing or recreational time
  - 064 Decrease workload/Change courses
- 07 Seeking Social Support for Instrumental Reasons
  - 071 Unspecified
  - 072 Family assistance
  - 073 Friends
  - 074 Other students
  - 075 Instructors/Tutors
  - 076 Boss
  - 077 Finances

- 078 Spouse/Partner
- 08 Restraint
  - 081 Wait and see
- 09 Stress Reduction
  - 091 Exercise
  - 092 Take a vacation/break
  - 093 Unspecified
- 10 Mental Engagement
  - 101 Commitment (Increase effort/try harder)
  - 102 Concentration
  - 103 Positive Self-Talk
- 11 Seeking Social Support for Emotional Reasons
  - 111 Unspecified
  - 112 Spouse/Partner
  - 113 Family
  - 114 Friends
- 12 Positive Reinterpretation and Growth
  - 121 Readjust Expectations
  - 122 Social Comparison
  - 123 Unspecified
- 13 Wishful Thinking
  - 131 Hope
- 14 Other
  - 141 Unspecified
  - 142 Does not know/Nothing
- 15 Religion
  - 151 Faith in God
  - 152 Prayer
- 16 Alcohol/Drug Use
  - 161 Alcohol
  - 162 Smoking
  - 163 Quitting
  - 164 Caffeine

Describe the results that actually happened in dealing with this demand:

- \*\*\*1 Less than desired outcome
- \*\*\*2 Same as or met desired outcome
- \*\*\*3 Exceeded desired outcome
- \*\*\*4 Undetermined/Unspecified
- \*\*\*5 Other outcome - negative
- \*\*\*6 Other outcome - positive

\*\*\* refers to the three digit code from Question #10:  
Desired outcome.

List the reasons why you try to deal with the situation in this way:

- 01 Personal
  - 011 Unspecified
  - 012 Revitalization
  - 013 Maintaining a positive attitude  
(motivation/initiative)
  - 014 Self-esteem
- 02 Limited Alternatives
  - 021 Only alternative
  - 022 Best alternative/Effective  
alternative/Previously successful
  - 023 Unspecified
- 03 Time
  - 031 Unspecified
  - 032 Relaxation
  - 033 Self
  - 034 Time Management/Making time to study
- 04 Relationships
  - 041 Maintaining quality
  - 042 Support
  - 043 Avoid upsetting others/Decrease tension
- 05 Goal Achievement
  - 051 Academic
  - 052 Financial
  - 053 Employment/career
  - 054 Personal life
- 06 Challenge
  - 061 Unspecified
  - 062 Personal Meaning/Importance/Priorities
  - 063 Fear of challenge
- 07 Stress Reduction (including references to anxiety)
  - 071 Unspecified
  - 072 Gaining control
- 08 Mental Disengagement
  - 081 Unspecified
  - 082 Distraction/Diversion
  - 083 Avoidance
- 09 Financial
  - 091 Security
  - 092 Lower costs
  - 093 Flexibility in paying bills
  - 094 Afford necessities
- 10 Recommendation/Referral
  - 101 Unspecified
- 11 Other
  - 111 Unspecified/Don't know/Resolved
- 12 Mental Engagement
  - 121 Concentration

Describe the criteria you used to determine the effectiveness of your attempts to deal with the demanding situation:

- 01 Academic
  - 011 Grades
  - 012 Knowledge
  - 013 Skill improvement
- 02 Personal Well-being
  - 021 Motivation
  - 022 Happiness
  - 023 Attitude
  - 024 Ability to concentrate
  - 025 Physical Health
  - 026 Self-concept/Self-esteem
  - 027 Sense of control/Stress level
  - 028 Amount of worrying
  - 029 Quality of Sleep
- 03 Relationship
  - 031 Quality
  - 032 Time
- 04 Other People
  - 041 Behavior
  - 042 Opinions
  - 043 Feelings
- 05 Employment
  - 051 Unemployment
  - 052 Maintaining responsibilities
  - 053 Securing employment
  - 054 Quality of job
- 06 Other
  - 061 Unspecified
  - 062 None - no criteria
- 07 Financial
  - 071 Obtain more money/Amount of money
  - 072 Affordability
  - 073 Responsibility use of money/staying on budget
- 08 Time
  - 081 Academic pursuits/activities/Amount of work completed
  - 082 Personal Leisure/Activities
- 09 Mental Disengagement
  - 091 Distraction
- 10 Accommodation
  - 101 Suitability

What result do you want to have happen with this demand:

- 01 Academic
  - 011 Good Grades
  - 012 Graduation
  - 013 Knowledge and comprehension/skills
  - 014 Motivation/Enthusiasm
- 02 Stressor Management
  - 021 Time less restricted
  - 022 Time management
  - 023 Task completion
- 03 Family
  - 031 Well-being
  - 032 Successful marriage
  - 033 Support
  - 034 Time
  - 035 Others less dependent/demanding
- 04 Finance
  - 041 Reduced debt-lad (including financial security)
  - 042 Student loan
  - 043 Affordability (cost or price)
- 05 Stress Management
  - 051 Stress reduction (including control)
  - 052 Relaxation
- 06 Employment
  - 061 Future career
  - 062 Secure a job
  - 063 Change in hours worked
  - 064 Job satisfaction
- 07 Accommodation
  - 071 Securing
  - 072 Finding a roommate
- 08 Other
  - 081 Unspecified
- 09 Personal Satisfaction
  - 091 Proving something (to self or others)
  - 092 Obtaining something
- 10 Relationships
  - 101 Getting involved (Intimacy/Significant other)
  - 102 Resolving problems/conflict
  - 103 Make new friends
  - 104 Break up



**Useful characteristics of SAIT Resources:**

- 01 Problem-solving
  - 011 Unspecified
- 02 Skill Development
  - 021 Study Skills
  - 022 Work experience/skills
  - 023 Athletic skills
- 03 Stress Reduction
  - 031 Relaxation
  - 032 Unspecified
- 04 Availability/Access
  - 041 Personal attention
  - 042 Information
  - 043 Unspecified
  - 044 Expanding social circle/new relationships
- 05 Helpful Attitude
  - 051 Unspecified
  - 052 Understanding
- 06 Competence
  - 061 Unspecified
- 07 Mental Disengagement
  - 071 Unspecified
- 08 Other
  - 081 Unspecified
- 09 Social Support
  - 091 Peers/students
- 10 Not effective
  - 101 Unspecified
  - 102 Hours/Waiting (Inconvenient)
  - 103 Insufficient feedback
  - 104 Obsolete or lack of information
  - 105 Negative attitude
  - 106 Lack of facilities