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ABSTRACT

A study was conducted at Southern Alberta Institute of Technology (SAIT) to investigate gender influences on coping strategies by tracking multiple episodes of demands and coping strategies throughout an academic year. The study sample consisted of 94 students enrolled in 2-year academic programs having at least a 70/30 gender ratio. From a pool of volunteer participants, equal numbers of males and females were selected in each of three age groups: direct entry (ages 18-19), mature students (age 25 and older), and other students (ages 20-24). Students' perceptions of demands, stress, and coping were assessed at four designated points during the academic year using the COPE, the Beck Anxiety Inventory, the Beck Depression Inventory, and the Inventory of Student Demands. Study findings included the following: (1) there were no significant gender differences in types of demands reported, with both males and females reporting academic demands most frequently, followed by family and relationship demands, finances, and employment-related concerns; (2) male students made significantly more "contacts with instructors" to assist in coping with perceived demands, while females were more likely to cope through emotional expression and seeking social support; and (3) as a group, students tended to cope with their most important demand at the beginning of the term by using denial and disengagement, but at the end of the term, they tended to use acceptance. Contains 48 references. (KP)

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Investigating Gender Influences on Coping

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Running head: GENDER INFLUENCES

Investigating Gender Influences on Coping

The literature on coping has been divided on the issue of coping stability over time and across situations. Dispositional perspectives consider coping as stable across a variety of different environmental demands (Carver, Scheier, & Weintraub, 1989; McCrae & Costa, 1986; Wheaton, 1983). On the other hand, situational perspectives consider coping to be a dynamic, shifting process, tailored to meet the perceived demand characteristics of situations (Folkman, 1982, 1984; Folkman & Lazarus, 1980, 1985; Folkman, Lazarus, Gruen, & Delongis, 1986).

Both dispositional and situational perspectives have investigated gender influences on coping. From a dispositional view, inherent, gender specific, characteristics are thought to underlie differences in the coping styles of women and men (Endler & Parker, 1990; Hamilton & Fagot, 1988; Houtman, 1990; Martin, Kuiper, & Westra, 1989; Folkman & Lazarus, 1980). The tenet is advanced that men use primarily problem-focused (instrumental) ways of coping while women are more apt to use emotionally expressive coping strategies. This view recently has been challenged by researchers with a situational perspective, who consider both personal and environmental contexts as being important in the coping process (Billings & Moos, 1984; Fleishman, 1984; Pearlin & Schooler, 1978). From a situational position, apparent gender differences in coping are thought to result from factors such as: differences in the demands faced by men and women, differences in the contexts of stress, and differential access to personal and social resources for coping (Astor-Dubin & Hammen, 1984; Belle, 1987; Jick & Mitz, 1985; Miller & Kirsch, 1987; Long, 1990).

Currently, the support for dispositional and situational perspectives is mixed. However, most studies have adopted a methodology that favors a

dispositional perspective, in that they have assessed coping procedures without assessing differences in demands being faced and they typically have used a "snapshot" approach, assessing coping at only one point in time, which does not permit examining whether coping practices change across time. Such investigations do not allow the consideration of coping as a process; a process that might vary over time and across situations (Folkman & Lazarus, 1985; Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986; Lazarus & Folkman, 1984; Long, 1990). They also do not allow the possibility that coping differences might be the result of different demands, different contexts within the same demand, or differential access to potential resources for coping with the situation (Lieberman, 1982; Magnusson, 1982).

The current study sought to correct these problems by tracking multiple episodes of demands and coping processes throughout an academic year. The study sought to investigate students' appraisal of demands, their ways of coping, and their experience of stress, using a methodology that was sensitive to spotting gender differences and capable of supporting either a situational or a dispositional perspective. Specifically, the study assessed the nature of demands students faced, the reasons those situations were demanding, how students coped with the demands, and their use of institutional resources in their coping attempts.

Method

The sample consisted of 94 students enrolled at the Southern Alberta Institute of Technology in 2 year academic programs having at least a 70/30 gender ratio and grade 12 entrance requirements. A stratified random sampling procedure was used to select, from a pool of volunteer participants, equal numbers of male and female students in each of three age groups: Direct entry

(ages 18-19), mature students (age 25 and older), and other students (age 20-24).

Students perceptions of demands, stress, and coping were assessed at four designated points during the academic year: 1) the third week of September (selected to fall within the initial adjustment period of the school year), 2) the first week of November and 3) the first week of February (selected immediately following the last date to withdraw from courses), and 4) the first week of April (selected to capture demands at the end of the school year).

Dependent Measures

A combination of standardized and researcher-constructed instruments were used. The COPE (Carver et al., 1989) was used to measure coping practices. The Beck Anxiety Inventory (BAI) (Beck, Brown, Epstein, & Steer, 1988) and Beck Depression Inventory (BDI) (Beck, 1979) were used to measure relevant affective variables. A researcher constructed, open-ended questionnaire, the Inventory of Student Demands (ISD) was used to collect qualitative information concerning students' perceptions of demands and coping efforts.

COPE. The COPE is a 60 item Likert-type instrument consisting of 15 subscales. Five subscales measure aspects of problem-focused coping (Active Coping, Planning, Suppression of Competing Activities, Restraint Coping, Seeking Instrumental Social Support), five subscales measure aspects of emotion-focused coping (Seeking Emotional Social Support, Positive Reinterpretation and Growth, Acceptance, Denial and Turning to Religion) and three subscales measure types of disengagement coping (Venting of Emotions, Behavioral Disengagement, and Mental Disengagement). The two exploratory subscales (Alcohol and Drug Use and Humor) were not used in the current study.

Carver (1991) suggests that the COPE can be used in three different formats, (a) asking respondents what coping strategies they usually or typically use when under stress (dispositional version), (b) asking respondents about what coping strategies they actually used during a period in the past (situational past focus), and (c) asking respondents about what coping strategies they actually have been using up to the present (situational present focus). This study used the third format, reasoning that it provided the best format for assessing whether coping attempts adjusted to address changes in demands across time. Thus, in answering the COPE, participants indicated their actual use of coping strategies in reference to the current most demanding situation that they were involved with.

The COPE has strong theoretical and psychometric support (Carver et al., 1989). Cronbach alpha reliability coefficients are reported to range from .45 to .92, with only mental disengagement falling below .6 (Carver, 1991). Test-retest reliability coefficients range from .46 to .86. Low correlations between most of the COPE scales suggest that the scales measure relatively independent coping approaches. Convergent and discriminant validity between the COPE subscales and a variety of personality measures including optimism, control, self-esteem, internality, hardiness, Type A, monitoring, blunting, anxiety, and social desirability also have been reported (Carver et al., 1989).

BDI. The BDI is one of the most commonly used self-report measure of depression (Beck, Rush, Shaw, & Emery, 1979). It is a 21 item self-report Likert-type questionnaire which yields an overall score for depression severity. From a meta-analysis of studies conducted from 1961 to 1986, Beck, Steer, and Garbin (1988) report a mean internal consistency coefficient of .86 for psychiatric subjects and .81 for nonpsychiatric subjects, and test-retest correlations of .48-.86 for psychiatric subjects and .60-.83 for nonpsychiatric

subjects. Beck et al. (1988) report validity estimates of .60 or higher for the relationship with clinical assessments and other depression measures such as the Hamilton Psychiatric Rating Scale for Depression, Zung Self-reported Depression Scale, MMPI Depression Scale, and Multiple Affect Adjective Checklist Depression Scale.

BAI. The BAI is a 21 item self-report Likert-type questionnaire originally developed to address the need to reliably distinguish between symptoms of anxiety and depression in psychiatric patients (Beck, Brown, Epstein, & Steer, 1988). Internal consistency is reported as .92 and test-retest reliability as .75. Although the correlation between the BAI and BDI scores is moderately high at .48, Beck, Brown, Epstein, and Steer (1988) note that this is a lower correlation than comparisons of other anxiety scales with the BDI typically reported in the literature.

ISD. The ISD is a researcher-constructed questionnaire based on the theoretical tenets of stress and coping described by Lazarus and Folkman (1984). The development of the ISD and a description of its contents have been reported previously, along with the results of a pilot study (Arthur, Hiebert, Waters, & Johannson, 1992). The questionnaire consists of a series of open-ended and 6-point Likert-type questions. In completing the ISD, students were asked to list up to five demands and elaborate the top demand, by describing the factors that made the situation demanding for them, the consequences attached to the situation, how they tried to cope with the situation, how effective they perceived their coping efforts to be, and their experience of stress. At each assessment time, students were asked to describe their current top demand in the preceding manner and also to revisit and describe their previous top demand if it was different than the current one. If the top-ranked demand had changed, participants also were asked to describe what had happened to

make that situation less demanding. Thus, the ISD provided a detailed assessment of students' perceived demands and coping efforts throughout the academic year.

To aggregate the responses on the ISD, a content analysis was conducted on the responses to the open-ended questionnaire and a taxonomy of demand characteristics and coping practices was developed. This taxonomy was then used to code responses for comparison across time and across different subsets of the sample.

Results

Gender Differences On Perceived Demands

A tabulation of the top-ranked demands indicated that academic demands were reported most frequently, accounting for about two-thirds of the responses at each time point. They were followed by family and relationship demands, finances, and employment-related concerns. Chi Square tests of independence (demand category by sex) indicated there were no significant differences in the types of demands reported by male and female students ($p > .05$). However, when the total number of reported demands (i.e. not just the top-ranked demand) were compared, females reported more relationship demands than males at Times 1 and 3, corresponding to the beginning of school semesters, $p < .05$.

Gender Differences In Coping

Use of institutional resources. Use of campus services were considered a potential coping resources for students. Campus services can be considered a form of seeking social support, a means for skill training to better equip a person to handle specific demands, a source for seeking help with problem solving, or a means to clarify or seek additional information. Chi-square tests of resource use suggested that at Time 3, male students made significantly

more "Contacts with Instructors" to assist in coping with perceived demands, $\chi^2=5.48$, $p<.01$. No other significant differences were observed.

COPE subscales. A MANOVA for repeated measures was used to investigate gender differences in the COPE scale scores across time. Where appropriate, follow-up univariate tests and post hoc Scheffés were used.

The MANOVAR on the COPE subscales yielded a significant time by gender interaction, $F(48,483)=1.46$, $p<.03$, and a significant main effect for time, $F(48,483)=1.87$, $p<.01$. Follow-up univariate tests indicated a significant effect for "Seeking Social Support - Emotional", $F(3,177)=3.51$, $p<.02$ (see Table 1). Post hoc Scheffés indicated that at Times 1,2, and 4, females had significantly higher scores than males.

Table 1

Means for Gender x Time Interaction for Coping Through Seeking Social Support-Emotional

Variable	Gender	n	Time 1	Time 2	Time 3	Time 4
Supem	male	29	7.97	8.14	9.55	8.86
	female	36	10.56	10.39	9.97	10.30

Following the significant main effect for Time, there were significant univariate tests for "Acceptance", $U(3,177)=3.15$, $U<.03$, "Behavioral Disengagement", $U(3,177)=4.47$, $p<.01$, and "Denial", $F(3,177)=2.59$, $p<.05$ (see Table 1). (See Table 2.) "Acceptance" scores at Times 3 and 4 were significantly higher than Times 1 and 2, "Behavioral Disengagement" scores were significantly higher at Time 1 than subsequent Times, and "Denial" scores were significantly lower at Time 3 than Times 1 or 2. Thus, as a group, the students tended to cope with their most important demand at the beginning of the term

by using denial and disengagement, but at the end of the term they tended to use acceptance, suggesting that they had resigned themselves to the situation and were attempting to deal with it directly.

Table 2

Means and Standard Deviations for Significant Time Effects On Coping and Relevant Affective Variables.

Variable	n	Time 1	Time 2	Time 3	Time 4
Accept	65	11.46(2.85)	11.34(2.48)	10.59(2.47)	10.91(2.83)
Behdis	65	6.22(1.93)	5.52(1.98)	5.42(1.73)	5.59(1.78)
Denial	65	5.08(1.72)	5.11(2.02)	4.67(1.04)	4.83(1.60)
Genstrs	76	2.83(1.33)	3.09(1.19)	3.21(1.31)	3.47(1.17)
BDI	76	7.95(5.92)	7.80(6.67)	8.34(7.23)	9.63(8.23)

Stress, Depression, and Anxiety

The MANOVA which examined the influence of sex on stress, depression, and anxiety scores produced a significant main effect for Time, $F(9,620)=3.09$, $p<.01$, with significant univariate tests for the variables of General Stress, $F(3,21)=7.25$, $p<.01$, and Depression, $F(3,210)=3.25$, $p<.02$ (see Table 2). On "General Stress" and "Depression", students' scores at Time 4 were significantly higher than previous Times. Although stress levels tended to climb for both males and females as the academic term progressed, the pattern was different. Stress levels rose almost immediately for females and then leveled off. Male stress levels were slower to climb, however, they exceeded those of females by the end of the term.

Coping and control appraisals. A series of MANCOVAs and MANOVAs were performed using several factors as classification variables that were considered to potentially influence appraisal of demands and coping (Lazarus &

Folkman, 1984). Because of cell size restrictions on the number of variables permitted in the MANCOVA, the COPE subscales were grouped into three categories, namely, Problem-focused coping (PCOPE), Emotion-focused coping (ECOPE), and Disengagement coping (DCOPE). The MANCOVA with the covariate Control produced a significant main effect for Time, $F(9,734)=3.21$, $p<.01$. Follow-up univariate tests indicated that students at Times 1 and 2 had significantly higher ECOPE scores than subsequent Times, $F(3, 248)=4.22$, $p<.06$. Results of the MANOVA showed that at Time 2, females used more coping through seeking both emotional and instrumental support, Religion, and emotional expression. In general, the more stress and more lack of control that students experienced in relation to their top demands, the greater was their use of emotion-focused coping.

Coping Stability

The extent to which students' coping strategies are stable across time was of particular interest in this study. Using estimates of coping stability (Shavelson, Webb, & Rowley, 1989), an index of the cross-situational generalizability of coping scores was derived. The sample as a whole showed moderate coping stability. Female showed a higher degree of coping stability on the problem-focused coping scales of "Suppression of Competing Activities", "Restraint", and "Seeking Social Support- Instrumental". Partialling out the effects of stress, depression, and anxiety resulted in further gender differences on problem-focused coping subscales. Males showed higher coping stability on "Planning", whereas females had higher scores on "Suppression of Competing Activities", "Restraint", and "Seeking Social Support - Instrumental". On the emotion-focused coping subscale of "Positive Reinterpretation and Growth", males showed higher coping stability.

Coping stability was also explored by looking at cases where the top-ranked demand remained consistent across time, versus cases where the top-ranked demand changed across time, and comparing the coping approaches used in same-demand versus different demand situations. A Chi-square test for independence indicated that students used the same ways of coping when the demand remained the same. However, when the demand changed, the coping approach changed as well. This suggests that students' coping attempts do in fact adjust to meet changing demands.

Summary

Noteworthy sex differences included more coping through emotional expression and seeking social support by females and more use of instrumental coping through accessing campus resources by males at certain times during the academic year. At the beginning of the academic year, students used coping strategies that withdrew them, actively and mentally, from the demand situation. Although stress levels peaked during the second half of the year, there was greater use of acceptance and coping strategies that dealt directly with perceived demands. The sample as a whole showed moderate stability in coping with the same demands over time, with higher stability in problem-focused coping evidenced by females.

Discussion

Generally speaking, our data suggest only moderate support for any gender differences in stress and coping. There were no significant differences in the top ranked demands reported by male or female students unlike previous research (Billings & Moos, 1984; Folkman, Lazarus, Pimley, & Novacek 1987; Jorgensen & Johnson, 1990). However, when considering all demands throughout the academic year, female students reported greater concerns about managing relationships than males.

In response to the top-ranked demand, females were more likely to use emotion-focused coping than males, which corroborates earlier findings (Billings & Moos, 1984; Endler & Parker, 1990; Houtman, 1990; Jick & Mitz, 1985; Labouvie-Vief, Hakim-Larson, & Hobart, 1987; Martin et al., 1989). This does not mean, as Menaghan and colleagues (Menaghan, 1982, 1983; Menaghan & Merves, 1984) point out, that women use less adaptive forms of coping. Instead, it could mean, given that there were no differences in the nature of the demands faced by males and females, that female students may have appraised the demands as being beyond their control and, therefore, appropriately responded with palliative coping (Folkman, 1984; Lazarus & Folkman, 1984).

Some researchers have maintained that there are advantages to maintaining a focus on emotional regulation in situations appraised to be beyond the individual's control (Folkman, 1984, Lazarus & Folkman, 1984; Scheier, Weintraub, & Carver, 1986). For example, Hiebert and Basserman (1986) reported that the most frequent coping strategy for school principals was "try harder" (active coping) and that there were virtually no back-up strategies to manage affect (palliative coping) if efforts to manage the demand were not successful. Findings that men use instrumental coping may imply gender differences in a) perseverance with particular coping strategies, b) greater perceived power to change the situation by men, or, c) greater actual power to change the situation by men. It may be that social expectations allow men and women different roles in which appraisals of control and subsequent coping efforts are influenced.

Our data suggest that males and females were equally likely to use problem-focused coping, which closely resembles previous research by Nezu and Nezu (1987) and Endler and Parker (1990). The absence of sex differences in

the use of problem-focused coping, and the finding that females have greater coping stability on problem-focused coping in general, supports researchers who have challenged the assumption of a purely dispositional explanation of coping (Long, 1990; Miller & Kirsch, 1987). The female students in this sample demonstrated a fuller range of coping strategies which may leave them better equipped to deal with both changeable and unchangeable demands.

Implications

The results of this study have implications for the debate over coping stability. According to Compas, Forsythe and Wagner (1988), when the specific contexts of demands are taken into consideration, coping efforts are likely to show consistency in response to the same stressor over time, however, in response to different types of stressors, coping efforts show low consistency. Our data agree: In reference to different demands, coping efforts shifted to meet the perceived characteristics of the demanding situations. Multiple assessments of demands and coping over time in this study generally reflected only moderate stability. The results are consistent with other studies that have taken situational contexts into account (Dolan & White, 1988; Folkman & Lazarus, 1985; Stone & Neale, 1984). These observations support Menaghan's (1982) recommendation that research on coping stability requires that demand context be considered and that coping efforts be studied in relationship to specific demands.

The results of our study make a statement about the methodology of previous research in addition to the findings pertaining to (lack of) gender differences. Magnusson (1982) argued that meaningful research on gender differences in stress reactions required attention to situational properties surrounding people's stressful experiences. First, the characteristics of the situation under which behavior is studied needs to be controlled. Second,

research is needed in a more varied set of stressful situations to examine gender by situation interactions. In addition, it is essential that researchers consider the influence of gender according to different contexts in which coping occurs as well as the differential access to coping resources available to women and men (Lieberman, 1982). We would agree whole heartedly with each of these points. Examinations of demands or coping globally as reports of subjects "usual" experience has little potential for contributing to existing knowledge. As Folkman and Lazarus (1984) recommend, rather than limiting the study of gender and coping to dispositional factors, it is essential that researchers examine differences in sources of stress, and allow for the assessment of situational specific coping attempts, while investigating the influence of gender on coping.

Summary

The overriding goals of this study were to investigate the nature of demands and coping by students in a post-secondary program and to examine the influence of gender on the demands students face, the way they cope with those demands, and students' stressful experiences. The finding that male and female students exhibited different patterns of demands and stress is important. Perhaps, the greater frequency of family and relationship demands for females is related to their marked rise in stress levels during the initial stage of the term - attempting to balance family and relationship demands with new academic demands was overwhelming. The fact that male stress levels rose at the end of the term might be related to the observation that females tended to have more extensive coping repertoires than did males. The observation that females used more emotion-focused coping than males suggests that female students tended to appraise demands as being beyond their control and therefore, responded appropriately with a palliative coping

approach. For female students, the availability of coping resources from which to draw support, particularly emotional support and understanding, appears paramount to dealing with demands (Belle, 1987). The fact that students adjusted their coping approaches to meet changed demand characteristics is reassuring, for it suggests that old habitual ways of responding to demands have the potential for being replaced by newer, more adaptive coping practices, once the new strategy is learned.

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