

Brunei Trainee Teachers' Coping Strategies for Stressful Situations

Lawrence Mundia

Psychological Studies and Human Development Academic Group

Sultan Hassanal Bolkiah Institute of Education

University of Brunei Darussalam

Jalan Tungku Link, Gadong BE 1410, Brunei Darussalam

Tel: 673-2463-001 Ext. 2036 E-mail: mundia_ljs@yahoo.co.uk

Abstract

The survey investigated the extent to which Brunei trainee teachers used the task-oriented, emotion-oriented, and avoidance-oriented coping strategies when in stressful situations. Data collection employed the Coping Inventory for Stressful Situations. Participants consisted of 118 educational psychology student teachers at the University of Brunei Darussalam. Of these, 89 (75%) were females while 29 (25%) were males. The sample comprised of 71 (60%) BEd and 47 (40%) PGCE students. Overall, the task-oriented strategy was the most used coping method followed by the avoidance-oriented style. There were no significant gender and program of study differences in the way participants employed the three coping procedures. Age, gender, and program of study were not significantly correlated with the three coping strategies. The coping strategies were found to be distinct ways of reacting to and relieving stress according to the Brunei sample. Further mixed methods research was recommended to gain additional insights on the problem.

Keywords: Stress, Coping, Strategies, Task, Emotion, Avoidance, Student teachers

1. Introduction

Stress is a non-specific physiological reaction to internal and external demands made on the body (Selye, 1974). Not all stress is bad though. An optimum amount of stress (called positive stress) is required to keep a person challenged and energized (Student Support Services, 2007; Australian Counseling Association, 2007). In addition a small number of studies claim that people learn a few good lessons from some aspects of stress such as critical incident stress, CIS (Werner et al., 1992). Furthermore there is also the so-called notion of stress related growth, SRG (Tassie & Whelan, 2007) which supports the view that people learn and grow from stressful events. Despite these and other beneficial aspects of stress it appears that the disadvantages of stress far outnumber the advantages. There are many forms of stress (collectively known as negative stress) that are harmful. The three main dangerous types of stress include acute stress, chronic stress and posttraumatic stress disorder (PTSD). For example severe, profound or catastrophic kinds of stress can lead to death through either suicide or stroke. Along with depression and anxiety, stress is to-date one of the three common mental health problems affecting university students worldwide (Benton et al., 2003). For instance there are many student deaths attributed to suicide or stroke in universities. Like depression and anxiety, stress has many symptoms, causes and effects some of which are briefly discussed below to set the background.

1.1 Causes of stress in university students

There is a wide range of factors that contribute to stress in university students. The majority of the causes of stress seem to be person-age-situation specific. For instance people experience different stressors in different places (e.g. home context, school setting, and work environment). In addition children, adolescents, middle aged persons, and the old appear to have different stressors. The causes may be divided into three broad categories: environmental; psychological; and biological (Cohen et al., 1995). Environmental causes of stress include adjusting to life in a new environment, studying in English, and culture shock (Pabiton, 2004) as well as loneliness or isolation (Pabiton, 2007). In developing countries, student mental health problems like stress are caused by a host of lifelong factors such as pressure of academic work, poverty, diseases, natural disasters, environmental hazards, war and the unrealistic expectations of parents and teachers (Ovunga et al., 2006). In their recent study, Yates et al. (2008) found that some mental health problems occur before students enter a college or university. Examples of psychological factors that contribute to stress are revising for tests, sitting for examinations, meeting deadlines for coursework assessments, and repeated failure (Pabiton, 2007). Psychological causes also include the pressure of combining paid work with study, procrastinating, excessive workload as well as parents' and students' unrealistic expectations (Student Support Services, 2007). The

biological causes include chronic sickness and poor health (Burns, 2003) and the role of biological factors such as the stress hormones and the autonomic nervous system (Jenkins et al., 1990; Taylor, 1990; Amchin, 1991; Rathus & Nevid, 1991).

1.2 Effects of stress and coping strategies

Most previous studies of stress coping strategies among university students were conducted in western countries, North America (US and Canada) and Australia. Some of these studies included Asian minority or foreign students in their samples (e.g. Iwasaki, 2003; Tassie & Whelan, 2007). The studies done and published in the above countries including Asia (few only e.g. Burnard et al., 2007a; b) dealt mainly with students other than trainee teachers. Studies of how Brunei student teachers react to stressful situations are still rare and the present investigation seeks to narrow this knowledge gap. Research indicates that stress has three main components (cognitive, affective and behavioral) and that long-term stress can have damaging effects on an individual's physiology and mental health (Bartlett, 1998). Stress has many symptoms or effects on the body, the most severe or profound being: burnout; headaches e.g. migraines; hypertension; ulcers; insomnia; sexual dysfunction; menstrual disorders; and stroke or death (see Ogden, 2000; Kiecolt-Glaser & Glaser, 1986; Burns, 2003; Rathus & Nevid, 1991; Amchin, 1991; Australian Counseling Association, 2007). People (including student teachers) use a variety of coping strategies when in stressful situations. Researchers, in turn, also use a number of procedures to assess the effectiveness of coping strategies for stressful situations such as observations, interviews and self-report questionnaires. The most widely used are self-report instruments such as the Ways of Coping Checklist, WOCC (Folkman & Lazarus, 1980; 1985; 1988) and the Coping Inventory for Stressful Situations, CISS (Endler & Parker, 1990). Coping strategies are ways or means by which stress and its impact may be avoided or reduced. Frydenberg (2008) says coping has many purposes and is a function of the person, situation, and perception of the situation $\{C = f(P + S + PS)\}$. However, the present study only examined the coping strategies embedded in the CISS instrument (namely: task-oriented coping; emotion-oriented coping; and avoidance-oriented coping). According to the CISS technical manual (Endler & Parker, 1990) task-oriented coping occurs when a stressed person engages in a task intended to reduce or remove the stressor (s). On the other hand, emotion-oriented coping takes place when a stressful individual reacts emotionally to stressors e.g. by crying or being sad or getting worried. There two forms of avoidant coping (distraction and social diversion). Both require the affected person to ignore the stressor thereby leaving the problem unresolved. These three forms of coping (task, emotion, and avoidant) closely resemble the three coping strategies (proactive, reactive, and nonproductive) measured by the Coping Scale for Adults (Frydenberg & Lewis, 1997). For example task-oriented coping is in a way like proactive coping in that it is positivistic, multidimensional, and forward-looking or future-oriented. Emotion-oriented coping is, however, somewhat the same as reactive coping. These two forms of coping comparatively deal with past stressful events and seek to address the loss or harm that occurred previously. Emotion-coping strategy is perhaps most effective for people who are high on emotional intelligence. The last form of coping, avoidance, approximates nonproductive coping in that the person afflicted with stress ignores the stressor(s) and does nothing to resolve the causal problem(s). Nonproductive coping is harmful because it leads to dysfunctional life. Most tertiary students have academic stress which correlates positively with nonproductive coping (Frydenberg & Lewis, 2001).

1.3 Findings from selected previous stress coping studies

The use of leisure as a relaxation technique was found to be effective with students in coping with stress (Iwasaki, 2003). However male students benefited more than females from leisure activities in alleviating stress (McKean & Misra, 2000). Other variables or factors that were reported by the same authors to be effective in lowering academic stress are time management and anxiety reduction. McKean and Misra (2000) found that female students had more effective time management behaviors than males and profited more from it. In one study that was done in the Asian context (Philippines), Pabiton (2004) found that the students' coping strategies for stressful academic situations included spending extra time on academic workload, joining study groups, seeking assistance from friends, and consulting with professors. In a more recent study, Pabiton (2007) found that students also sought help / advice from their significant others. This later finding concurs with the results of Chan and Lim's (2006) study in another Asian country (Singapore) who observed that Asian adolescent students (regardless of their gender, age, or nationality) had lower preferences for formal sources of help such as teachers and counselors but tended to prefer informal sources of help such as friends, parents, or family members. However there are big differences. In China, Hsiaowen (2007) found that Chinese female students had more favorable attitudes toward seeking psychological help than their male counterparts. Despite this apparent resistance to seeking professional help, group counseling is one form of psychotherapy that seems to appeal to both secondary and tertiary Asian students. School counselors in Brunei Darussalam use this form of

psychological intervention when providing career and academic counseling (see Yahya, 2005). Individual counseling is, however, still needed for severe, profound, or catastrophic cases involving acute stress, chronic stress, and PTSD. For more diagnostic information on all these, readers are referred to the American Psychiatric Association (2000) and the World Health Organization (2007). In addition, Hsiung (2003) created a website of virtual pamphlets used in counseling individual students by various universities that can be used by students for self-referral and voluntary counseling through bibliotherapy.

1.4 Objectives of the study

The present study sought to determine the extent to which Brunei trainee teachers utilized the three main coping strategies (task-oriented, emotion-oriented, and avoidance-oriented) postulated by Endler and Parker (1990). In addition the study also looked at the differences (by gender and program of study) in the way Brunei student teachers employed these three coping strategies. A further objective of the present study was to establish the relationship between the demographic variables (age, gender, and study program) and the three coping strategies (task-oriented, emotional-oriented and avoidant-oriented).

2. Method

The field survey method was used to investigate the research problem. Like all other research strategies, field surveys have their own limitations. For instance the findings from field surveys may not show cause-and-effect relationships among the variables probed. Despite this and other disadvantages, the rationale for employing this research strategy was two-fold. First, the investigator wanted to use as respondents many trainee teachers taking a selected educational psychology course. Second, the researcher wanted to give on-the-spot assistance to participants who needed help to complete the data collection instrument properly in order to increase the number of usable returns.

2.1 Sample

The target population of the study were student teachers taking an educational psychology course taught by the researcher. The course had 125 students but only 118 were present on the day the instrument was administered. Of these, 29 (25%) were males while 89 (75%) were females. Seventy one (60%) of the students were on the BEd program while 47 (40%) were taking the PGCE course. The age of all the research participants ranged from 18 to 39 (Mean = 24.6; SD = 5.8). There was no statistically significant gender difference in age between males (Mean = 23.2; SD = 4.4) and females (Mean = 25.0; SD = 6.1) when the two-tailed t-test for independent groups was applied [$t(116) = 1.5, p > .05$]. However the BEd Students (Mean 23.5; SD = 6.8) and PGCE students (Mean = 26.3; SD = 3.3) differed significantly in age [$t(116) = -2.66, p < .01$].

2.2 Instrument

Data for the study were collected with the adult version of the Coping Inventory for Stressful Situations (CISS) developed by Endler and Parker (1990). This is a self-report paper and pencil measure of coping containing 48 items. Sixteen (16) items assess task-oriented coping and 16 items measure emotion-oriented coping. The avoidance scale is divided into two subscales: distraction (8 items) and social diversion (5 items). The three remaining items of the avoidance-oriented scale are filler items and therefore not included in the data scoring and analyses. All the three subscales were pretested on 60 similar students in the previous cohort and had good alpha reliability: task-oriented .86; emotion-oriented .79; and avoidance .79. Internal consistency reliability estimated by Cronbach's (1951) alpha is considered acceptable when in the .70 - .80 range (Guilford & Frutchter, 1978; Carmines & Zeller, 1979). The three subscales' construct validity indices assessed by average corrected item-total correlations were: .48 (task-oriented); .41 (emotional-oriented); and .45 (avoidance-oriented). Psychometric theory holds that an item is valid if it correlates positively and highly with total scores of which it does not form a part (Rust & Golombok, 1989). The minimum acceptable average non-spurious item-to-scale correlation as evidence of construct validity is .30 (Gable, 1986; Gogolin & Swartz, 1992). All the three scales are Likert-type instruments each with a 5-points response format (ranging from 1 = not at all, to 5 = very much). Because the trial sample had no problems in completing the instrument in English and the scales had good reliability and validity at the pilot phase, the CISS was not translated into Bahasa Melayu (main language of Brunei) and was used "as is". A section (with three items) for collection of biographic data was added to the three subscales.

2.3 Procedure

Prior to administering the instrument, ethical conditions for participating in the study were verbally explained to the respondents. These included privacy, voluntary participation, anonymity, confidentiality, and protection from both psychological and physical harm. Students participated in the study on the basis of this verbal informed

consent. They were also free to withdraw from the study at any point or stage. In addition the study met the ethical requirements of the University of Brunei Darussalam Research Committee and the Helsinki Declaration on the use of human participants in research.

2.4 Data Analysis

The three subscales (Task, Emotion, and Avoidance) were scored according to instructions in the CISS technical manual (Endler & Parker, 1990). Both raw data and transformed T-scores (Mean = 50; SD = 10) were used in this study. Raw data for each subscale were analyzed by descriptive statistics (mean, mode, median, standard deviation, and skewness) and inferential statistics (correlations and t-tests for independent groups). The higher the test score on anyone of the 3 subscales (task, emotion, and avoidance) the greater the degree of coping activity for the person or group on the corresponding coping dimension. Frequencies and percentages for the prevalence rates were based on T-scores. The two subscales of the avoidance coping orientation (distraction and social diversion) were not scored and analyzed separately in this study because they inter-correlate positively and strongly (see Bouteyre et al., 2007).

3. Results

3.1 Performance on the three subscales

The descriptive statistics in Table 1 provide a brief quantitative outline of the sample's performance on the three tests at the whole-group level. The coefficients of skewness and the standard deviation indices indicate respectively that the individual total raw scores were quite high and varied. Although the participants used all the three strategies, evidence from the three measures of central tendency shows that they relied more on the task-orientation followed by the avoidance strategies. These differences in preference for coping strategies are probed further below by gender and study program.

<Insert Table 1 here>

3.2 Task-oriented coping strategies

Task-oriented transformed coping scores, frequencies and percentages are presented in Table 2 by gender and study program. Thirty eight students (32 % of the overall sample) used the task-oriented coping strategy at above average level ($T > 55$). Of these, 8 (7 %) males, 25 (21 %) females, 19 (16 %) BEd students, and 14 (12 %) PGCE participants used the task-oriented coping strategy from slightly above average ($T = 56-60$) to above average ($T = 61-65$) levels. Only 5 females (4 %, all PGCE students) used the task-oriented coping strategy intensely from much above average ($T = 66-70$) to very much above average ($T > 70$). However, both the gender and program differences on task-oriented coping were statistically insignificant as indicated by the t-statistics in Tables 5-6 below. Overall, the mean scores in Table 1 indicated that the task-oriented coping was the most used strategy ($T > 56$) by most of the participants (38 or 32% of the whole sample). The other participants (80 or 68 % of the whole sample) employed the task-oriented coping strategy at various levels of coping ranging from average ($T = 45-55$) to very much below average ($T = < 30$).

<Insert Table 2 here>

3.3 Emotion-oriented coping strategies

T-scores, frequencies and percentages for emotion-oriented coping strategy are presented in Table 3 by gender and program of study. Although the participants' mean score on the emotion-oriented coping strategy was lower than the mean on the task-oriented strategy, it can be observed from Table 3 that both genders and both program students relied on this strategy to some extent. In all, there were 33 students (28 % of the entire sample) of both genders (12 males and 21 females) whose use of the emotion-oriented coping strategy ranged from slightly above average ($T = 56-60$) to very much above average ($T > 70$). However the number of BEd students (16) whose use of the emotion-oriented coping strategy ranged from slightly above average ($T = 56-60$) to very much above average ($T > 70$) was almost the same as that of PGCE students (17). Again, these gender and program differences on emotion-oriented coping were proved to be statistically insignificant by t-statistics in Tables 5-6 below. Emotion-oriented coping was the third most used strategy (according to mean scores in Table 1) by 33 students or 28 % of all the participants with $T > 56$. The rest of the students (85 or 72 % of all participants) used the emotion-oriented coping strategy at either the average ($T = 45-55$) or below average ($T < 45$) levels.

<Insert Table 3 here>

3.4 Avoidance-oriented coping strategies

The avoidance-oriented coping scores and frequencies are presented in Table 4 by gender and study program. Only 4 females (all PGCE students) used the avoidance-oriented coping strategy at much above average level (T

= 66-70) to very much above average level ($T > 70$). The 27 participants who used the avoidance-oriented coping strategy at slightly above average level ($T = 56-60$) to above average level ($T = 61-65$) included 7 males (6% of the whole sample), 20 females (17%), 16 BEd students (14%), and 15 PGCE students (13%). Again, the t-test statistics yielded no significant differences by gender (Table 5). However there was a significant difference on avoidance-oriented coping strategy by study presented in Table 6 where PGCE students scored much higher than BEd students. In addition, evidence in Table 1 suggests that the avoidance-oriented coping strategy was the second most used strategy ($T = > 56$) by both genders (31 students) and both program students (31). The majority of the participants (87 or 74% of the sample) variously used the avoidance-oriented coping strategy at the average ($T = 45-55$) and below average ($T < 45$) levels.

<Insert Table 4 here>

3.5 Gender differences in participants' coping styles

When grouped by gender, males and females did not differ significantly in the way they were oriented to the three main coping styles (task, emotion and avoidance). T-test analyses in Table 5 gave no significant differences.

<Insert Table 5 here>

3.6 Differences in coping style by study program

Table 6 shows that there was no significant difference in the way students on the two teacher education programs were oriented to two of the three coping strategies (task and emotion). However, PGCE students scored significantly higher than BEd students on the avoidance scale.

<Insert Table 6 here>

3.7 Relationships between independent and dependent variables

The study used three independent variables, IVs (age, gender, and study program) and three dependent variables, DVs (task, emotion, and avoidance). Inter-correlations between these variables are presented in Table 7. Low but statistically significant relationships were obtained on one pair of IVs (age vs. program) and on two pairs of DVs (task vs. emotion and task vs. avoidance). All the IVs were not significantly related to the DVs.

<Insert Table 7 here>

4. Discussion

The study focused on three main coping strategies: task-oriented; emotion-oriented; and avoidance-oriented. These are, however, not the only coping strategies used by Brunei students. Brunei student teachers might be using other outlets for stressful events such as the family, sports, friends, massage, religion, bomos (traditional healers or therapists), hospitals, and so on that were not included in this investigation. Further research therefore needs to be conducted to determine the extent to which they use these other alternative sources of help.

Task-oriented coping style was the most used coping strategy by participants in this study. The majority of students who used the task-oriented coping strategy were females (most of them on the BEd program). Task-oriented in this context refers to purposeful efforts aimed at solving the problem, cognitively restructuring the problem, or attempts to alter the situation (Endler & Parker, 1990). The main emphasis is on the task or planning and on attempts to solve the problem. Stress and many other mental health problems are caused by a variety of factors as noted by Ovunga et al. (2006). Some of these stressful problems occur before a student goes to college or university (Yates et al., 2008). The best way to solve stressful problems is therefore to prevent, if possible, the problems through task-oriented coping than to create or let the problems occur and then try to solve them. Not all problems can be prevented though. In view of the supposed effectiveness of the task coping mechanism, it is unclear why Brunei males in the present study were less interested in using this strategy. In Brunei, incorporating task-oriented coping skills in group counseling of male students might be helpful (Yahya, 2005). Group counseling appears to be strategy that may appeal to these trainee teachers that needs to be incorporated in counseling interventions to help them cope effectively with stressful situations. Both students who scored high and low on the task-oriented coping scale may benefit from counseling therapies that incorporate elements of task-focused solutions to stressful problems. Further qualitative research needs to be conducted to identify possible cultural and environmental factors that cause female BEd student teachers to rely more on the task-oriented coping strategy than the other categories of trainee teachers.

A number of psychological problems that human beings have tend to be emotional in nature. Coping strategies and solutions to such problems are often of an emotional type. This might be the reason why human languages are usually rich in emotional (e.g. feeling) words or vocabulary. Despite this, the emotion-oriented coping was

the least used coping strategy by research participants in this study. Emotion-focused coping refers to emotional reactions that are self-oriented (e.g. blaming the self, getting angry, getting tense, fantasizing, and day dreaming). In some cases the reaction actually increases the stress (e.g. becoming very upset or tense) and this might explain why this coping strategy may be less popular. Further research (both quantitative and qualitative) needs to be conducted to provide insights into reasons why the participants' preference for emotion-oriented coping strategies was fairly high. One of the reasons for preferring this strategy is that it may be easier (though not the best thing to do) to unrealistically. React emotionally to a stressful problem than to address it. Emotions (e.g. crying and sadness) are produced mainly by an interaction of thoughts, feelings and beliefs (TFBs) and are thus difficult to control. This implies that research participants in this study who scored high on the emotion-oriented coping scale might benefit from counseling strategies that utilize cognitive-behavioral therapies to provide insights into why emotions, automatic thoughts, and irrational beliefs are never the best way to solve stressful problems. In their study, Yates et al. (2008) recommended that pastoral care mechanisms in higher education institutions need to be enhanced to identify and support potentially vulnerable students.

The avoidance-oriented coping strategy was the second most used coping method by participants in this study. In the context of this study avoidance-oriented coping refers to activities and cognitive changes aimed at avoiding the stressful situation. This may occur via distracting oneself with other situations or tasks or via social diversion as a means of alleviating stress. The strategy may provide temporary relief from a problem but is ineffective since it leaves the stressor(s) unresolved. The avoidance-oriented coping strategy appealed most to female and older PGCE students with T-scores of 66 and above (Table 4). In addition PGCE students scored significantly higher on the avoidance coping variable than BEd students. These differences might partly be explained by previous research which indicates that Asian students like the avoidance-oriented coping strategy particularly the social diversion component (see Pabiton, 2004, 2007; Chan & Lim, 2006). However, according to Frydenberg & Lewis (2001) nonproductive and avoidance coping are not effective strategies.

Age, gender and program of study were not significantly related to the three coping strategies (task, emotion and avoidance) according to evidence from this study. In view of this, these three demographical variables could not effectively be used in predicting the coping strategies of the research participants. This therefore implies that further research needs to be conducted to identify predictors of coping strategies in the Brunei context. Such information would be useful in planning appropriate counseling interventions. In the present study, the three coping strategies (task, emotion and avoidance) were quite independent of each other (as shown by the inter-scale correlations) and Brunei student teachers appear to have used them distinctively. This finding suggests that adherents to different coping strategies need different therapies when helping them through counseling.

5. Conclusion

The knowledge of how people resolve their problem(s) is essential when counseling and helping individuals or groups to address their concerns. The present study investigated the extent to which Brunei trainee teachers used three coping strategies for stressful situations. Evidence showed that the task-oriented strategy was the most used coping method followed by the avoidance-oriented strategy. The emotion-oriented strategy was the least used. Participants did not differ significantly by either gender or program of study in the way they used the task and emotion coping strategies. However PGCE students scored significantly higher on the avoidance coping scale than their BEd counterparts. The results suggested that participants could benefit from counseling strategies that were non-overlapping but distinctively addressed each coping strategy. Further research was recommended to determine the specific ways in which participants used the task, emotion, and avoidance coping strategies including other alternative coping avenues.

6. Limitations of the study

The exploratory study had some limitations. First, it was based on one small group of trainee teachers who took a course taught by the researcher. As such, the study had low external validity and the results could not be generalized to all the other student teachers at UBD. Second, interviews were not conducted to probe the reasons why students used the preferred coping strategies. Qualitative information might have helped identify other common coping strategies used by students in Brunei and reveal the extent to which their responses in the interview matched, differed from, or added to the data gathered by the CISS survey instrument. In so doing findings from the qualitative component would have enriched interpretations of the results from the quantitative survey. Third, the subscales were not correlated with other scales that measure similar constructs. Criterion-related validity would have demonstrated further the suitability of the subscales for use in the Brunei student teacher context. Despite these limitations the findings are useful in informing and guiding future studies

on this topic in Brunei. The study used the CISS instrument for the first time in Brunei.

References

- Amchin, J. (1991). *Psychiatric Diagnosis: A biopsychosocial approach using DSM-III-R*. Washington, DC: American Psychiatric Press.
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders, 4th edition Text Revision, DSM-IV-TR*. Washington, DC: American Psychiatric Association.
- Australian Counselling Association. (2007). *Mental health information for health professionals and the public: Stress fact sheet No.4*. [Online] Available: www.theaca.net.au. Accessed (20 November 2007).
- Bartlett, D. (1998). *Stress perspectives and processes*. Buckingham, Philadelphia: Open University Press.
- Benton, S.A., Robertson, J.M., Tseng, W.C., Newton, F.B., & Benton, S.L. (2003). Changes in Counseling Center Client Problems Across 13 Years. *Professional Psychology: Research and Practice*, 34, 66-72.
- Bouteyre, E., Maurel, M., & Bernand, J-L. (2007). Daily hassles and depressive symptoms among first year psychology students in France: The role of coping and social support. *Stress and Health*, 23, 93-99.
- Burnard, P., Edward, D., Bennett, K., Rahim, T.A., Tothova, V., Baldacchino, D., Bara, P., & Myteveli, J. (2007b). A Comparative Longitudinal Study of Stress in Student Nurses in Five Countries: Albania, Brunei, the Czech Republic, Malta and Wales. *Nurse Education Today*, 6 June 2007.
- Burnard, P., Rahim, T. A., Hayes, D., & Edwards, D. (2007a). A Descriptive Study of Bruneian Student Nurses' Perceptions of Stress. *Nurse Education Today*, 27(7), 808-818.
- Burns, R. (2003). *Unwind: 10 Ways to manage stress and improve your well-being*. Sydney: Allen and Unwin.
- Carmines, E.G., & Seller, R. A. (1979). *Reliability and validity assessment*. Beverly Hills, CA: Sage.
- Chan, W. M., & Lim, K. M. (2006). Adolescent foreign students' preferred sources of help for academic and interpersonal problems. *Journal of Applied Research in Education*, 10, 87-95.
- Cohen, S., Kamarch, T., & Mermelstein, R. (1983). A Global Measure of Perceived Stress. *Journal of Health and Social Behavior*, 24, 385-396.
- Cohen, S., Kessler, R., & Underwood-Gordon, L. (eds.) (1995). *Measuring stress: A guide for health and social scientists*. New York: Oxford University Press.
- Cronbach, L. J. (1951). Coefficient Alpha and the Internal Structure of Tests. *Psychometrika*. 16, 297-334.
- Endler, N. S., & Parker, J. D. A. (1990). *Coping inventory for stressful situations, CISS*. North Tonawanda, NY: Multi-Health Systems.
- Folkman, S., & Lazarus, R. S. (1980). An analysis of coping in a middle aged study of emotion and community sample. *Journal of Health and Social Behaviour*, 21, 219-239.
- Folkman, S., & Lazarus, R. S. (1988). *Manual for ways of coping questionnaire*. Palo Alto, CA: Consulting Psychologists Press.
- Folkman, S., & Lazarus, R. S. (1985). *The revised ways of coping (online)*. [Online] Available: <http://www.caps.ucsf.edu/capsweb/pdfs/waysofcoping.pdf>. (Accessed 20 December 2003).
- Frydenberg, E. (2008). *Stress and coping in adolescents: Advances in theory, research and practice*. Paper presented at the 3rd International Conference on Child and Adolescent Psychopathology, Roehampton University, London, 14-15 July 2008.
- Frydenberg, E., & Lewis, R. (1997). *Coping scale for adults: Manual*. Melbourne: Australian Council for Educational Research.
- Frydenberg, E., & Lewis, R. (2001). The coping scale for adults: Construct validity and what the scale tells us. *Australian Educational Research Association*, 1 (6). [Online] Available: <http://www.sce/newsltr/2001.htm> Accessed (3 September 2008).
- Gable, R. K. (1986). *Instrument development in the affective domain*. Boston, MA: Kluwer-Nijhoff.
- Gogolin, L., & Swartz, F. (1992). A quantitative and qualitative inquiry into the attitudes toward science of non-science college students. *Journal of Research in Science Teaching*, 29 (5), 487-504.
- Guilford, J. P., & Fruchter, B. (1978). *Fundamental statistics in psychology and education*. (6th ed.) London: McGraw-Hill.

- Hsiaowen, C. (2007). Psychological distress and help-seeking among Taiwanese college students: Role of gender and student status. *British Journal of Guidance and Counselling*, 35 (3), 347-355.
- Hsiung, R. (2003). *The student counseling virtual pamphlet collection*. [Online] Available: <http://counseling.uchicago.edu/pvc> Accessed (15 November 2007).
- Iwasaki, Y. (2003). Roles of leisure in coping with stress among university students: A repeated-assessment field study. *Anxiety, Stress and Coping*, 16 (1), 31-57.
- Jenkins, S. C., Gibbs, T. P., & Szymanski, S. R. (1990). *A pocket reference for psychiatrists*. Washington, D.C.: American Psychiatrist Press.
- Kiecolt-Glaser, J. K., & Glaser, R. (1986). Psychological influences on immunity. *Psychosomatics*, 27, 621-624.
- McKean, M., & Misra, R. (2000). *College students' academic stress and its relation to their anxiety, time management, and leisure satisfaction*. [Online] Available: file:\\c:\users\owner\documents\stress\college students academic stress. Accessed (5 November 2007).
- Ogden, J. (2000). *Health psychology: A textbook*. Buckingham, Philadelphia: Open University Press.
- Ovunga, E., Boardman, J., & Wasserman, D. (2006). Undergraduate student mental health at Makerere University, Uganda. *World Psychiatry*, 5 (1), 51-52.
- Pabiton, C. P. (2004). Concerns, issues and coping strategies of international students in selected private universities in the Philippines. *Philippine Journal of Counseling Centres*, 6, 22-31.
- Pabiton, C. P. (2007). Problems and Coping Strategies of University Students: Implication for Counseling Centres. *Philippine Journal of Counseling Centres*, 6, 78-95.
- Rathus, S. A., & Nevid, J. S. (1991). *Abnormal psychology*. Englewood Cliffs, NJ: Prentice Hall.
- Rust, J., & Golombok, S. (1989). *Modern psychometrics: The science of psychological assessment*. London: Routledge.
- Selye, H. (1974). *The stress of life*. New York: McGraw-Hill.
- Student Support Services (2007). *Managing stress*. [Online] Available: www.st-andrews.ac.uk/services/sss Accessed 920 November 2007).
- Tassie, S., & Whelan, T. (2007). Mainland Chinese students in Australia: The potential for stress-related growth. *Journal of Psychology in Chinese Societies*, 8 (1), 71-90.
- Taylor, R. L. (1990). *Distinguishing psychological from organic disorders: Screening psychological masquerade*. New York: Springer Publishing Company.
- Werner, H. R., Bates, G. W., Bell, R. C., Murdoch, P., & Robinson, R. (1992). Critical incident stress in Victoria state emergency service volunteers: Characteristics of critical incidents, common stress responses, and coping methods. *Australian Psychologist*, 27 (3), 159-165.
- World Health Organisation. (2007). *International classification of diseases Tenth Edition Text Revision Clinical Modification, ICD-10-CM*. Geneva: United Nations.
- Yahya, R. A. (2005). Counselling camp at Rimba secondary school. *Borneo Bulletin*, Thursday 9 June 2005, page 6.
- Yates, J., James, D., & Aston, I. (2008). Pre-existing mental health problems in medical students: a retrospective survey. *Medical Teacher*, 30 (3), 319-321.

Table 1. Descriptive statistics for coping strategies (N = 118)

Statistic	Task	Emotion	Avoidance
Mean	61.64	46.86	53.47
Mode	62.00	41.00	49.00
Median	62.00	48.00	54.00
Standard deviation	7.95	8.79	9.60
Skewness	-0.85	-0.17	-0.14

Table 2. Frequency distributions of task-oriented coping scores (N = 118)

T-scores	Males (n = 29)	Females (n = 89)	BEd (n = 71)	PGCE (n = 47)
Above 70	0 (0.0) *	1 (1.1)	1 (1.4)	0 (0.0)
66 – 70	0 (0.0)	4 (4.5)	4 (5.6)	0 (0.0)
61 – 65	2 (6.9)	12 (13.5)	7 (9.9)	7 (14.9)
56 – 60	6 (20.7)	13 (14.6)	12 (16.9)	7 (14.9)
45 – 55	14 (48.3)	40 (44.9)	30 (42.3)	24 (51.0)
40 – 44	2 (6.9)	6 (6.7)	6 (8.4)	2 (4.3)
35 – 39	4 (13.8)	8 (9.0)	8 (11.3)	4 (8.5)
30 – 34	0 (0.0)	3 (3.4)	1 (1.4)	2 (4.3)
Below 30	1 (3.4)	2 (2.3)	2 (2.8)	1 (2.1)

* Frequency (percent), Note: BEd = Bachelor of Education, PGCE = Postgraduate Certificate in Education

Table 3. Frequency distributions of emotion-oriented coping scores (N = 118)

T-scores	Males (n = 29)	Females (n = 89)	BEd (n = 71)	PGCE (n = 47)
Above 70	2 (6.9) *	2 (2.3)	2 (2.8)	2 (4.3)
66 – 70	2 (6.9)	1 (1.1)	1 (1.4)	2 (4.3)
61 – 65	2 (6.9)	6 (6.7)	4 (5.6)	4 (8.5)
56 – 60	6 (20.7)	12 (13.5)	9 (12.7)	9 (19.2)
45 – 55	5 (17.2)	41 (46.0)	29 (40.9)	17 (36.2)
40 – 44	8 (27.6)	11 (12.4)	13 (18.3)	6 (12.8)
35 – 39	1 (3.5)	10 (11.2)	8 (11.3)	3 (6.3)
30 – 34	3 (10.3)	4 (4.5)	4 (5.6)	3 (6.3)
Below 30	0 (0.0)	2 (2.3)	1 (1.4)	1 (2.1)

* Frequency (percent), Note: BEd = Bachelor of Education, PGCE = Postgraduate Certificate in Education

Table 4. Frequency distributions of avoidance-oriented scores (N = 118)

T-scores	Males (n = 29)	Females (n = 89)	BEd (n = 71)	PGCE (n = 47)
Above 70	0 (0.0) *	2 (2.3)	0 (0.0)	2 (4.3)
66 – 70	0 (0.0)	2 (2.3)	0 (0.0)	2 (4.3)
61 – 65	5 (17.2)	4 (4.4)	5 (7.1)	4 (8.5)
56 – 60	2 (6.8)	16 (18.0)	11 (15.5)	7 (14.9)
45 – 55	15 (51.7)	40 (44.9)	35 (49.3)	20 (42.6)
40 – 44	4 (13.8)	13 (14.6)	10 (14.1)	7 (14.9)
35 – 39	1 (3.5)	6 (6.7)	4 (5.6)	3 (6.3)
30 – 34	1 (3.5)	3 (3.4)	3 (4.2)	1 (2.1)
Below 30	1 (3.5)	3 (3.4)	3 (4.2)	1 (2.1)

* Frequency (percent), Note: BEd = Bachelor of Education, PGCE = Postgraduate Certificate in Education

Table 5. Differences in coping styles by gender (N = 118)

Style	Gender	n	M (SD)	t(116)	P(2-tailed)	ANCOVA F	P-value
Task	Males	29	60.69 (7.84)	0.74	0.463	0.161	0.689
	Females	89	61.94 (8.01)				
Emotion	Males	29	47.21 (9.70)	- 0.24	0.810	2.275	0.134
	Females	89	46.75 (8.53)				
Avoidance	Males	29	53.59 (9.37)	- 0.07	0.943	0.000	0.999
	Females	89	53.44 (9.73)				

Note: M = Mean, SD = Standard deviation

Table 6. Differences in coping styles by program (N = 118)

Style	Program	n	M (SD)	t(116)	P(2-tailed)	ANCOVA F	P-value
Task	BEd	71	60.76 (8.53)	- 1.48	0.143	0.955	0.331
	PGCE	47	62.96 (6.87)				
Emotion	BEd	71	46.34 (8.33)	- 0.79	0.426	0.389	0.534
	PGCE	47	47.66 (9.49)				
Avoidance	BEd	71	52.08 (8.87)	- 1.96	0.050*	1.120	0.292
	PGCE	47	55.57 (10.35)				

*p < .05, Note: M = Mean, SD = Standard deviation, BEd = Batchelor of Education, PGCE = Postgraduate Certificate in Education

Table 7. Pearson correlations between independent and dependent variables (N = 118)

Variables	1	2	3	4	5	6
1. Age (IV)	1					
2. Gender (IV)	-.14	1				
3. Program (IV)	.24**	.10	1			
4. Task (DV)	.17	-.06	.15	1		
5. Emotion (DV)	-.03	-.01	.04	-.24**	1	
6. Avoidance (DV)	.04	-.01	.17	-.22*	.18	1
Mean	24.59	-	-	61.64	46.86	53.47
Standard deviation	5.80	-	-	7.95	8.79	9.60

* p < .05 (2-tailed); ** p < .01 (2-tailed)