

The Avoidance coping Strategy, Stress, and Job Satisfaction in Thailand's Hospital Nurses

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ABSTRACT

Stress is an important issue in the nursing profession and it appears to be related to how nurses cope with occupational stress. Data were based on a sample of 200 Thai nurses working at 14 hospitals in Bangkok and three provinces along the eastern seaboard. The findings showed that sources of stress for Thailand's nurses were similar to their Western colleagues: workload, organizational support, dealing with patients, and home / work conflicts. In addition, nurses in Thailand utilized problem solving, social support, avoidance, and relaxation / meditation as methods of coping with stress. Consistently, multiple regression analyses revealed significant relationships between the avoidance coping strategy and the amount of nursing stress. Employing the avoidance coping strategy as well as occupational stress were also negatively correlated with job satisfaction. Although nurses in Thailand employ a number of methods of a coping, there is one which clearly predicts negative job satisfaction and level of occupational stress, that is nurses who use avoidance as a strategy for coping with stress. The main recommendation arising from this study is that hospital administrators learn to recognize staff who are avoiding stress and consider stress management programs so that appropriate coping strategies would be adopted.

INTRODUCTION

Individuals learn various ways of coping or adapting to stressful situations. Stress can be defined as an imbalance between the perceived demands of the situation and the individuals' perceived resources to cope (Lazarus, 1966). Coping refers to the cognitive and behavioral efforts to reduce or tolerate experienced levels of stress, irrespective of whether the coping strategies are successful (Lazarus & Folkman, 1984). The present study was designed to analyze the relationship between four coping strategies, occupational stress, and job satisfaction.

Studies have identified nursing as a stressful occupation and have frequently attempted to describe different kinds of coping strategies in response to specific types of stressful situations (Bailey & Clarke, 1989; Tyler & Cushway, 1992). By focusing on the instrument's psychometric properties, the Coping Strategy Indicator produced a set of coping strategies which have been shown to be more independent than other coping measures reporting such statistics (Amirkhan, 1990). Although not exhaustive of coping possibilities, the most commonly reported coping responses to stress fall into three strategies: Problem Solving, Social Support, and Avoidance (Amirkhan, 1990). In general, coping strategies which approach the situation such as problem solving and social

support are found to be more successful in alleviating the effects of stress than avoidance strategies (Dewe, Cox, & Ferguson, 1993). Recently, a study of Chinese nurses in Taiwan who received relaxation / meditation training found significant reductions in work-related stress (Tsai & Crockett, 1993) and other research suggests that the practice of meditation techniques improves job satisfaction (Uelmonte, 1984). It is hypothesized that Thai nurses living in an indigenous Buddhist culture (Somboon, 1982) utilize meditative / relaxation techniques as a coping strategy to deal with occupational stress. Although scores on these four coping strategies measures were designed to be independent, they are not mutually exclusive; that is, nurses can not simply be characterized as problem solvers or avoiders because nearly all people use some components from each coping strategy.

The most widely cited model of coping (Lazarus & Folkman, 1984) assumes that individuals have a repertoire of coping options available to them from which they select a particular style of coping to deal with a specific source of stress. Studies of stress in nurses have attempted to identify the sources of stress and several common factors have been derived from the data collected from a nationwide survey of New Zealand nurses

(Dewe, 1987), from nurses within the U.K. (Hingley & Cooper, 1986), the U.S.A. (Jacobson & McGrath, 1983) , and Taiwan (Tsai, 1993). Although there is not yet general agreement on the number of factors, the Nurse Stress Index has been used extensively in research and has identified five major sources of job stress amongst nurses. Workload, Organizational Support, Dealing with Patients, Confidence and Competence in Role, and Home / Work Conflict (Cooper & Mitchell, 1990; Harris, 1989; Tyler & Cushway, 1992). Empirical studies employing multiple regression analyses report that nurses who reported high levels of workload used more problem solving strategies, nurses who were stressed by lack of confidence and competence in their role used social support, and avoidance coping strategies were used more frequently when nurses had conflicts with staff or felt a lack of organizational support and involvement (Tyler & Cushway, 1992)

The research to be discussed below was designed to identify sources of stress among Thai nurses and to begin to understand how these stressors influence job satisfaction as well as coping strategies. In 1960, Menzies pointed out that workers in caring professions are faced with a number of sources of stress and the level of occupational stress is a significant factor in determining job satisfaction. Research during this decade used the Minnesota Satisfaction Questionnaire and

divided job satisfaction into intrinsic and extrinsic factors (Weiss, Dawis, England, & Lofquist, 1967). The intrinsic subscale includes factors such as personal independence, ability utilization, and social status of the job, whereas the extrinsic subscale includes factors such as working conditions, monetary compensation, and chances for advancement. Current research supports the validity of the Minnesota Satisfaction Questionnaire as a measure of job satisfaction consistently related to occupational stress (Decker & Borgen, 1993). Overall, occupational stress is hypothesized to be negatively correlated with job satisfaction. In particular, sources of stress related to personal variables like confidence and competence in role and home/work conflicts should be correlated with intrinsic satisfaction, whereas workload and organizational support and involvement should be correlated with extrinsic job satisfaction

In summary, the first hypothesis predicts a positive correlation between stress and coping because nurses who report higher levels of stress will more frequently attempt to manage the perceived demands. Problem solving strategies will be more frequently associated with workload demands, social support with lack of confidence and competence in nursing role, and avoidance coping strategies with lack of organizational support and involvement. The second hypothesis

predicts a negative correlation between stress and job satisfaction. As the levels of mental and physical demands increase, stress will have a negative impact on job satisfaction. Finally, the third hypothesis predicts a negative correlation between coping and job

satisfaction. To the degree that cognitive and behavioral coping efforts are symptoms of perceived demands taxing the resources of nurses, less coping will be associated with higher levels of job satisfaction.

METHOD

Research Setting

The present study was conducted in seven hospitals in Bangkok and in seven hospitals in three provinces along the eastern seaboard of Thailand. Bangkok is a major metropolitan center in southeast Asia and has a population in excess of 5.6 million. The eastern seaboard of Thailand is a developing industrial and tourist area and has 948 thousand in Chonburi, 464 thousand in Chachergsoa, and 597 thousand in Rayong

province. Of the seven hospitals in Bangkok and seven in the eastern regions, three were public hospitals and ranged from 500 to 1200 beds. The four private hospitals in Bangkok and forty questionnaires were distributed to Thai nurses. Of these 120 were sampled from Bangkok and 120 sampled from the eastern provinces. Within each region, 60 nurses were sampled from public and 60 were sampled from private hospitals.

Measures

Nurse Stress Index : This index consists of 30 items and nurses were asked to rate the potential stressor on a 6 point scale with 0 = no pressure, 1 = very little pressure, 2 = small pressure, 3 = moderate pressure, 4 = high pressure, and 5 = extreme pressure. With written permission, the above scale was substituted for Harris' (1989) original five point rating scale with 1 = no pressure and 5 = extreme pressure. The index

has been subdivided into six subscales assessing five major sources of occupational stress.

1. Managing Workload-these two scales measure pressure due to feelings of insufficient time and resources to complete nursing tasks.

2. Organizational Support and Involvement-this scale assesses the pressures nurses perceive due to lack of involvement

in planning and decision making at work.

3. Dealing with Patients and Relatives- this scale is concerned with the nurses' relationship with patients and the nurses' feelings about death and dying.

4. Home and Work Conflicts- this scale measures the stresses due to the conflicting demands of work and home.

5. Confidence and competence in Role- this scale measures the difficulties experienced by nurses with the role that they are required to fill, including coping with change and responsibility

Coping Strategy Indicator This indicator consists of 15 items and nurses were asked to rate how frequently they used each coping option rated on a 6 point scale with 0 = never, 1 = infrequently, 2 = sometimes, 3 = frequently, 4 = very frequently, and 5 = all the time. With written permission, the above scale was substituted for Amirkhan's (1990) original three point scale with 0 = not at all, 1 = a little, and 3 = a lot. The indicator has been subdivided into three subscales assessing three types of coping strategies

1. Problem Solving - this strategy emphasizes defining goals, planning and searching for alternative solutions.

2. Social Support- this strategy reflects a tendency to turn to others for advice, communication, and comfort

3. Avoidance- this strategy involves either physical or psychological withdrawal

through distraction or fantasy.

Relaxation / Meditation Strategy : This new coping strategy measure began with 11 items and asked nurses to rate how frequently they used these coping options on a 6 point scale which is the same scale as the Coping Strategy Indicator. The items were derived from relaxation items in existing measures (Lazarus & Folkman, 1984, Tyson & Sobschak, 1994), Buddhist literature (Claxton, 1987, Tyson, 1982, 1987, Watts, 1962) and suggestions from nurses in Thailand. Four questions assessed how frequently nurses utilized relaxation or meditation techniques. Three questions were related to focusing on the present situation instead of dwelling on the past. One question asked nurses how frequently they took time to consider that birth, old age, sickness, and death are natural. Another question assessed whether nurses used crying to release tension and two questions focused on the tendency to restrain or suppress emotions

Job Satisfaction This measure includes 20 items and nurses were asked to rate how they feel about their present job on a 5 point scale ranging from -2 = very dissatisfied to 0 = neutral to + 2 = very satisfied. The short form of the Minnesota Satisfaction Questionnaire (Weiss, Dawis, England, & Lofquist, 1967) can be divided into intrinsic and extrinsic satisfaction subscales. The 12 item intrinsic subscale includes factors such

as "the chance to make use of my abilities" and "the feeling of accomplishment I get from my job." The 6 item extrinsic subscale addresses individual satisfaction with factors such as pay, company policies, and management. The final general satisfaction scores were computed by averaging across all 20 items in the scale.

Translation : The questionnaire items were translated from English to Thai by the

first author (R.P.) and independently translated back into English by nurses. The English translations were reviewed by the second author (P.T.) and questionable items were retranslated. This iterative back translation process was utilized until there was agreement by both authors. The complete questionnaire was then submitted to five hospital staff nurses for item by item comments concerning item ambiguity and relevance.

RESULTS

Demographic Data

Of the 240 questionnaires distributed to nurses, 209 were returned for subsequent analysis. The response rate of 87 percent was considered excellent for studies in the occupational stress field (Kasl & Cooper, 1987). Of the questionnaires which were returned and complete, 97 percent were female and 99 percent were professional nurses. The results to be reported are based on the female professional nurses to avoid confounding the female sample with the 6 male respondents and 3 technical nurses who have two years of training. The 200 female respondents had a mean age of 32.5 years (SD = 7.3). One hundred percent described their nationality as Thai and described their religion as Buddhist (98.5%) or Christian (1.5%). The sample was 50.5% single, 44% married, 2.5% divorced, 1.5%

separated, and 1% widowed. The nurses' monthly income converted to U.S. currency (\$1 U.S. = 25 Bath) was 14 percent between \$200 to \$320, 22.5% to \$400, 48.5% to \$800, and 15% over \$800 dollars per month. The average number of people living in the household was 3.79 (SD = 1.7) and 0.65 children (SD = 0.98) of which 62% had no children. The monthly household income was 5 percent between \$200 to \$320, 10.5% to \$400, 22.5% to \$800, 15% to \$1,200, 24% to \$2,000, and 14.5% over \$2,000 per month. Fifty eight percent of nurses rated their household income as greater than expenses, 27% equal to expenses, and 4% income less than their household expenses.

Of the sample of professional nurses who graduated with a B.S. from a four year

University program. 3% had additional training for an upper B.S. degree. The majority (56.5%) were hospital staff nurses, 23% head nurses, 6.5% in charge nurses, and 1% supervisors. The sample included a wide range of hospital wards: E.R. (12%), I.C.U. (11.5%), O.R. (9.5%), L.R. (2%), private wards (12%), medical (9%), surgical (8%),

obstetric (6.5%), paediatric (3.5%), orthopaedic (2.5%), and 22.5% other wards. The average respondent in this sample had been working 10 years as a nurse, 5 years in their present position, 47 hours per week, and 42 percent rotating shift, 36.5% day shift, 0.5% night shift, and 21% varied shift work.

Reliabilities and Means

Internal reliability coefficients (Cronbach's alpha) were calculated for each of the Nurse Stress Index scales and Minnesota Satisfaction Questionnaire scales. As can be seen from Table 1 all of the scales reached the generally accepted criterion of scale internal reliability ($\alpha > 0.6$, Cooper & Mitchell, 1990). The Nurse Stress Index asked nurses to rate the potential stressful situation on a 6 point scale that ranged from 0 (no pressure) to 5 (extreme pressure) and the means are shown in Table 1. As previously found with nurses, workload and organizational support and involvement were major sources of perceived stress, although on the average most Thai nurses rate stress between 1 (very little) and 3 (moderate pressure). Also consistent with previous studies, home and work conflict had the lowest mean and most Thai nurses rate this source between 0 (no pressure) and 2 (small pressure). Sample

demographics may have contributed to the low level of home and work conflict since 50.5% of the Thai nurses were single and 62% had no children living in the household. The Minnesota Satisfaction Questionnaire asked nurses to rate how they felt about their job on a 5 point scale that ranged from -2 (very dissatisfied) to 0 (neutral) to +2 (very satisfied). The means in Table 1 show that Thailand's hospital nurses on the average are satisfied with their job and the majority rate job satisfaction between 0 (neutral) and +1 (satisfied), although using a correlated ($r = 0.638$) t - test found that the mean for intrinsic ($M = +.80$) job satisfaction is significantly ($t = 13.17, p < .001$) higher than extrinsic ($M = +.38$) job satisfaction. On the average, 32% of Thai nurses rated their satisfaction with intrinsic factors above +1, whereas only 14% were very satisfied with extrinsic factors.

Table 1 Reliability coefficients (Cronbach's alpha) and means for the nurse stress index and measures of job satisfaction.

	Alpha	#Items	Mean	Standard Deviation
NSI Nurse Stress Index	.9210	30	1.789	0.703
W1 Managing Workload 1	.7360	5	2.050	0.877
W2 Managing Workload 2	.6943	5	2.030	0.844
OS Organizational Support and Involvement	.7151	5	2.097	0.926
DP Dealing with Patients and Relatives	.6999	5	1.809	0.906
HW Home and Work Conflicts	.7288	5	1.080	0.821
CR Confidence and Competence in Role	.6698	5	1.755	0.811
JS Job Satisfaction	.8740	20	+0.522	0.536
IS Intrinsic Job Satisfaction	.8105	12	+0.801	0.435
ES Extrinsic Job Satisfaction	.7261	6	-0.384	0.574

Stress and Job Satisfaction

Since reported stress is regarded as a precursor of outcome variables such as job satisfaction, it was hypothesized that stress would have a negative impact on nurses' job satisfaction. Examining the correlation matrix presented in Table 2 confirms the hypothesis that higher levels of occupational stress are significantly correlated with lower levels of job satisfaction. In addition, it was hypothesized that specific types of stress, e.g. organizational support and involvement, have differential effects on an individual's

degree of extrinsic and intrinsic satisfaction. Confirming Cooper & Michell's (1990) findings, organizational support and involvement was the strongest predictor of nurses's extrinsic satisfaction such as factors like management decisions and hospital policies. Although dealing with patients and relatives is a major source of nursing stress, it contributed the least to job satisfaction. As expected, nurses in Thailand reported a negative relationship between occupational stress and satisfaction on the job.

Table 2 Significant negative correlations between sources of nursing stress and measures of job satisfaction

	Job Satisfaction JS	Intrinsic Satisfaction IS	Extrinsic Satisfaction ES
NSI Nurse Stress Index	.376 ****	-.353 ****	-.357 ****
W1 Managing Workload 1	-.301 ****	-.283 ****	-.233 ***
W2 Managing Workload 2	-.330 ****	-.331 ****	-.335 ****
OS Organizational Support and Involvement	-.404 ****	-.302 ****	-.450 ****
DP Dealing with Patients and Relatives	-.144 *	-.208 **	-.165 *
HW Home and Work Conflicts	-.269 ***	-.284 ****	-.225 ***
CR Confidence and Competence in Role	-.297 ****	-.311 ****	-.323 ****

* $r > .12 = p < .05$ ** $r > .17 = p < .01$ *** $r > .22 = p < .001$ **** $r > .27 = p < .0001$

Avoidance Coping Strategy

In general coping strategies were hypothesized to be positively correlated with stress because nurses who report higher levels of stress make more frequent use coping strategies. Thai nurses were asked to rate how frequently they used problem solving, social support, avoidance and relaxation as coping strategies and the avoidance coping strategy was the best predictor of every measure of stress using a stepwise multiple regression analysis. The correlations between Amirkham's (1990) avoidance coping strategy, Nurse Stress Index, and Job Satisfaction subscales are shown in Table 3. Multiple

regression analyses on every source of nursing stress and every measure of job satisfaction showed that the avoidance coping strategy had higher correlations than problem solving, social support, or relaxation coping strategy. An items analysis within Amirkham's (1990) five avoidance strategy items revealed that avoiding people (#13 and #21) and cognitive escape (#18 "identified with characters in novels or movies") contributed the most to this scale's predictive power. Although item #13 with a mean of 3.2 was the most frequently used avoidance scale item "daydreaming about better times" was

not significantly correlated with any stress or nursing stress, these avoidance items were job satisfaction measure. The new avoidance not correlated with job satisfaction. The items suggested by nurses in Thailand reported frequency of use of alcohol and which focused on trying to be patient and drugs (#27) by Thai nurses as an avoidance restrained (#12) by suppressing emotions or coping strategy was extremely small and anger (#25) were frequently used. Although only correlated with home/work conflicts and significantly correlated with measures of perceived competence in their nursing role.

Table 3 Avoidance coping strategy scale items correlated with the nursing stress index subscales and job satisfaction subscales.

Avoidance Scale Items	Nursing Stress Index Scale Items & Job Satisfaction Scale Items									
	NSI	W1	W2	OS	DP	HW	CR	JS	IS	ES
6. Daydreamed about better times?	---	---	---	---	---	---	---	---	---	---
11. Watched television more than usual?	*	---	---	---	**	---	*	**	**	-
12. Tried to be patient and restrained?	**	***	*	*	**	*	***	---	---	---
13. Avoided being with people in general?	***	**	**	**	**	***	****	****	****	***
18. Identified with characters in novels or movies?	****	****	****	**	**	**	****	**	**	*
21. Wished that people would just leave me alone?	****	****	****	***	****	****	****	***	**	***
25. Suppressed my emotions or anger?	**	*	---	*	***	---	**	---	---	---
27. Used alcohol, drugs, or tranquilizers to forget my problems?	**	---	---	---	---	*	*	---	---	---
Avoidance Strategy = #6+#11+#13+#18+#21	.35	.28	.29	.24	.31	.30	.33	-.29	-.26	-.24
	NSI	W1	W2	OS	DP	HW	CR	JS	IS	ES

*r > .12 = p < .05 **r > .17 = p < .01 ***r > .22 = p < .001 ****r > .27 = p < .0001

DISCUSSION

The sources of stress reported by nurses in Thailand were in accord with other research employing the Nurse Stress Index (Cooper & Mitchell, 1990; Harris, 1989; Tyler & Cushway, 1992) and research with other measures of occupational stress (Dewe, 1987; Hingley & Cooper, 1986; Tyler, Carroll, & Cunningham, 1991). Similar to previous research (Tyler & Cushway, 1992), organizational support and workload were the primary sources of stress among Thai nurses and home / work conflict produced the lowest level of nursing stress.

In general, nurses in Thailand were satisfied with their occupation, but the levels of job satisfaction with intrinsic factors such as personal accomplishment, social status, and utilization of ability were significantly higher than extrinsic factors such as working conditions, management, and monetary compensation. As expected from previous research (Baglioni, Cooper, & Hingley, 1990), the present study confirmed that stress has a negative impact on job satisfaction. All of the sources of nursing stress were significantly correlated with job satisfaction, however Thai nurses felt that dealing with patients and relatives only contributed marginally to job satisfaction. On the other hand, organizational support and involvement was highly correlated ($r = -.45$, $p < .001$) with lower levels of external

job satisfaction which replicates previous research (Cooper & Mitchell, 1990). The multidimensional quality of the negative relationship between job satisfaction and stressful encounters would seem to suggest that coping strategies are an important mechanism through which a positive sense of job satisfaction can be maintained in the face of adverse conditions (Lazarus & Folkman, 1984)

The question is whether coping strategies help to reduce stress or the detrimental outcomes of stress such as reduced job satisfaction. Investigators recognize that low or negligible correlations between coping and a kind of stress may mean that the coping strategy is a moderator or buffer of the stress effects. In the case of problem solving, for example, the hypothesized positive relationship between the amount of stress and coping is cancelled out by the beneficial effects of this coping strategy. In general, empirical findings on the effectiveness of coping are mixed, with researchers suggesting that at best the effects of coping may be neutral and at worst, that to lower stress individuals should avoid maladaptive coping strategies (Dewes, Cox, & Ferguson, 1993). In the area of occupational stress, coping appears to be least effective with impersonal problems at work and individuals may not be willing to use problem

solving coping strategies because they simply add to the stress (Leana & Feldman, 1990).

In the present study four coping strategies, problem solving, social support, relaxation, and avoidance were measured to predict the level of stress associated with six sources of stress which affect nurses. The hypothesis suggested that nurses use a variety of coping strategies which can be molded to fit the demands of the specific stressful situation (Lazarus, 1993). For example, problem solving may be an effective strategy when the situation is controllable, but avoidance is better if the situation is uncontrollable. For nurses in Thailand, the overwhelming finding of every multiple regression analysis supports the idea that avoidance is consistently used in every situation related to occupational stress and consistently correlated to low job satisfaction. Of the four coping strategies measured in this study, the avoidance strategy was the most significant predictor of the nurse stress index, managing workload, organizational support and involvement, dealing with patients, confidence and competence in role, home and work conflicts as well as general, intrinsic, and extrinsic job satisfaction. The potential costs of nurses using avoidance over a long period of time are significant (Roth & Cohen, 1986). First, the avoidance strategy can interfere with nurses taking appropriate action when confronted with an emergency such as

ignoring warning signals and information about the threatening situation. The avoidance strategy can also result in emotional numbness, unwanted intrusions, and sporadic disruptive avoidance behaviors to keep threatening thoughts and feeling out of awareness. For example, in the service of keeping threatening material out of awareness an individual may suppress her emotions, avoid going to work, or severely restrict her activities to avoid people associated with the stressful situation. Finally, a lack of awareness of the relationship between physiological symptoms and sources of stress can be costly for the nurse's physical and mental health (Jamal, 1984)

At this time, one tentative conclusion may be drawn from the study concerning the avoidance coping strategy-avoidant behaviors are reliable symptoms of occupational stress and dissatisfaction among hospital nurses in Thailand. Although the avoidance strategy is the best predictor, it is the most difficult coping strategy for supervisors and colleagues to diagnosis. An item analysis of the avoidance strategy revealed that nurses who are experiencing high levels of stress and dissatisfaction tend to "*avoid being with people...*" and "*wished that people would just leave me alone*". If this avoidant behavior predominates, it becomes difficult for organizations, friends and family to give nurses social support. The personal significance

of the avoidance coping strategy was revealed by the coping items suggested by Thai nurses. The nurse's physical and mental health are placed at risk when a nurse reports that she frequently "suppressed...emotions or anger" and "tried to be patient and restrained". The results of this study suggest that hospitals consider stress management programs similar

to the meditative/relaxation training found to reduce stress in hospital nurses in Taiwan (Tsai & Crockett, 1993). Specifically, the program must focus on developing psychological skills that can be substituted for the avoidance coping strategy and the stress management program must be properly tailored to nurses living in a Thai Buddhist culture.

REFERENCES

- Amirkhan, J. H. (1990). A factor analytically derived measure of coping : The coping strategy indicator. *Journal of Personality and Social Psychology*, 59, 1066-1074.
- Bailey, R., & Clarke, M (1989). *Stress and coping in nursing*. London : chapman and Hall.
- Baglioni, A. J., Cooper, C. L. & Hingley, P. (1990). Job stress, mental health and job satisfaction among UK senior nurses. *Stress Medicine*, 6, 9-20.
- Claxton, G. (1987). Meditation in Buddhist psychology In M.A West (Ed.), *The psychology of meditation* (pp. 23-38) Oxford, England Oxford University Press.
- Cooper, C. L., & Mitchell, S. (1990). Nurses under stress : A reliability and validity study of the NSI. *Stress Medicine*, 6, 31-24.
- Decker, P. J., & Borgen, F. H (1993). Dimensions of work appraisal : Stress, strain, coping, job satisfaction, and negative affectivity *Journal of Counseling Psychology*, 40, 470 -478.
- Dewe, P. J. (1987). Identifying the causes of nurses' stress : A survey of New Zealand nurses. *Work and Stress*, 1, 15-24.
- Dewe, P., Cox, T., & Ferguson, E (1993). Individual strategies for coping with stress at work : A review. *Work & Stress*, 7, 5-15.
- Harris, P. E. (1989). The nurse stress Index. *Work & Stress*, 3, 335-346.
- Hingley, P., & Cooper, C. L. (1986). *Stress and the nurse manager*. Chichester . Wiley.
- Jacobson, S. F., & McGrath, H. M. (1983). *Nurses under stress*. New York :Wiley.
- Jamal, M (1984). Job stress and job performance controversy : An empirical assessment. *Organizational Behavior and Human Performance*, 33, 1-21.
- Kasl, S., & Cooper, C. L (1987). *Stress and health . Issues in research methodology*. Chichester Wiley
- Lazarus, R. S. (1966). *Psychological stress and the coping process*. New York : McGraw-Hill.

- Lazarus, R. S. (1991). Progress on a cognitive-motivational-relational theory of emotion. *American Psychologist*, 46, 819-834.
- Lazarus, R. S. (1993). Why we should think of stress as a subset of emotion. In : L. Goldberger & S. Breznitz (Eds.). *Handbook of stress : Theoretical and clinical aspects* (pp. 21-39). Toronto : Maxwell macmillan Canada.
- Lazarus, R. S., & Foldman, S. (1984). *Stress, appraisal and coping*. New York : Springer.
- Leana, C. R., & Feldman, D. C. (1990). Individual responses to job loss : Empirical findings from two field studies. *Human Relations*, 11, 1155-1181.
- Menzies, I. E. (1960). Nurses under stress : A social system functioning as a defence against anxiety. *International Nursing Review*, 7, 9 - 16.
- Roth, S., & Cohen, J. (1986). Approach, avoidance, and coping with stress. *American Psychologist*, 41, 813 - 819.
- Somboon Suksamran (1982). *Buddhism and politics in Thailand*. Singapore : Institute of southeast Asian Studies.
- Tsai, S - L. (1993). Chinese nurse stress in Taiwan, Republic of China. *Issues in Mental Health Nursing*, 14, 275 - 285.
- Tsai, S - L., & Crockett, M. S. (1993). Effects of relaxation training, combining imagery and meditation on the stress level of Chinese nurses working in modern hospitals in Taiwan. *Issues in Mental Health Nursing*, 14, 51-66.
- Tyler, P., & Cushway, D. (1992). Stress, coping and mental well-being in hospital nurses. *Stress Medicine*, 8, 91-98.
- Tyler, P., Carroll, D., & Cunningham, S. E. (1991). Stress and well-being in nurses : A comparison of the public and private sectors. *International Journal of Nursing Studies*, 28, 125-130.
- Tyson, P. D. (1982). A general systems theory approach to consciousness, attention, and meditation. *Psychological Record*, 2, 491-500.
- Tyson, P. D. (1987). Task-related stress and EEG alpha biofeedback. *Biofeedback and Self-Regulation*, 12, 105 - 119.
- Tyson, P. D., & Sobschak, K. B. (1994). Perceptual responses to infant crying after EEG biofeedback assisted stress management training : Implications for physical child abuse. *Child Abuse & Neglect*, 18, 933-943.
- Uelmonte, M. M. (1984). Meditation practice as related to occupational stress, health, and productivity. *Perceptual and Motor Skills*, 69, 681-682.
- Watts, A. W (1962). *The way of Zen*. Harmondsworth, Middlesex : Penguin.
- Weiss, D., Dawsons, R., England, G., & Lofquist, L. (1967). Manual for the Minnesota Satisfaction Questionnaire. *Minnesota Studies in Vocational Rehabilitation*, #22.