

NURSES' PERCEIVED STRESS LEVELS
AND COPING STYLES

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BY
DENISE C. MAXWELL

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DEDICATION

This thesis is dedicated to Dr. Susan Goad,
Dr. Joy McCreary, and Dr. Daniel Corley.

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TABLE OF CONTENTS

	Page
DEDICATION	iii
ACKNOWLEDGEMENTS	iv
TABLE OF CONTENTS	v
LIST OF TABLES	vii
Chapter	
1. INTRODUCTION	1
Problem Statement	2
Justification of Problem	3
Theoretical Framework	5
Assumptions	9
Hypotheses	9
Definition of Terms	10
Limitations	11
Summary	12
2. REVIEW OF LITERATURE	13
Stress in Nursing	13
Stress Stimuli	14
Stress Reactions	16
Perception of Stress	17
Nurses' Coping Behaviors	22
Summary	24
3. PROCEDURE FOR COLLECTION AND TREATMENT OF DATA	26
Setting	26
Population and Sample	27
Protection of Human Subjects	28
Instruments	29

	Page
4. ANALYSIS OF DATA	34
Description of Sample	34
Findings	39
Hypothesis 1	39
Hypothesis 2	41
Additional Findings	42
Summary of Findings	43
5. SUMMARY OF THE STUDY	46
Summary	46
Discussion of the Findings	48
Conclusions and Implications	52
Recommendations	53
APPENDIX A	55
APPENDIX B	59
APPENDIX C	61
APPENDIX D	63
APPENDIX E	65
APPENDIX F	67
APPENDIX G	69
REFERENCES CITED	71

LIST OF TABLES

Table	Page
1. Age Distribution of the Sample	35
2. Length of Registered Nurse Time	36
3. Perceived Level of Stress	37
4. Age and Perceived Level of Stress	38
5. Years Employed as Registered Nurse and Perceived Level of Stress	39
6. Mean Problem-Oriented Coping Scores and Levels of Stress	40
7. Problem-Oriented Coping Scores Analysis of Variance	40
8. Mean Affective-Oriented Coping Scores and Levels of Stress	41
9. Affective-Oriented Coping Scores Analysis of Variance	42

CHAPTER 1

INTRODUCTION

Stress is a fact of life. "Stress is a physical and emotional state always present in the person, intensified when environmental change . . . occurs internally or externally to which he must respond" (Murray & Zentner, 1979, p. 229). These changes usually evoke coping behaviors (Holmes & Rahe, 1967).

Everyday practicing nurses encounter and must adapt to numerous potential stressors. This activity occurs in both personal and professional dimensions. The current absenteeism, turnover, and attrition statistics of nursing personnel, as well as widely publicized complaints and strikes, suggest that high levels of stress are present in the professional dimension and that nurses differ in their adaptive ability.

While coping mechanisms have been and are being studied, much remains to be done. Specifically, according to Lazarus (1977) the cost, efficacy, and corollary effects of coping mechanisms have not been

well researched. This is true with any population of subjects and is especially true with practicing nurses.

Coping mechanisms have been labeled with multiple terms. Ordinarily they are classified into two categories--leading either to adaptation or to maladaptation. The different phraseology for the adaptive versus maladaptive categories include:

1. adaptive versus defensive behaviors (Murray & Zentner, 1979, p. 245),
2. direct action coping behaviors versus intrapsychic coping behaviors (Lazarus, 1977, p. 150),
3. long-term versus short-term coping methods (Bell, 1977), and
4. problem-oriented versus affective-oriented coping (Jalowiec & Powers, 1981).

More knowledge of the adaptation that nurses accomplish and the types of coping mechanisms involved in their adaptive efforts will be useful to nursing leaders. These factors may affect job performance specifically and nursing practice in general.

Problem Statement

Is there a difference in problem-oriented coping scores as well as affective-oriented coping scores among

three groups of nurses who subjectively evaluate their general level of stress occurring from work on a typical day as low, medium, or high?

Justification of Problem

Both from humanistic and economic viewpoints, illness prevention and health maintenance have become increasingly important in today's society. Variables in the health maintenance and resistance to illness realm include: (a) necessity for change incurred from the occurrence of significant life events, (b) physical fitness, (c) mental attitude, (d) exposure to illness-producing agents (Holmes & Holmes, 1974), (e) developmental level, (f) cultural setting (Lazarus, 1966), (g) emotional status, (h) environmental demands, (i) personality characteristics, (j) usual coping pattern, and (k) perceptual style with a concomitant sense or lack of sense of control (Lazarus, 1977). Consistency of coping style could be referred to as a regularly uniform aspect of the subject's personality. Thus, coping style may be considered a somewhat stable variable in relation to other variables.

Nurses deal with personal and professional stressors. They also deal with multiple current and anticipated

stressors belonging to their clients and allied health personnel. Thus, the knowledge gained from a beginning assessment of coping modes among nurses will contribute to the enhancement of nursing practice.

Previously, only one investigation reported in the literature correlated spontaneous coping activity with practicing nurses. In this study, Oskins (1979) described the coping mechanisms used by intensive care unit nurses. Another study focused on student nurses and looked into person-environment fit, psychological stress, and coping behavior (Walker-Burt, 1978). Still other studies related practicing nurses or student nurses to sources of stress, but did not expand into coping activity (Balbierz, 1977; Barut, 1978; Walker, 1977).

In the area of coping behavior in general several populations have been studied. These groups include teachers (Needle, Griffin, & Svendsen, 1981), adolescents (Beard, 1980), adults (Ilfeld, 1980; Pearlin & Schooler, 1978), middle-aged persons (Folkman & Lazarus, 1980), chronically ill persons (Cohen & Lazarus, 1979), psychiatric inpatients (Bell, 1977), children (Murphy, 1964), college students (Sidle, Moos, Adams, & Cady, 1969), and acute crisis victims (Hamburg, 1974).

It can be seen that the area of coping modes of practicing nurses has not been well researched and warrants more description. In this investigation, the nurses' subjective rating of the general level of stress incurred from working a typical shift on their divisions was utilized as a measure of perception of stress. This study investigated the differences in coping scores among groups of nurses who subjectively evaluated their typical levels of stress from work as low, medium, or high.

Theoretical Framework

The theoretical framework for this study was Lazarus' theory of coping. He defined coping as the problem-solving effort made by an individual when the demands he faces are highly relevant to his welfare, and when these demands approach the limits of the individual's skill. (Lazarus, Averill, & Opton, 1974, pp. 250-251)

In the theory, Lazarus et al. (1974) emphasized the importance of a three-fold system of appraisal made by the individual. Primary appraisal occurs when the individual appraises the situational outcomes as either harmful, beneficial, or irrelevant. Secondary appraisal occurs when he perceives the coping alternatives which are available to obtain good results.

Reappraisal, the third form, occurs when the original perception changes and reflects changing cues, information, and the changing individual.

According to Lazarus (1966), the individual's perception of degree of threat is the key intervening variable in any analysis of psychological stress and coping. This threat perception occurs in the primary appraisal, influences the secondary appraisal (that of the consequences of the available coping alternatives), and is reevaluated in the third appraisal. Threat perception need not occur in full awareness, or even in the conscious. It has two main properties. First, perception of degree of threat is anticipatory; secondly, it is dependent on cognition which includes such items as thought, perception, memory, learning, and judgement.

Subjective concepts such as appraisal of threat are not only valuable, but perfectly capable of being fruitfully employed in methodologically sound scientific research. (Lazarus, 1966, p. 84)

The degree of threat and concomitant emotional stake judged to be present during these appraisals, importantly determine which of two coping modes will be initially employed. First, if the degree of threat is low, and concomitantly the emotional tone, it is more likely that the direct action/problem-oriented coping

mode will be used (Lazarus et al., 1974). In this mode, active preparation against harm occurs such as avoidance, attack, building resistance, or arranging escape routes. Secondly, if the degree of the threat and concomitant emotional aspects are high, the intrapsychic/affective-oriented coping mode is more likely to occur. This mode creates an impression of safety and deals more with the individual's emotional response rather than the objective situation. These two modes--direct action and intrapsychic coping (also called problem-oriented and affective-oriented)--are not mutually exclusive. Both may function beneficially for the individual in a given situation.

Thus, mixed styles typically are seen. Both modes may serve adaptive purposes. For example, affective-oriented coping methods have been shown to deal effectively with intense short-term stress; subsequently, enabling the individual to use problem-oriented methods more efficaciously. However, the individual who uses problem-oriented coping methods will by definition have a more realistic interaction and reaction with the stressor. He will be able to deal with the stressor more appropriately than the individual who copes with

his emotional response in lieu of coping with the stressor itself. As mentioned previously, coping with the emotional response rather than the stressor itself occurs with intrapsychic/affective-oriented coping. As energy is spent working with emotions, less energy is available for coping with other stressors.

Further, as the degree of threat and concomitant emotional tone increase, as judged in the appraisal process, coping responses tend to become increasingly dependent on previous learning. Therefore, prior successful coping experience does enhance adaptive ability.

Thus, nurses who have been practicing nursing will presumably have had time to learn to develop adaptive modes of coping in response to stress in the specific environment of the hospital. Therefore, previous learning as might occur with experience working as a practicing nurse may lead to a decreased perception of threat and utilization of primarily problem-oriented coping mechanisms.

Lazarus pointed out that the term "stress" has been used to encompass issues previously included under the classification of emotions--especially the negative aspects of emotions. In this study, levels of perceived

stress reflected the emotional aspects that accompany varying levels of threat perception in both coping modes.

Assumptions

The following assumptions were made for the purposes of this study:

1. General levels of stress can be rated subjectively.
2. Coping styles can be measured.
3. People have differing life experiences which, due to their individuality, affect them differently.
4. In dealing with the vast array of stressors occurring in hospital environments, styles of coping develop among nurses.
5. Problem-oriented coping is more adaptive than affective-oriented coping in that it deals more realistically with stressors.

Hypotheses

The hypotheses for this study were:

1. There will be no significant differences in problem-oriented coping scores (as measured by the Coping Scale) among nurses categorized by three levels of perception of stress.

2. There will be no significant differences in affective-oriented coping scores (as measured by the Coping Scale) among nurses categorized by three levels of perception of stress.

Definition of Terms

Within the limits of this study, the following terms were used:

1. Coping scale--a 40-item questionnaire devised by Jalowiec (Jalowiec & Powers, 1981) composed of a 15-item problem-oriented coping method subscale and a 25-item affective-oriented coping method subscale. Problem-oriented coping mechanisms deal with the problem directly; whereas, affective-oriented coping mechanisms deal with the emotion evoked by the problem. For the specific coping strategies of each type, see the keyed Coping Scale in Appendix A.

(a) Affective-oriented coping scores--total summed numerical scores on the 25-item affective-oriented subscale of the Coping Scale. The highest possible score, if all the affective mechanisms are always utilized, is 125.

(b) Problem-oriented coping scores--total summed numerical scores on the 15-item problem-oriented subscale

of the Coping Scale. The highest possible score, if all the problem-oriented mechanisms are always utilized, is 75.

2. Levels of perception of stress--the participant's subjective rating (low, medium, and high) of the general level of stress generated by a typical workday as reported on the Demographic Data and General Work Stress Rating Sheet (see Appendix B).

3. Nurses--female registered nurses who are licensed to work in Texas any shift full-time on a medical-surgical division in the selected hospital of this study.

Limitations

1. The sample was limited to those who were willing to participate.

2. A convenience sample was used.

3. The study was limited to one hospital; therefore, the sample size was small and the results are not generalizable.

4. Part II of the Demographic Data and General Work Stress Rating Sheet was not tested for validity and reliability.

5. No provision was made for measuring the impact of personal sources and levels of stress.

Summary

The purpose of this study was to determine differences in problem-oriented and affective-oriented coping scores among nurses who perceived low, medium, and high levels of stress arising from work. The theoretical framework for this study was centered on Lazarus et al.'s (1974) theory of coping. An overview of the theory and literature pertinent to it was cited. A problem statement, justification, several assumptions, two hypotheses, definitions of terms, and limitations for this study were stated.

CHAPTER 2

REVIEW OF LITERATURE

Nurses occupy a focal role in patient care, and everyday many stressors present themselves to nurses working in a hospital setting. How nurses react to these stressors in order to maintain equilibrium depends on the cognitive appraisal and coping processes which occur as dynamic transactions between the individual and the environment (Lazarus, 1966).

Chapter 2 presents a discussion of the literature related to stress, perception, and coping. Specifically, three areas will be focused on: stress in nursing, perception of stress, and nurses' coping behaviors.

Stress in Nursing

The term stress has been used indiscriminately. It has been defined as a state of increased activation of the body systems involving flight or fight which may occur inappropriately or become unusually pervasive (Stoyva, 1978). Other definitions of human stress describe the steady state dynamic equilibrium of an individual who sensitively responds to internal or external environmental changes (Murray & Zentner, 1979;

Selye, 1976). In this sense, "stress" is adaptive and necessary. Selye distinguished between the individual's adaptive response to pleasant stressors (termed "eustress") and unpleasant stressors ("distress") (Selye, 1976). In common usage, the term "stress" is utilized to connote Selye's use of "distress". "Stress" is utilized to indicate either a source of stress (stressor) or the state of experiencing the after-effects of encountering a stressor.

Such a lack of agreement may lead to confusion. Lazarus (1966) has approached the ordering of stress terminology by describing stress stimuli, with their antecedent stimuli conditions, in addition to the delimited stress reactions which the individual experiences. Several authors emphasized the cognitive mediators between a given stress stimulus and the subsequent stress reaction of the individual (Aguilera & Messick, 1974; Lazarus, 1966; Oskins, 1979).

Stress Stimuli

Many studies of stress in nursing have focused on stress stimuli. In a 1977 study of 104 operating room nurses, Olsen found that interpersonal relations with doctors and co-workers, role conflict and ambiguity,

and specific factors inherent in the work itself were stressors. In a study of 87 neonatal intensive care unit (ICU) nurses, Jacobson (1978) concluded that the primary stressors were psychosocial conflicts and insecurity about knowledge and competence.

Oskins (1979) had 79 intensive care unit registered nurses respond to a questionnaire describing 12 potentially stressful narratives. The categorical ranking of identified stressors from most to least frequently was: factors pertaining to the patient and his care; the ICU itself; the patient's family; administration; ICU personnel; and the ICU nurse herself.

In another study, Cronin-Stubbs and Velsor-Friedrich (1981) used a semistructured assessment guide which was completed by 65 registered nurses who participated in the authors' stress management workshops. A content analysis of the stress stimuli indicated that of the major sources of stress, 62% of the items were personal stressors, and 38% were professional stressors. Of the latter, 51% centered on interpersonal relationships, including interaction with doctors, co-workers, patients, new employees, subordinates, and supervisors.

Stress Reactions

While opinion articles on nurses' stress reactions are popular, research studies in this area are limited. In one study, Gentry and Foster (1972) found a significant difference between ICU and general medical-surgical nurses for self-rated depression ($p = < .01$). Their data supported that ICU nurses encounter more emotional and psychologic stress, and subsequently, tend to become more hostile, anxious, and depressed. Burnout is one type of stress reaction prevalent in helping professions that has received major popular attention.

Burnout occurs when chronic emotional stress at work and subsequent mental and physical exhaustion lead to detachment and/or alienation in both professional and personal spheres of life. However, few research studies have investigated burnout. In one study, Pines and Maslach (1978) interviewed more than 200 psychiatric nurses, social welfare workers, poverty lawyers, prison personnel, and child-care workers. Their data showed the majority had experienced increases in negative self-concept, negative job-attitudes, and loss of concern for clients.

In Oskins' 1979 study of ICU registered nurses mentioned previously, 57% were at risk to illness from

their stress levels, as measured by the Rahe-Life Change Event Scale. In the Cronin-Stubbs and Velsor-Friedrich (1981) study of a convenience sample of 65 registered nurses, 58% of the nurses reported that stress had deleterious effects on their health, including items such as migraine headaches, fatigue, hypertension, depression, and gastrointestinal disorders. Twenty-one percent reported decreases in productivity due to stress.

Thus, research supports the existence and impact of high levels of stress stimuli and stress reactions. Stress perception in nursing has also been researched.

Perception of Stress

The ongoing transaction between stress stimuli and stress reactions are mediated recipocally by the two processes of appraisal and coping. The key intervening variable, according to Lazarus (1966), is the individual's appraisal of threat. This is an anticipatory evaluative perception or judgment in which the person construes the event or situation as important to the person's well being and taxing of the person's resources. Thus, this appraised perception of threat, or stress, is a highly personal

perception derived between the individual and his unique environment.

In 1945, Grinker and Spiegel conducted a field study concerning the psychodynamics underlying stress disorders in World War II airmen. In one case study, a pilot without any actual combat flying experience manifested severe depression, anxiety, agitation, and blocking originating from a perception of danger.

In another study, Barber and Coules (1959) found that the magnitude of the galvanic skin response did not differ when: (a) the subjects anticipated a pinprick and received one; (b) the subjects anticipated a pinprick but did not receive one; and (c) they received a pinprick without anticipating one. The authors concluded that anticipation alone is sufficient to produce the stress reaction.

Lazarus, Opton, Nomikos, and Rankin (1965) conducted an experiment with a film of woodmill accidents in which the fingers of the operator are variously mutilated. Two orientation passages were developed in which the viewers were told: (a) this is only a dramatization (using denial); or (b) this is a real situation but observe how the shop foreman deals with the group (using intellectualization). A control

passage stated only that some accidents would be seen. The subjects who viewed the experimental versions had significantly reduced stress reactions, as measured by skin conductance and heart rate. The authors concluded that the viewer's perceptions had been altered significantly.

Only a few nursing studies mention perception of stress or threat. In the study mentioned previously, Oskins (1979) asked 79 ICU registered nurses if each of 12 (stressful) narratives was perceived as stressful to them. She reported that the leading coping methods identified by the registered nurses were direct-action methods and were based on their perception of the stress.

In 1979, Huckabay and Jagla had 46 ICU registered nurses rank order a series of 32 potentially stressful situations. The data from this study supported that nurses perceived a situation as stressful in inverse proportion to the amount of direct control which the nurse had over it. Thus, patient death and the amount of workload were perceived as most stressful, while patient teaching was perceived as least stressful.

Ivancevich and Matteson (1980) surveyed 82 registered nurses from a large southwestern hospital,

asking them to rank order stressors from most to least stressful. In addition to demographic factors, Type A and Type B behavioral patterns were investigated. As a total group, four categories were the most stressful (in two divisions--hospital and job). These were: (a) the hospital's lack of concern in supporting nurse development, (b) hospital power plays, (c) responsibility for people, and (d) time pressures. When the subjects are divided into Type A and Type B behavior patterns, however, distinct differences emerge. Of the top five stressful categories in both hospital and job divisions, these two behavior classes agreed on only one topic and rating. They agreed that responsibility for people is the number one job stressor. This study emphasized the variability in perception.

In 1981 Donovan studied the use of relaxation with guided imagery on a total of 24 cancer nurses randomly assigned to an experimental group or a control waiting list. Subjects completed a demographic card and a Pre (and Post) Training Inventory (PTI). The PTI consisted of 47 items representing four subscales of the SCL-90 (a symptom checklist used to quantify psychological improvement in drug research). They also completed daily cards recording blood pressure and pulse,

current tension level, maximum tension stress level, and identifying the event which precipitated the maximum tension (stress).

The results were analyzed in the context of 1976 studies of Weisman and Worden on the effectiveness of coping which sorts subjects into good, adequate, and effective copers. (This was done by matching the subject's response to "What do you do to cope with tension situation?" with Weisman's and Worden's coping behaviors). Both good copers and ineffective copers reported similar numbers, kinds, and magnitudes of stressors on their self-report cards. Good copers used both effective and ineffective coping methods, but poor copers used only ineffective methods. Good copers had significantly lower signs of stress as measured by the sum of all the PTI scales. Specifically, they had significantly less depression, anxiety, and lack of self-esteem. Donovan (1981) stated that the data supported a relationship between coping and the magnitude of the stress response, rather than coping and the numbers and/or magnitude of the stressors per se.

Thus, perception of the stressor influences stress response and becomes the key intervening variable in the

stress-coping configuration. This area is just beginning to be researched by nursing investigators.

Nurses' Coping Behaviors

Coping has been defined as the efforts made by individual when facing demands which are highly relevant to his welfare and taxing of the individual's adaptive skill. (Lazarus et al., 1974, pp. 250-251)

Such coping efforts are designed to either manage the source of stress (problem-oriented coping function) or regulate the concomitant emotions (affective-oriented coping functions). Most investigations of coping behavior have involved unusual populations in conditions of severe stress such as people in natural disasters or psychiatric hospitalizations. This is true of coping behavior in nurses. These studies tend to focus on nurses working in highly specialized areas such as ICUs.

In Oskins' (1979) sample of 79 ICU nurses, four leading coping behaviors were identified as being used more than 50% of the time. These included talking it out, becoming anxious, taking definite action based on present understanding, and drawing upon past experience in similar situations. In analyzing the frequencies of coping behaviors a trend emerged. Initial direct action methods were followed by an

increase in anxiety levels as nurses became angry or prepared to expect the worst. This heightened anxiety level was released by affective-oriented methods such as humor, crying, and denial. Presumably more direct-action, problem-oriented methods will follow, according to the author.

It can be noted that in the study mentioned above both problem-oriented and affective-oriented coping modes were used. Often, the two modes do complement one another.

Another investigation used 65 registered nurses who attended a stress workshop in a survey study (Cronin-Stubbs & Velsor-Friederich, 1981). Sixty-five percent of the subjects were staff nurses from diverse areas; 19% were supervisors; and 16% were school nurses. Ninety-eight percent were female. The subjects' length of nursing service ranged from 6 months to 26 years. The authors found that 77% of the subjects reported using coping mechanisms which comfort or change themselves in response to stress. Often cited adaptive mechanisms included interpersonal relationships, exercising, taking vacations, prayer, relaxation, and positive thinking. Forty-six percent of the nurses listed smoking, eating, sleeping, exploding,

and ignoring the stressful situation. Only 23% cited coping methods directed at removing the stressor or changing the environment. The authors found that most nurses wanted to learn how to deal with stress more constructively. In particular, the subjects wanted to increase communication skills, assertiveness, interpersonal, relaxation, and time management skills. Most nurses preferred personal changes; 3 nurses wanted to facilitate change in the work environment; 5 nurses wanted to change jobs. The authors suggest that nurses need to learn and use more active direct methods for confronting sources of stress. More studies need to be done in the area of nurses' coping behavior.

Summary

Chapter 2 has reviewed the literature on stress in nursing, perception of stress, and nurses' coping behaviors. Although it is widely discussed in the literature, a lack of agreement exists concerning stress terminology. For this reason, Lazarus' (1966) conceptualization of stress stimuli and stress reactions was introduced and utilized. It was noted that while stress stimuli and stress reactions have been studied in the nursing literature, perception of stress, a key intervening variable, has been less well

studied. Finally, although there is a shortage of research regarding nurses coping behaviors, the area is beginning to be explained. This exploratory, descriptive study was undertaken to add to the body of knowledge concerning nurses' coping behaviors.

CHAPTER 3

PROCEDURE FOR COLLECTION AND TREATMENT OF DATA

This study was classified as a nonexperimental, ex post facto type of research (Polit & Hungler, 1978). In this classification there is no manipulation or randomization, and no control over the independent variable. The independent variable--the level of perceived stress--was inherently uncontrollable. Because this study described differences in phenomena without explaining relationships, it was termed a descriptive research design (Polit & Hungler, 1978). This research design generated knowledge for future research in the area of nurses and coping. The phenomena investigated were the differences, if any, in problem-oriented coping scores as well as affective-oriented coping scores among three groups of nurses who subjectively evaluated their general level of stress occurring from work on a typical day as low, medium, or high.

Setting

The setting for this study was a southwestern metropolitan city hospital. This teaching facility

had over 20 medical-surgical divisions, most of which specialize in various areas, for example plastic surgery, ear-nose-throat, respiratory, or orthopedics.

Population and Sample

The population solicited consisted of 100 nurses working on 12 medical-surgical divisions of the selected hospital. The subjects were identified by the Director of Inservice Education as registered nurses. Then, in order to be included in the sample, the subjects had to meet the following criteria: (a) between 23 and 60 years of age, (b) female, and (c) working full-time on the medical-surgical divisions. This sampling technique was a convenience sample in which the most readily available people are used as subjects (Polit & Hungler, 1978). Questionnaire packets containing the Coping Scale, the Demographic Data and Work Stress Rating Sheet, and a letter of introduction and explanation (see Appendix C) were distributed to all nurses on the selected wards. Sixty-seven subjects returned the questionnaires, and 61 of these were usable.

Protection of Human Subjects

The following activities were designed to ensure the protection of the participants' rights. Because this involved staff nurses as participants, the hospital's Nursing Research Committee granted approval for the study (see Appendix D). This study was approved by the Texas Woman's University Human Subjects Review Committee as posing minimal to no risk to the subjects (see Appendix E). Therefore, a specific signed consent form was not needed and was not included with each packet. A written introduction was included with each packet. This introduction contained a description, purpose, and explanation of the procedure, including potential risks and benefits, a method for questions to be answered, a statement of confidentiality and an explanation of the voluntary nature of participation. Each questionnaire had in capital letters the statement "Completion and return of this form will be construed as informed consent to be a research subject."

No names were used on the questionnaires. The questionnaire packets and follow-up reminders were distributed via interdepartmental mail to the subjects. The list of names of potential subjects, kept by the Director of Inservice Education, was destroyed after the follow-up reminders were distributed.

Instruments

Two instruments were used for data collection. The first was a Demographic Data and General Work Stress Rating Sheet. This sheet listed five items in two parts: part I requested the respondent's age, sex, length of time in nursing practice, and full-time or part-time work status; part II requested a response about general level of work stress on a typical work-day. The demographic data were used to describe the sample.

The questions referring to full-time or part-time work status and gender enabled the investigator to eliminate from the sample part-time staff and males who did not eliminate themselves as directed in the letter of introduction. The age and length of time practicing nursing were used to describe the sample in frequency tables for the three groups, giving actual numbers and percentages.

The question regarding the subjective rating of general level of work stress as either low, medium, or high was used to separate the respondents into three groups. This question, part II of this tool, has not been tested for validity and reliability. However, when Sidle et al. (1969) developed a coping scale,

results supported that a paper and pencil test is capable of deriving information about coping, including the less socially approved ways of coping. Lazarus (1966) has stated that although modern psychology is reluctant to deal with subjective concepts, it is becoming increasingly acknowledged that subjective concepts such as appraisal of threat/stress are valuable and capable of contributing to sound scientific research.

The second instrument was the Coping Scale. Permission for use of this tool was obtained from its developer, Jalowiec, before data collection was begun (see Appendix F). This 40-item scale reflects specific coping behaviors. Content validity is supported by the developer's extensive review of the literature on coping.

This scale contained two subscales: a 15-item affective-oriented coping subscale and a 25-item problem-oriented subscale. A Likert-type format with a 5-point scale allowed the subject to rate each coping method according to amount of usage including never (1), seldom (2), sometimes (3), usually (4), and always (5). The subscales were classified by 20 volunteer judges who were familiar with aspects of behavioral research on stress and coping, regarding whether the specific

methods were affective or problem-oriented. Overall agreement by the judges were 85%, agreement on the affective-oriented items was 82%, and agreement on the problem-oriented items was 88%.

Test and retest methods were used to determine reliability of the instrument in a pilot study, composed of 28 adult volunteers. "Spearman's rank ordering of the test-retest data indicated that the instrument was reliable ($r_s [26] = .79, p < .001$)," (Jalowiec & Powers, 1981, p. 11).

The Coping Scale was divided into its problem-oriented and affective-oriented subscales. The answers were numerically totaled for each subscale for each subject.

Data Collection Methods

Each nurse was identified by the Director of In-service Education as a registered nurse working on one of the 12 previously selected medical-surgical divisions. Every nurse on these divisions was mailed a questionnaire packet through the hospital's interdepartmental mail. Each subject had to meet the following delimitations: (a) between 23 and 60 years of age, (b) female, and (c) working full-time. The questionnaire packet contained a letter of introduction and explanation, the Demographic

Data and General Work Stress Rating Sheet, and the Coping Scale. The subjects were requested to complete the forms in 7 days and return them in the enclosed pre-addressed, pre-stamped envelope. One week after the initial mailing, follow-up reminders were sent via interdepartmental mail to each subject.

Treatment of Data

Frequency tables for the demographic data were constructed to describe the three groups' characteristics. The actual number and percentage of these three groups was listed regarding age and length of time practicing nursing. The respondents' subjective rating of stress as low, medium, or high was used to place the subjects into one of three groups. To facilitate computer analysis, the low stress group was labeled as (1), the medium stress group was (2), and the high stress group was (3).

The frequencies and percentages for the problem-oriented and affective-oriented subscales scores were calculated. Mean scores for each level of stress were placed in tabular form.

The statistical procedure used to analyze the scores for Hypothesis 1 and Hypothesis 2 was an analysis of variance (ANOVA). Analysis of variance is an appropriate

statistical test for use with multiple groups (Huck, Cormier, & Bounds, 1974). Analysis of variance was used to determine if there were significant differences in the problem-oriented coping scores as well as the affective-oriented coping scores between the low, medium, and high stress groups. The statistic computed in the ANOVA is the F-ratio statistic. The level of significance for this study was set at .05.

CHAPTER 4

ANALYSIS OF DATA

This ex post facto study was designed to describe the differences in problem-oriented coping scores and affective-oriented coping scores among nurses who perceived low, medium, and high levels of stress from their jobs. Two self-administered questionnaires were utilized for data collection. The data analysis is reported in Chapter 4. The sample is described according to age, time spent in practice, and perceived stress levels. The findings of a one-way analysis of variance (ANOVA) reported as they apply to the previously established hypotheses. Additional findings are reported. A summary of results concludes this chapter.

Description of Sample

A total of 100 questionnaire packets were distributed to registered nurses working on medical-surgical divisions at a large metropolitan hospital. A total of 67 nurses (67%) returned the questionnaires. One questionnaire was returned unanswered and another three questionnaires were received after the cut-off date.

Two questionnaires were not used in the data analysis because the subjects were employed on a part-time basis.

The sample used in the data analysis consisted of 61 female registered nurses who worked full-time on a medical-surgical division of the hospital. Demographic data collected included the respondent's age and total length of time as a practicing registered nurse.

The age of the sample varied widely. The ages ranged from 23 to 55 years with the largest percentage in the age group of 23-29 years (Table 1). The mean age was 31.4 years with a standard deviation of 8.4 years.

Table 1
Age Distribution of the Sample

Range	Frequency	Percentage
23 - 29	35	58
30 - 39	16	26
40 - 49	6	9
Over 50	4	7

$\underline{n} = 61.$

The next demographic variable was time spent as a practicing registered nurse. This varied widely, ranging from 7 months to 32 years. The mean time was 5.9 years with a standard deviation of 5.6 years (Table 2).

Table 2
Length of Registered Nurse Time

Range (years)	Frequency	Percentage
< 1	7	12
1 - 3	20	30
3 - 5	10	18
5 - 8	8	13
7 - 9	2	3
9 - 11	8	13
11 - 13	2	3
13 - 15	1	2
15 - 17	1	2
17 - 19	1	2
> 19	1	2

The next variable examined was perceived level of stress from work. The subjects were asked "How do you rate the general level of stress from your work on a

typical day?" The possible responses were low, medium, and high levels of stress. Of the 61 subjects, 40 (66%) perceived medium levels of stress. Sixteen subjects (26%) perceived high levels. Only 2 respondents (3%) perceived low levels of stress. Three respondents (5%) chose to answer medium to high levels of stress, thus creating another category (Table 3).

Table 3
Perceived Level of Stress

Range	Frequency	Percentage
Low	2	3
Medium	40	66
Medium to High	3	5
High	16	26

n = 61.

The mean age of the low, medium, medium to high, and high perceived level of stress groups are given in Table 4. Also shown in this table are the range of ages and standard deviation for each group. The mean age for the largest sized group was 31.1 years old with a standard deviation of 7.6 years.

Table 4
Age and Perceived Level of Stress

Stress Level.	Frequency	Mean Age	Standard Deviation	Minimum	Maximum
Low	2	26.5	0.7	26	27
Medium	40	31.1	7.6	23	55
Medium to High	3	25.7	2.1	24	28
High	16	33.7	10.6	23	55
Total	61	31.4	8.4	23	55

Table 5 displays the mean time of practice as a registered nurse (in months) for the low, medium, medium to high, and high perceived levels of stress groups. The range of time for each group is also shown. The largest sized group was the medium perceived level of stress. For this group, the mean time as a registered nurse was 6 years.

Table 5

Years Employed as Registered Nurse and
Perceived Level of Stress

Stress Level	Frequency	Mean Time (years)	Standard Deviation	Minimum	Maximum
Low	2	3.3	5.0	36	43
Medium	40	6	75.1	7	384
Medium to High	3	2.6	24.9	9	58
High	16	5.8	56.8	8	192
Total	61	5.7	67.8	7	384

Findings

Research findings in this study were analyzed according to the null hypotheses. Each hypothesis is discussed separately.

Hypothesis 1

The first hypothesis of this study was:

There are no significant differences in problem-oriented coping scores (as measured by the Coping Scale) among nurses categorized by three levels of perception of stress.

This hypothesis was analyzed using a one-way analysis of variance (ANOVA). The stress categories of

low, medium, and high were used. The medium to high category (3 subjects) was not used. The means and standard deviations of the problem-oriented coping score for each level of stress are given in Table 6. No statistically significant differences were found between the three groups ($p = .9$) (Table 7). Thus, the null hypothesis was accepted.

Table 6
Mean Problem-Oriented Coping Scores and
Levels of Stress

Stress Level	Frequency	Mean	Standard Deviation
Low	2	49.5	6.4
Medium	40	49.7	7.5
High	16	48.5	8.0
Total	58	49.5	7.5

Table 7
Problem-Oriented Coping Scores
Analysis of Variance

Source	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F-ratio</u>	<u>p</u>
Between Groups	2	14.8	7.4	0.127	0.9
Within Groups	55	3198.8	58.2		
Total	57	3213.6			

Hypothesis 2

The second hypothesis of this study was:

There are no significant differences in affective-oriented coping scores (as measured by the Coping Scale) among nurses categorized by three levels of perception of stress.

This hypothesis was analyzed using a one-way ANOVA. The stress categories of low, medium, and high were used. The medium to high category was not used. The means and standard deviations of the affective-oriented coping score for each level of stress are given in Table 8. No significant differences were found between the three groups ($p = .09$) (Table 9). Thus, the null hypothesis was accepted.

Table 8

Mean Affective-Oriented Coping Scores
and Levels of Stress

Stress Level	Frequency	Mean	Standard Deviation
Low	2	46.0	2.8
Medium	40	51.8	8.6
High	16	56.4	8.3
Total	58	52.9	8.4

Table 9
Affective-Oriented Coping Scores
Analysis of Variance

Source	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F-ratio</u>	<u>p</u>
Between Groups	2	341.7	170.8	2.4	0.09
Within Groups	55	3907.7	71.1		
Total	57	4249.4			

Additional Findings

The medium and high levels of perceived stress groups were analyzed using a one-way ANOVA to test for significant differences in problem-oriented coping scores. No significant differences were found ($p = .6$). Similarly, the medium and high level of perceived stress groups were analyzed using a one-way ANOVA to test for significant differences in affective-oriented coping scores. No significant differences were found ($p = .07$).

Three respondents added a medium to high stress category. The low, medium, medium to high, and high level of perceived stress groups were also analyzed using a one-way ANOVA to test for significant differences in problem-oriented coping scores. No significant differences were found ($p = .89$). The low, medium,

medium to high, and high level of perceived stress groups were also analyzed using a one-way ANOVA to test for significant differences in affective-oriented coping scores. No significant differences were found ($p = 0.19$).

Overall, the perceived low stress group used 67% of the possible problem-oriented coping methods, and 37% of the possible affective-oriented coping methods. The perceived medium stress group used 69% and 42%, respectively. The perceived high stress group used 65% and 45%, respectively, of the problem-oriented and affective-oriented coping methods.

Summary of Findings

In this chapter, the analysis of research data was reported. The sample consisted of 61 full-time female registered nurses working on the medical-surgical divisions of a metropolitan hospital. The mean age was 31.6 years and mean length of time employed as a registered nurse 5.9 years. The subjects were asked to rate their general level of stress from their work on a typical shift as either low (1), medium (2), or high (3). Forty subjects (66%) perceived medium levels of stress. Sixteen subjects (26%) perceived high levels

of stress. Three respondents (5%) chose to answer medium to high levels of stress. Only 2 subjects (3%) perceived low levels of stress. The mean level of stress was 2.3 with a standard deviation of 0.5. The mean age and mean time employed as a registered nurse were displayed in tables relative to the low, medium, medium to high, and high levels of perceived stress.

The first hypothesis stated that there would be no significant differences in problem-oriented coping scores among nurses categorized by three levels of perception of stress. This hypothesis was accepted at the significance level set at .05, using a one-way ANOVA. No significant differences were found in problem-oriented coping scores among nurses grouped by three levels of stress perception.

The second hypothesis stated that there would be no significant differences in affective-oriented coping scores among nurses categorized by three levels of perception of stress. Using a one-way ANOVA, this hypothesis was accepted at the significance level set at .05. No significant differences were found in affective-oriented coping scores among nurses grouped by three levels of perception of stress.

Using a one-way ANOVA, the medium and high perceived stress groups alone were tested for significant differences in problem-oriented coping scores. No significant differences were found. The medium and high perceived stress groups were also tested for significant differences in affective-oriented coping scores. No significant differences were found.

The low, medium, medium to high, and high stress groups were tested with a one-way ANOVA to test for significant differences in problem-oriented coping scores. No significant differences were found. The same groups were tested for significant differences in affective-oriented coping scores. Similarly, no significant differences were found.

The percentages of each coping made for each stress level were calculated. These figures indicate that similar proportions of problem-oriented coping methods to affective-oriented coping methods were used by each stress level.

CHAPTER 5

SUMMARY OF THE STUDY

A nonexperimental descriptive study was conducted to examine the differences in problem-oriented and affective-oriented coping scores among groups of nurses categorized by three levels of perception of stress. This chapter presents the summary of the study and a discussion of the findings. Conclusions and implications are presented. Recommendations are suggested for additional research in the area of stress and coping among registered nurses.

Summary

Stressors are endemic to nurses working in a hospital. Registered nurses adapt by employing coping mechanisms to mitigate the stress experienced. The individual nurse's perception of stress is a key intervening variable between the stress stimuli and the stress reaction the nurse experiences. This study was undertaken in order to describe differences in problem-oriented coping method scores as well as affective-oriented coping method scores among nurses grouped according to three levels of stress perception. The level of perceived

stress was the independent inherently uncontrollable variable. The scores on the problem-oriented and affective-oriented subscales of the Coping Scale were the dependent variable.

The population for this study consisted of all female registered nurses practicing full-time on the medical-surgical divisions of a southwestern metropolitan hospital. The sample was obtained by distributing questionnaire packets to 100 registered nurses, via the hospital's interdepartmental mail. Approval for this study was obtained from the Human Subjects Review Committee, the graduate school at Texas Woman's University, and the participating hospital. Each packet contained the data collection tools and a letter of introduction and explanation. The subjects were informed in the letter and on each questionnaire that return of the questionnaire in the self-addressed stamped envelope would be construed as informed consent.

Two instruments were used for data collection: The Demographic Data and General Work Stress Rating Sheet, and the Coping Scale. The Demographic Data and General Work Stress Rating Sheet elicited information on age, sex, full or part-time work status, length of time as a practicing registered nurse, and general

level of perceived stress from work on a typical shift. The Coping Scale asked the subjects to rate how often they used each of 40 specific coping methods in response to stress.

The hypotheses tested in this nursing research study were:

1. There will be no significant differences in problem-oriented coping scores (as measured by the Coping Scale) among nurses categorized by three levels of perception of stress.

2. There will be no significant differences in affective-oriented coping scores (as measured by the Coping Scale) among nurses categorized by three levels of perception of stress.

Discussion of the Findings

There were no statistically significant differences in both problem-oriented coping scores and affective-oriented coping scores in three groups of nurses who perceived low, medium, and high levels of stress from their work. Due to a dearth of research investigating coping modes with perceived stress, the data are hard to evaluate and more questions are raised than answered in this exploratory study.

According to Lazarus' theory (1966), when stress is perceived as low, problem-oriented coping methods are more likely to be utilized. The low stress group did have a higher mean problem-oriented coping score (49.5) as compared to the high stress group (48.5), but this was not statistically significant and there was no overall trend from low through medium to high with problem-oriented scores decreasing per se.

Larger sample sizes are mandatory. (The low level of stress perception had only two subjects). Although the one-way ANOVA is an appropriate statistical tool for this study, its optimum use requires an equal number of subjects per each level of stress perception (Huck et al., 1974).

Also, according to Lazarus' theory (1966), affective-oriented coping scores would increase as stress increased. In fact, the affective-oriented coping scores did demonstrate a (statistically nonsignificant) tendency to increase as stress perception increased. This (statistically nonsignificant) tendency was manifested whether two, three, or four groups of perceived levels of stress were compared. This is not inconsistent with Lazarus' theory. A p value of .07 was obtained when the medium and high perceived stress groups

were tested; this suggested that larger sample sizes may more clearly reflect this tendency.

This increase in affective-oriented coping as stress perception increases may precede or follow problem-oriented coping. As perception of stress once again reaches lower levels, problem-oriented coping methods may become more available to the individual (Lazarus, 1966). The data from this study are not inconsistent with Lazarus' theory or Oskins' (1979) data.

No pattern was demonstrated regarding age or time employed as a registered nurse to perceived level of stress. It is important to view these findings in light of mixed reports in the literature. Huckabay and Jagla (1979) found a significant inverse correlation between years of ICU experience and stress factors ($r_s = 3.5$, $p = .05$). Olsen (1977) found no pattern of decreasing perceived stress with more nursing experience. However, less perceived stress was correlated with increasing operating room experience, though this finding was not 100% consistent for all items--on three items perceived stress increased with increased operating room experience.

The problem-oriented mean coping scores and the affective-oriented mean coping scores were similar (as were the percentages) for each stress level. That is, the average coping style of any given subject, was typically composed of approximately equal proportions of problem-oriented and affective-oriented coping methods. This finding was supported by the literature. In 1969 Sidle, Moos, Adams, and Cady investigated college students' responses to stories about problem situations. They found that so-called "good" and "bad" coping strategies were not negatively correlated.

In another study, Folkman and Lazarus (1980) investigated the way 100 persons coped with the stressful events of daily living for one year. Both problem-oriented and affective-oriented coping methods were used in 98% of the 1,332 episodes. The authors emphasized that coping must be conceptualized as involving both problem-oriented and affective-oriented coping functions.

Two subjects in the medium and high stress groups were both over 50 years old. These two subjects also had much nursing experience, and may have skewed the data considerably, unduly influencing the results. Finally,

in this discussion of findings, sample size, statistical outcome, and the limited generalizability of this study should be remembered before drawing conclusions.

Conclusions and Implications

The goal of this exploratory descriptive nursing research study was to contribute to the knowledge base of coping among nurses. One immediate conclusion is that further research of all types is needed including descriptive, experimental, and quasi-experimental research. Further investigation is needed in even smaller units of study with clear delineation of concepts as they relate to specific relationships in Lazarus' theory of coping. The question of how stress perception influences the coping mode, and how effectively the coping method manipulates stress perception also needs investigation.

Another conclusion of the investigator is that nurses are concerned with the concepts of stress and coping. There was a good response rate from a variety of ages and experience.

A further conclusion is that, as is evidenced elsewhere, subjects used a mixture of problem-oriented

and affective-oriented coping methods (Folkman & Lazarus, 1980; Sidle et al., 1969). The mean problem-oriented and affective-oriented coping socres were not very different for all stress levels.

Recommendations

Based on the findings of this nursing research study the following recommendations are offered:

1. Replication of the study using more randomization with a larger sample size, increasing the level of perceived stress response range, and controlled for age and time spent as a practicing registered nurse.
2. Identification of those specific factors which contribute to a low and high perceived level of stress.
3. Experimental studies involving the teaching of specific coping skills.
4. Further testing combining an objective measure of stress stimuli with a report of perceived levels of stress in relation to problem-oriented and affective-oriented coping methods.
5. Further investigation into the percentage mixture of problem-oriented and affective-oriented coping modes, specifically:

(a) establish normative guidelines for the general population with low, medium, and high levels of perceived stress.

(b) investigate the optimum mixture of coping modes for low levels of stress in nurses.

APPENDIX A

COPING SCALE

COMPLETION AND RETURN OF THIS QUESTIONNAIRE WILL BE
CONSTRUED AS INFORMED CONSENT.

People react in many ways to stress and tension. Some use a single way to handle stress, while others use a combination of coping methods. I am interested in finding out what things people do when faced with stressful situations.

Please estimate how often you use the following ways to cope with stress by checking the appropriate number for each item.

1--Never	4--Often
2--Occasionally	5--Almost Always
3--About half the time	

	1	2	3	4	5
1. Worry (A) ¹	—	—	—	—	—
2. Cry (A)	—	—	—	—	—
3. Work off tension with physical activity or exercise (A)	—	—	—	—	—
4. "Hope that things will get better" (A)	—	—	—	—	—
5. Laugh it off, figuring that "things could be worse" (A)	—	—	—	—	—
6. Think through different ways to solve the problem or handle the situation (P) ¹	—	—	—	—	—
7. Eat; smoke, chew gum (A)	—	—	—	—	—
8. Drink alcoholic beverages (A)	—	—	—	—	—
9. Take drugs (A)	—	—	—	—	—
10. Try to put the problem out of your mind and think of something else (A)	—	—	—	—	—
11. Let someone else solve the problem or handle the situation for you (P)	—	—	—	—	—
12. Daydream; fantasize (A)	—	—	—	—	—

¹A = affective-oriented coping method

¹P = problem-oriented coping method

COMPLETION AND RETURN OF THIS QUESTIONNAIRE WILL BE
CONSTRUED AS INFORMED CONSENT.

1--Never
2--Occasionally
3--About half the time

4--Often
5--Almost Always

	1	2	3	4	5
13. Do anything just to do something, even if you're not sure it will work (P)	—	—	—	—	—
14. Talk the problem over with someone who has been in the same type of situation (P)	—	—	—	—	—
15. Get prepared to "expect the worst" (A)	—	—	—	—	—
16. Get mad; curse; swear (A)	—	—	—	—	—
17. Accept the situation as it is (P)	—	—	—	—	—
18. Try to look at the problem (P) objectively and see all sides	—	—	—	—	—
19. Try to maintain some control over the situation (P)	—	—	—	—	—
20. Try to find purpose or meaning in the situation (P)	—	—	—	—	—
21. Pray; "put your trust in God" (A)	—	—	—	—	—
22. Get nervous (A)	—	—	—	—	—
23. Withdraw from the situation (A)	—	—	—	—	—
24. Blame someone else for your problems or the situation you're in (A)	—	—	—	—	—
25. Actively try to change the situation (P)	—	—	—	—	—
26. Take out your tensions on someone or something else (A)	—	—	—	—	—
27. Take off by yourself; "want to be alone" (A)	—	—	—	—	—
28. Resign yourself to the situation because "things look hopeless" (A)	—	—	—	—	—
29. Do nothing in the hope that the situation will improve or the problem "will take care of itself" (A)	—	—	—	—	—

COMPLETION AND RETURN OF THIS QUESTIONNAIRE WILL BE
CONSTRUED AS INFORMED CONSENT.

1--Never
2--Occasionally
3--About half the time
4--Often
5--Almost Always

	1	2	3	4	5
30. Seek comfort or help from family or friends (A)	___	___	___	___	___
31. Meditate; use yoga, biofeedback, "mind over matter" (A)	___	___	___	___	___
32. Try to find out more about the situation so you can handle it better (P)	___	___	___	___	___
33. Try out different ways of solving the problem to see which works the best (P)	___	___	___	___	___
34. Resign yourself to the situation because it's "your fate" so there's no sense trying to do anything about it (A)	___	___	___	___	___
35. Try to draw on past experience to help you handle the situation (P)	___	___	___	___	___
36. Try to break the problem down into "smaller pieces" so you can handle it better (P)	___	___	___	___	___
37. Go to sleep, figuring "things will look better in the morning" (A)	___	___	___	___	___
38. Set specific goals to help you solve the problem (P)	___	___	___	___	___
39. "Don't worry about it, everything will probably work out fine" (A)	___	___	___	___	___
40. Settled for the next best thing to what you really wanted (P)	___	___	___	___	___

Used with Permission from
Anne Jalowiec, R.N., M.S.N.
College of Nursing-Room 727
University of Illinois at the Medical Center
845 South Damen, Chicago, Illinois 60612

APPENDIX B

DEMOGRAPHIC DATA AND GENERAL WORK STRESS RATING SHEET

COMPLETION AND RETURN OF THIS FORM WILL BE CONSTRUED AS INFORMED CONSENT TO BE A RESEARCH SUBJECT.

The following information will be used to analyze the findings of this study. Please fill in our check the appropriate space below. PLEASE DO NOT SIGN YOUR NAME.

PART I:

1. Age: (in years) _____
2. Sex: female _____ male _____
3. Do you work: full-time _____
part-time _____
4. Length of time as a practicing nurse
(Please be as specific as possible
for example, 6 years 2 months).

years _____

months _____

PART II:

1. How do you rate the general level of stress from your work, on a typical shift:

low _____

medium _____

high _____

APPENDIX C

Dear Registered Nurse:

I am a nurse in the master's program in medical-surgical nursing at Texas Woman's University at the Dallas Campus. I am interested in investigating stress and coping among practicing nurses as my master's thesis.

This study involves using approximately 10 minutes of your time to fill out the two enclosed questionnaires, and then placing them in the provided envelope and in the public mail. (If you are a male, or younger than 23 or over 60, or are working only part-time, please do not fill out the questionnaires.) The first sheet included is the Demographic Data and General Work Stress Rating Sheet, which requests information about certain general characteristics.

The second tool is the Coping Scale which asks you to rate certain activities which you may or may not do when confronted with a problem situation. There are no "right or wrong" answers on this tool.

There is no risk to you in this study. No names are to be used on the forms, and thus, no names will be able to be associated with any data. Only group data will be released to the hospital. It may cause you some discomfort to reflect on your coping activities in response to problems. Your response or lack of response will not be known to anyone but yourself, and will in no way reflect on or jeopardize your job.

One of the benefits of this study is a contribution to the knowledge of how nurses cope. Results of the study will be available in the office of the Director of Inservice Education.

I would greatly appreciate your participation, which is completely voluntary. You may withdraw from the study at any time after reading and before completing the questionnaires. This study has been approved by the hospital's Nursing Research Committee, and through the regular channels of Texas Woman's University.

If you wish to participate please complete the attached forms within seven days. Any questions you may have concerning the questionnaires will be answered if you call 495-0083 after 6:00 P.M. Please return the forms in the pre-addressed, pre-stamped envelope, which is provided, via the regular public mail.

I am grateful for your cooperation. You may be assured of the value of your participation in this study. Thank you for your time and attention.

Sincerely,

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To protect individuals we have covered their signatures.

APPENDIX D

TEXAS WOMAN'S UNIVERSITY
COLLEGE OF NURSING

AGENCY PERMISSION FOR CONDUCTING STUDY*

THE _____

GRANTS TO NENISE C. MAYWELL

a student enrolled in a program of nursing leading to a Master's Degree at Texas Woman's University, the privilege of its facilities in order to study the following problem.

Is there a difference in problem-oriented coping scores as well as affective-oriented coping scores among three groups of nurses who subjectively evaluate their general level of stress occurring from work on a typical day as low, medium, or high?

The conditions mutually agreed upon are as follows:

1. The agency (~~may~~) (may not) be identified in the final report.
2. The names of consultative or administrative personnel in the agency (~~may~~) (may not) be identified in the final report.
3. The agency (~~does not want~~) (does not want) a conference with the student when the report is completed.
4. The agency is (willing) (~~is willing~~) to allow the completed report to be circulated through interlibrary loan.
5. Other Please submit the final thesis to the agency.

Date: 12/1/71

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APPENDIX E

Prospectus for Thesis Approval Form

This proposal for a thesis by Denise C. Maxwell

and entitled

"NURSES' PERCEIVED STRESS LEVELS AND COPING STYLES"

has been successfully defended and approved by the members of the Thesis Committee.

This research is XX is not _____ exempt from approval by the Human Subjects Review Committee. If the research

is exempt, the reason for its exemption is: this study

poses no risk to the subjects.

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APPENDIX F

UNIVERSITY OF ILLINOIS AT THE MEDICAL CENTER, CHICAGO
COLLEGE OF NURSING - Room 727

x2559

October 23, 1981

Denise Maxwell, R.N., B.S.N.
Texas Women's University, College of Nursing
1810 Inwood Rd.
Dallas, Texas 75235

Dear Ms. Maxwell:

Thank you for the interest you expressed in the Coping Scale recently reported in Nursing Research. I have enclosed a copy of the instrument for your use, in addition to some other information that you may find useful.

Permission is granted to use the Coping Scale, under my copyright, for your master's thesis study. As I mentioned in our phone conversation, I would like a brief summary of your proposal when that becomes available. In addition, when your research is completed, I would like you to share your coping data with me (including demographic information on your subjects) so that it can be incorporated into the ongoing work here at the university on further assessment of validity and reliability of the instrument.

If I can be of any further help, please feel free to contact me. Good luck with your study.

Sincerely,

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APPENDIX G



Texas Woman's University

P.O. Box 22479, Denton, Texas 76204 (817) 383-2302, Metro 434-1757, Tex-An 834-2133

THE GRADUATE SCHOOL

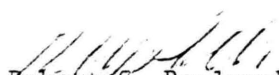
February 11, 1982

Ms. Denise C. Maxwell
2418 Norway Drive
Garland, TX 75040

Dear Ms. Maxwell:

I have received and approved the Prospectus for your research project. Best wishes to you in the research and writing of your project.

Sincerely yours,


Robert S. Pawlowski
Provost

ap

cc Dr. Susan Goad
Dr. Anne Gudmundsen

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