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THE EFFECTS OF SOCIAL SUPPORT ON WORK STRESS AND BURNOUT

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science at Virginia Commonwealth University

By

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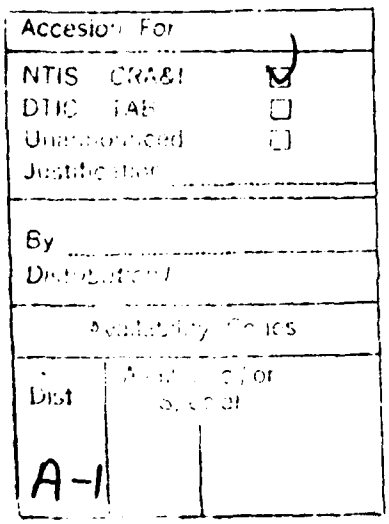

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ABSTRACT

THE EFFECTS OF SOCIAL SUPPORT ON WORK STRESS AND BURNOUT

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This study was a descriptive study which investigated the effects of social support on work stress and burnout in registered nurses. The convenience sample consisted of 171 registered nurses. The nurses completed a questionnaire packet containing a brief demographic sheet, the Maslach Burnout Inventory, the Gray-Toft Nursing Stress Scale, and the House Social Support Scale. Pearson's product-moment correlation and forced entry multiple regression were used to analyze the data.

Stress was found to have a significant positive relationship with the Depersonalization and Personal Accomplishment dimensions of burnout. As job stress increased there was an increase in the frequency of feelings of depersonalization and a decrease in the frequency of feelings of personal accomplishment. Social support showed a significant negative relationship with the burnout dimension of

Personal Accomplishment. As social support increased, there was an increase in the frequency of feelings of personal accomplishment.

In combination, social support and job stress were found to be a significant predictor of the burnout dimension of Personal Accomplishment. The interaction of social support with job stress was not found to significantly account for the variance in any of the three dimensions of burnout: Emotional Exhaustion, Depersonalization, or Personal Accomplishment. There was a negative relationship between the independent variables: social support and job stress. As social support increased, job stress decreased.

CHAPTER ONE

Introduction

Human service organizations are not mechanical lifeless structures; they are composed of people. People work in them and people manage them. The relationships among these people have a critical effect on job stress and burnout (Cherniss, 1980). When human service professionals are asked why they chose their particular profession, the answer invariably has to do with the fact that they perceive themselves as people oriented. Because these professionals care about people, they are particularly sensitive to the social dimensions of their work and consequently are particularly vulnerable to the dangers of burnout (1983).

Burnout can best be defined as a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that occurs among individuals who do "people work" (Maslach, 1982). Since the term was coined in 1974, it has been the subject of numerous research studies which have involved thousands of subjects and been the subject of many workshops. This research has demonstrated that burnout is significantly correlated to reduced satisfaction from work, life and oneself, and that it is also correlated with poor physical health and with an increase in sleep disorders,

headaches, loss of appetite, nervousness, backaches, and stomachaches. Burnout was also found to be related to hopelessness (and suicidal potential), alcoholism, tardiness and the intention to leave the job (Pines, 1983). Thus it is clear that the cost of burnout is extremely high for the individual, the organization in which that individual is working, and society at large.

What is the etiology of burnout in professionals? Maslach (1982) maintains it is a response to the chronic emotional strain of dealing extensively with other human beings, particularly when they are troubled or having problems. Thus it can be considered one type of job stress. Much of the job stress in nursing is an inherent feature of the job: dealing with the high anxiety exhibited by patients and families in crisis; witnessing human suffering and death; and accountability for life and death decisions (Norbeck & Resnick, 1986). Because most sources of job stress in nursing are not irreversible, a means of altering, buffering, or protecting the individual has been the subject of research within the fields of social psychology, epidemiology, medical ecology and social epidemiology. One factor which has received considerable research attention is the direct and buffering effect of social support on job stress and ultimately on burnout.

There is a fast growing body of research evidence that social support is an important protection against the impact of stress on physical and mental health (Caplan, 1974; Cobb, 1976; Gore, 1978; House & Wells, 1977; LaRocco & Jones, 1978; Pinneau, 1975). The findings of research focused on the relationship of social support to stress and burnout in nursing, however, have only recently appeared. The results of exploratory studies suggest that a lack of supportive relationships may enhance one's vulnerability to burnout. And of even more significance, in an atmosphere of occupational and personal stressors, social support may offset the effects of intense and undesirable stressors and contribute to the prevention of burnout (Cronin-Stubbs & Brophy, 1985; Pines & Kanner, 1982; Yasko, 1983).

Significance of the Study

Considering the high cost of burnout to the nursing profession, it is time that nursing research began focusing on taking care of the care givers. Social support has emerged in the last decade as a significant health behavior and, therefore, a promising focus of theory development in nursing. Nursing's concern with health, environment, and person provides an ideal perspective from which to take the lead in research, in theory construction, and instrument development in social support (Tilden, 1985).

Problem Statement

The purpose of this study is to investigate the relationship between social support, job stress, and burnout among nurses.

Definition of Terms

The following definitions are provided to increase the clarity of the hypotheses, variables and the population involved in this study.

Burnout: A three-dimensional syndrome of emotional exhaustion, depersonalization, and a lack of personal accomplishment which involves the development of fatigue, loss of concern and feelings for patients, and a feeling of inadequacy and incompetence on the job (Maslach & Jackson, 1986). For the purpose of this study, burnout will be operationally defined as the scores achieved on the Maslach Burnout Inventory (MBI) (Maslach & Jackson, 1986). The MBI consists of three subscales: a nine-item Emotional Exhaustion subscale that measures feelings of being emotionally overextended and exhausted by one's work; a five-item Depersonalization subscale which measures an unfeeling and impersonal response toward recipients of one's service, care, treatment, or instruction; and an eight-item Personal Accomplishment subscale that assesses feelings of competence and successful achievement in one's work with people (Maslach & Jackson, 1986).

Nurse: A nurse is defined as an individual who has either a master's degree, four-year bachelor of science degree, three-year or two-year diploma, and two-year associate degree in nursing, has a license to practice nursing, and is working in a position requiring such qualifications. A minimum of six months of work within the profession is required.

Social support: Support from job-related (supervisors and co-workers) and nonjob-related (spouse, family and friends) sources, which are perceived by employees (nurses) as meeting their important human needs (e.g., security, social contact, approval, belonging, and affection) (House, 1981). For the purpose of this study it will be operationally defined as the score achieved on the House and Wells' Social Support Scale (SSS) (House, 1981).

Job stress: Occupational stress experienced by hospital nursing staff as measured by a score on the Gray-Toft and Anderson Nursing Stress Scale (NSS). The scale involves the following seven subscales which measure sources of stress: (a) Relationship with Physicians, (b) Emotional Demands, (c) Communication on the Unit, (d) Workload, (e) Death, (f) Supervisor, (g) Floating between Units (Gray-Toft & Anderson, 1981).

Research Hypotheses

Hypothesis one. There will be a positive correlation between job stress and the three dimensions of burnout: Emotional Exhaustion (EE), Depersonalization (DP), and Personal Accomplishment (PA).

Hypothesis two. There will be a negative correlation between social support and the three dimensions of burnout: EE, DP, and PA.

Hypothesis three. There will be an additive relationship in which job stress and social support combine to predict the three dimensions of burnout: EE, DP, and PA.

Hypothesis four. The interactive effect of social support with job stress will predict the three dimensions of burnout: EE, DP, and PA.

CHAPTER TWO

Conceptual Framework and Review of Research Literature

Conceptual Framework

Burnout is defined throughout the literature by authorities as a syndrome or process demonstrating symptoms or changes in both the health status and the psychological status of the individual. The term burnout is reserved for those individuals working in professions where there is a certain amount of interpersonal involvement between worker and client. Characteristics of burnout are physical and emotional exhaustion; loss of positive feelings, compassion, respect and concern for clients; feelings of hopelessness and helplessness; fatigue; and development of negative self-concept and job attitudes (Maslach, 1977; Maslach, 1978; Maslach & Jackson, 1986; Pines, Aronson, & Kafry, 1981; Pines & Maslach, 1978). To understand the connection between work environment, stress and burnout, a brief summary of the theory of stress and its effects on individuals will be discussed.

Selye's work in developing a theory of stress, its reactions, and the general adaptation syndrome (GAS) in an important concept to understanding the development of burnout. He defined stress as the nonspecific response of

the body to any demand made upon it and a stressor is anything which produces stress. Selye said that whether the stressor is pleasant or unpleasant that the demand on the body to make an adjustment or to adapt to the new situation is the same. What does matter is the intensity and the frequency of the demand (Selye, 1974).

This leads to a discussion of the general adaptation syndrome (GAS) to understand the body's response to the stressor. The GAS is the manifestation of stress in the whole body. The manifestations develop over time and the GAS evolves in three stages: alarm reaction, stage of resistance, and stage of exhaustion (Selye, 1974). Burnout has been described as a negative form of adaptation to work environment stress. The individual cannot cope with the emotional stress required and begins to withdraw, using one of the distancing techniques to be discussed in Chapter Three. He just becomes too tired to continue giving so much to his/her clients.

What is the etiology of burnout in professionals? The process is insidious and it is difficult to trace the exact source of burnout. Maslach (1982) said burnout "is a response to the chronic emotional strain of dealing extensively with other human beings, particularly when they are troubled or having problems" (p. 3). Cherniss (1980b) argued that "burnout is a reaction to a stressful work

situation; thus previous empirical and theoretical work on stress in the work place also can be used to further our understanding of this phenomena" (p. 13). Stress appears to be the underlying theme for the "cause" of burnout. Thus, job stress can be considered one type of stress. "Although burnout has some of the same deleterious effects as other stress responses, what is unique about burnout is that the stress arises from social interaction between helper and recipient" (Maslach, 1982, p. 3). Pines et al. (1981), after their investigations, stated that burnout "is the result of constant or repeated emotional pressure associated with an intense involvement with people over long periods of time" (p. 15).

Jacobson (1983) wrote an excellent summary of Cherniss' theory of the dynamics of the burnout syndrome in Staff Burnout: Job Stress in the Human Services:

> Burnout is a process that begins with excessive and prolonged levels of job stress that cannot be alleviated through ordinary, active, problem solving. The first stage involves an imbalance between resources and demand (stress). This stress produces strain in the worker, manifested as feelings of tension, irritability, and fatigue. The worker then copes defensively with the job stress by psychologically detaching himself from the job and becoming apathetical, cynical, or rigid. These attitudes help the worker to first reduce the guilt and frustration associated with the work and then, by blaming the victim or system, to rationalize his withdrawal and preoccupation with his own needs. Unfortunately, the process is self-reinforcing. The loss of enthusiasm, optimism, and involvement decrease one's chances for success.

> Failure leads to further discouragement which leads in turn to further failure. The cycle is difficult to break (Jacobson, 1983, p. 101).

Current theory supports the connection between job or occupational stress and burnout. Burnout is a syndrome that develops in response to the stressors and strains a professional is exposed to in the work setting and is required to respond to on a daily basis. Burnout is said to be a result of responding or adapting in a negative fashion, which only makes the situation worse for the individual and does not resolve the original stressor. It is an accepted premise that all work environments, especially the demands of the helping professions, produce stress in men's lives. If stress cannot be eliminated or reduced to levels which do not result in the burnout syndrome, then what can be done to help those individuals at risk? Managers and administrators are looking for ways to buffer or moderate the stress found within the occupational setting and hopefully reducing the loss of good personnel who burnout from the stress. One such "buffer or moderator" may be social support and how it interacts with other aspects in an individual's life may decrease the risk of individual burnout.

Support is defined as the ability to "keep from failing or giving way, give courage, confidence, or power of endurance to" (The Concise Oxford Dictionary, 1964, p. 1298). What

distinguishes social support from the broader concept is that it necessarily involves the presence and products of stable human relationships. The concept of social support has been defined in terms of social bonds, social networks, meaningful social contact, availability of confidants and human companionship (Turner, 1983).

The concept of social support has been the subject of considerable attention and research effort among social scientists, psychiatrists, and epidemiologists. Philosophers from Aristotle to Martin Buber have emphasized that the essence of human existence is expressed in our relations with others. Social bonds, social integration, and primary-group relations in general are central concepts in sociological theory and have long been prime consideration in social analysis. A central hypothesis of primary-group theory

> holds that our morale, our sense of well-being, is sustained by membership in primary group, and that without any primary group affiliation we would become despairing. Withdrawal from primary contacts would be seen as dangerous to an individual's cognitive and emotional states (Weiss, 1974, p. 18).

The profound consequences of maternal deprivation observed by Spitz (1946), the implications of nonresponsive mothering suggested by Harlow's (1959) work, and Bowlby's (1969, 1973) discussion of the importance of attachment in healthy human development demonstrates the importance of

social interaction. "It is only a minor leap of faith to pervasive assumption that these compelling developmental contingencies must also be significant with respect to general functioning and well-being" (Turner, 1983, p. 106). The view that social bonds and supportive interactions are important to a person's health and well-being has been previously shared. What is comparatively new is the growing evidence, as noted in reviews by Cassel (1974, 1976) and Cobb (1976), that social support may be an effective buffer or mediator of life stress (Turner, 1983).

There is little agreement among researchers on the definition of social support. Despite this diversity, most definitions have focused on the helping elements and processes of the social systems in which the individual is located. A brief summary of definitions follows:

> The help that helpers extend (Gottlieb, 1981, p. 209).
>
> Support accessible to an individual through social ties to other individuals, groups and the larger community (Lin, Walter, Simeone, & Kuo, 1971, p. 109).
>
> Attachments among individuals or between individuals and groups that serve to improve adaptive competence in dealing with short-term challenges, stresses, and deprivations (Caplan & Killilea, 1976, p. 41).
>
> Information leading an individual to believe that he is (1) cared for and loved, (2) esteemed and valued, (3) belongs to a network of communication and mutual obligation (Cobb, 1976, p. 71).

> Comprised of three subconcepts: emotional (attachment, reassurance), informational (advice in solving problems and feedback), and tangible support (material supplies or services) (Schaefer, Coyne, & Lazarus, 1981, p. 385).
>
> An interpersonal transaction containing one or more of the following: affect (love, liking, respect, admiration), affirmation (agreement, acknowledgement of appropriateness or rightness of another's behavior), and aid (direct service or giving of material supplies) (Turner, 1983, p. 107).

One author, House (1981), reviewed definitions of social support in the literature, noting the common themes, the range of aspects, and the points of divergence. House structured the definition issue as: "Who gives what to whom regarding which problems." He noted agreement that emotional support is the most important type of support for buffering stress and facilitating health. House offers a four-part definition which subsumed all subconcepts of other definitions (House, 1981):

1. Emotional support (esteem, affect, trust, concern, listening).

2. Appraisal support (affirmation, feedback, social comparison).

3. Informational support (advice, suggestion, directives, information).

4. Instrumental support (aid in kind, money, labor, time, modifying environment).

House's framework is based on Lazarus' (1966) theories of stress, coping, and adaptation. Social support is viewed as a coping strategy in the face of stress. In response to a stressful stimuli, an individual engages in behaviors that fosters receipt of emotional, appraisal, informational, and instrumental support. Evidence for the use of stress theory is provided by research (LaRocco, House, & French, 1980; Nuckolls, Cassel, & Kaplan, 1972) which found social support to be correlated with favorable health outcomes only in the event of stress and to be unrelated in situations of low stress (Tilden, 1985). House (1981) explained social support as follows:

> People may be said to have social support if they have a relationship with one or more other persons which is characterized by relatively frequent interactions, strong and positive feelings, and especially perceived ability and willingness to lend emotional and/or instrumental assistance in times of need (p. 13).

House (1981) maintained that supportive social relationships with superiors, colleagues, and/or subordinates at work should directly reduce levels of occupational stress for several reasons. First, supportive co-workers are less likely to create interpersonal pressures or tensions. Secondly, the experience of support satisfies important social or affiliation needs for most people and hence tends to make them feel more positively about themselves and their jobs.

Therefore, social support should reduce known occupational stresses such as role conflict, role ambiguity, job dissatisfaction, and low occupational self-esteem. Social support's direct stress-reducing properties provide one stronger reason for attempting to enhance social support (House & Wells, 1977).

In addition to direct stress-reducing properties, House maintained that social support has the ability to "buffer" relationships between occupational stress and health. The concept of "buffering" is that social support from persons outside the work setting as well as those within it can alter the relationship between occupational stress and health. Whereas in the absence of social support, physical and/or mental disorders should increase as occupational stress increases; as levels of social support rise, this relationship should diminish in strength, even perhaps disappearing under maximal social support. This is the essence of the hypothesized "buffering" or "conditioning" effect of social support and this effect may occur regardless of whether social support has any direct effect on levels of stress and/or health. How and why should social support increase "resistance" to the deleterious consequences of stress? Consideration of the basic nature of psychosocial stress suggests some answers. An increasing number of researchers (French, Rodgers, & Cobb, 1974; Kagan & Levi, 1974; Levine &

Scott, 1970; McGrath, 1970) have converged on a conceptualization of the nature of stress as a phenomena or process. This paradigm states that "stress" is ultimately in the eye of the beholder. Stress is perceived by people when they confront a situation in which their usual modes of behaving are insufficient and the consequences of not adapting are serious. These will be situations where the demand on people exceed their abilities or where they are unable to fulfill stronger needs or values (French et al., 1974; McGrath, 1970). No one objective social or occupational situation will necessarily produce perceptions of stress or resultant physiological, psychological, or behavioral responses and outcomes in all people exposed to a situation. Rather, how people perceive a given situation depends on other individual or conditioning factors, of which social support is one (House & Wells, 1977). There is evidence from social psychological experiments that the presence of other people alters initial perceptions of objective social stimuli (Lazarus, 1966; Tajfel, 1968). Thus, social support could "buffer" the effect of potentially stressful objective situations (such as boring jobs, heavy workloads, unemployment) by causing people initially to perceive the situation as less threatening or stressful and hence leading them to manifest less of those psychological, physiological, or behavioral responses productive of disease (House & Wells, 1977). Even

if a situation is initially perceived as stressful, social support may still lessen or eliminate the tendency of this perceived stress to lead to responses productive of disease. Once a situation is perceived as stressful, a variety of responses are possible, some of which may serve to modify the objective social conditions and/or the person's perception of the situation resulting in a reduction or elimination of the perception of stress and hence to alleviate its impact on health (House & Wells, 1977). Cobb (1976) has suggested that these are the most important ways in which social support helps to buffer persons against stress.

Where efforts at coping and defense fail to reduce the perception of stress, social support may still alleviate the impact of such perceptions on other sets of physiological, psychological, and behavioral responses which are productive of more enduring health or disease outcomes. Without altering the perception of stress, social support may reduce the importance of this perception and hence the individual's degree of reaction to it. Support from spouses may mitigate the impact of job dissatisfaction on health by helping the person to recognize that the job is not so important in the total context of life and that dissatisfactions with it may be compensated for by satisfactions and accomplishments outside of work (House & Wells, 1977). Support may also have some kind of general tranquilizing effect on the

neuroendocrine system, making people less reactive to perceived stress (Cassel, 1976). Finally, supportive others may facilitate certain kinds of behavior (exercise, personal hygiene, proper nutrition and rest) which increase individuals' ability to tolerate or resist psychosocial stress as well as physical, chemical, or biological threats to health (House & Wells, 1977).

In summary, the theoretical framework for this study is based on the nature of social stress. An individual may perceive many objective work situations or conditions as stressful. The individual perceives that the environment demands exceed his abilities; or that environmental supplies and opportunities will leave major needs or motives unmet. Perceived job stress, such as perception of excessive workload or role conflict, may adversely affect general feelings about work, such as job satisfaction, which is termed job-related strain. In the "helping professions," it has been demonstrated via research that job-related stress and strain will result in burnout.

Whether perceived stress affects job strain and whether both of these affect health or result in burnout depends on what are termed conditioning variables, characteristics of the individual or the situation that conditions the relationship between these variables. Social support is one of these conditioning variables. As levels of perceived social

support increase, a reduction in level of job stress will occur. With the reduction of job stress, a concurrent reduction in burnout will be noted.

Review of the Research

The phenomena of burnout has been of interest since 1974 when Freudenberger first coined the term to describe what he saw in himself and others working with street kids. Many have tried to answer the question of who is at risk for developing burnout. By answering the question, it is hoped that the etiology and predisposing factors can be understood and a way devised to prevent or reduce the risk for individuals working in the health care professions.

Personal Characteristics and Burnout

In her early research, Maslach (1976) studied the social and psychological dimensions of burnout in 200 professionals, through personal interviews and questionnaires. Her sample included lawyers, physicians, nurses, prison personnel, social workers, child-care workers, psychiatrists and clinical psychologists. She found that all these professionals tended to protect themselves from stress by distancing themselves from their clients using a variety of techniques. Although these techniques can be helpful when used correctly, they can be detrimental to the individual and client when they result in viewing the client in negative

ways and deserving of his plight. Maslach (1976) stated that burnout becomes inevitable when the caseload becomes too heavy for the professional and he begins to feel helpless and unable to assist anyone. Her data also demonstrated that longer work hours correlated positively with more stress and negative staff attitudes only when they involved continuous direct client contact and that professionals who could actively express their feelings and share their ideas had lower rates of burnout.

"My feeling is that many of the causes of burnout are located not in permanent traits of the people involved, but in certain specific social and situational factors that can be influenced in ways suggested by our research" (Maslach, 1976, p. 22).

Maslach and Pines (1977) studied workers in the child-care setting to explore the relationship between work environment and the burnout phenomena. They chose this setting because of Pines' observations of staff members in the child-care setting her child attended and because of the desire to test the hypothesis that the quality of professional interaction is greatly affected by the number of people for whom the professional is providing care. Their sample consisted of 83 staff members from eight different centers, four private and four public. Each subject completed a questionnaire and some were interviewed. The

authors stated that the results were highly significant according to standard statistical tests, but did not specify in their article the exact method used to analyze the data.

The results supported the earlier findings of Maslach (1976). The ratio of staff to children was an important factor in job satisfaction. The staff in the higher child to staff member ratio liked their jobs less, were less likely to talk with children or confer with other staff members, felt they had little control over their job, were more approving of compulsory naps and the use of tranquilizers for hyperactive children. Longer working hours were associated with greater stress and negative attitudes on the part of staff. In addition, those staff members who were able to voluntarily remove themselves from work when they felt stressed showed less burnout. The program structure was an important factor. In general, the more open, nonstructured centers had better working conditions.

Pines and Maslach (1978) conducted a study of 76 staff members in various mental health facilities in the San Francisco area to determine the characteristics of staff burnout and ways of coping with it. They gathered their data through personal interviews and questionnaires on institution-related and personal variables. A correlation analysis of the data was performed with a significance level of $p < 0.05$.

The results showed that professionals use a set of distancing techniques to cope with stress. Pines and Maslach (1978) categorized these as follows:

1. Detached concern - establishing a balance between the handling of clients in a more objective, detached way and yet maintaining a real human concern for them. This is considered the most positive and successful technique to combat burnout.

2. Intellectualization - recasting clients into a more clinical picture, i.e., treating the diagnosis and not the person.

3. Compartmentalization - sharply separating work from their personal lives.

4. Withdrawal - minimizing involvement with clients, i.e., spending less time with clients, taking longer breaks, interacting with staff instead of client.

5. Reliance on staff - turning to other professionals for advice, comfort, tension reduction, and diffusion of responsibility.

The results of this Pines and Maslach (1978) study showed several institutional variables that increased the risk of burnout in the mental health setting. Staff-to-patient ratio was important. The more patients per staff member the higher the job dissatisfaction was among workers. Also, the higher the percentage of schizophrenia in the

patient population, the greater the job dissatisfaction experienced by staff. Work relations were better among staff members who worked with the less seriously ill and those who worked fewer hours. When workers perceived that relationships were good in the institution, among other staff members and patients, they liked their work, felt successful, described patients more positively, and rated the institution more highly. Additionally, they found that a high frequency of staff meetings correlated positively with very negative and dehumanizing attitudes toward patients among the staff. Those who attended the meetings most often were older, and higher in administration authority, used the meetings for avoidance of direct contact with patients, and viewed the schizophrenic patients with a more bizarre, cold, cruel, uncaring attitude. Staff who could take time away from direct patient contact for other work activities showed more favorable attitudes toward patients.

More specific personal variables that were examined in this study were level of education, administrative position, time in the mental health setting, sense of success and control, perceived relationship with patients, job attitudes, and attitudes toward mental illness. Pines and Maslach (1978) concluded that the longer staff had worked in the mental health field the less they liked working with patients, the less successful they felt with them, and the less human-like were their attitudes toward mental illness.

Maslach and Pines offered suggestions for preventing burnout based on their findings. The amount of direct contact with the children needed to be kept down. The opportunity for staff to get together and discuss problems, and to get advice and support should be available as one method to help cope with job stress.

Most research conducted to pinpoint a profile of the individual who is more at risk for burnout in a certain work setting is descriptive in nature. Only by understanding who is at risk, can they be identified and measures to help them initiated.

Bartz and Maloney (1986) conducted a descriptive study of registered nurses working full-time in an intensive care setting in a large Army medical center. They were interested in the relationship between intensive care nurse burnout and demographic variables in order to determine "a demographic profile descriptive of the intensive care nurse who is likely to experience burnout" (Bartz & Maloney, 1986, p. 147). They distributed a self-administered questionnaire comprised of the Maslach Burnout Inventories and a demographic data sheet to a convenience sample of 89 subjects. The data were analyzed using the Pearson product-moment correlations, and a two-tailed test of significance and regression analysis. The research article did not specify which two-tailed test was used. The significance level of this study was set at $p < 0.05$.

The results showed that five of the demographic variables correlated significantly at low to moderate levels of the components of burnout. The variable that had the most significant correlation was age which correlated negatively to frequency of depersonalization ($r = -.24$) (i.e., the younger the individual the greater the frequency in feelings of depersonalization), intensity of emotional exhaustion ($r = -.33$), and intensity of depersonalization ($r = -.25$) (i.e., the younger the individual the greater the feelings of emotional exhaustion and depersonalization). Males demonstrated greater intensity of emotional exhaustion ($r = -.23$) and intensity of depersonalization ($r = -.28$) than did females. Military nurses demonstrated greater frequency of emotional exhaustion ($r = -.24$), frequency of depersonalization ($r = -.21$), and intensity of emotional exhaustion ($r = -.21$) than did civilian nurses. Those nurses with preparation at the baccalaureate level or with higher degrees showed more frequency of emotional exhaustion ($r = -.21$) and intensity of emotional exhaustion ($r = -.21$) than nurses with less educational preparation. Length of time in nursing negatively correlated to frequency of emotional exhaustion ($r = -.28$), frequency of depersonalization ($r = -.27$), intensity of emotional exhaustion ($r = -.41$), and intensity of depersonalization ($r = -.29$) (i.e., less experience in nursing resulted in an increase in frequency and

intensity in feelings of emotional exhaustion and depersonalization. Based on this data analysis, Bartz and Maloney developed a profile of the intensive care nurse who is less prone to experience burnout as the older nurse, civilian, female with less than a baccalaureate degree who has more nursing experience. The researchers do caution that the results needed to be interpreted cautiously with regard to sex because their sample only had 10 males.

Also trying to answer who is at risk in a certain population, Beaver, Sharp, and Cotronis (1986) recognized that nurse-midwives were at risk for developing burnout and believed that descriptive data might help plan preventive measures. They conducted a study to answer two questions: (a) to what extent does burnout exist among nurse midwives, and (b) does a relationship exist between personal and environmental variables and the level of burnout experienced. A self-administered questionnaire consisting of two parts, the Maslach Burnout Inventory and demographic data was sent to 200 randomly selected members of the American College of Nurse-Midwives (ACNM). Ninety-eight completed questionnaires were returned. Three different methods of data analysis were used: the Pearson product-moment correlation for interval data, the Spearman rank correlation for ordinal or interval data which were inappropriate for parametric testing, and an analysis of variance for nominal or

grouped data related to the independent variables. The authors set the significance level for this study at 0.05.

The results demonstrated that four personal variables were significantly related to at least one of the three dimensions of the Maslach Burnout Inventory. These were age, marital status, children, and the years in nurse-midwifery/ number of jobs ratio. As age increased, burnout decreased in the dimensions of intensity of emotional exhaustion ($r = -.17$, $p = .05$), frequency of depersonalization ($r = -.23$, $p = .01$), and intensity of depersonalization ($r = -.24$, $p = .01$). Divorced nurse-midwives experienced more burnout in personal accomplishment than did married or single nurse-midwives. As the number of children a nurse-midwife had increased, burnout increased in the dimensions of intensity of emotional exhaustion ($r = .17$, $p = .05$) and frequency of personal accomplishment ($r = -.23$, $p = .01$). As the years in nurse-midwifery/number of job ratio increased, two dimensions of burnout slightly decreased; frequency of depersonalization ($r = -.19$, $p = .05$) and intensity of depersonalization ($r = -.17$, $p = .05$).

The environmental variables that significantly correlated with the Maslach Burnout Inventory were type of community, type of service, client characteristics, nurse-midwifery practice characteristics, salary, sources of support and problems. Nurse-midwives working in a more varied

type of community, combined rural and urban, had less burnout than those working in an exclusively rural area. Nurse-midwives who participated in providing continuous care showed less burnout in intensity of personal accomplishment than those who were involved only in episodic care, i.e., antepartum care only. The percentage of clients on welfare significantly correlated with four dimensions of burnout: frequency of emotional exhaustion ($r = .24$, $p - .008$), frequency of depersonalization ($r = .24$, $p = .01$), frequency of personal accomplishment ($r = -.27$, $p = .003$), and intensity of personal accomplishment ($r = -.32$, $p = .001$). In all four dimensions as the percentage of welfare clients increased so did the experience of burnout. As the numbr of nurse-midwives in a practice increased, the degree of burnout in relation to frequency of emotional exhaustion ($r = .30$, $p = .001$) and intensity of emotional exhaustion ($r = .25$, $p = .007$) increased, but decreased in relation to intensity of personal accomplishment ($r = .24$, $p = .01$). As the number of deliveries per month increased, so did the burnout dimensions of frequency of emotional exhaustion ($r = .20$, $p = .03$) and intensity of emotional exhaustion ($r = .26$, $p = .007$). As hours worked per week increased so did burnout, as measured in the dimensions of frequency of emotional exhaustion ($r = .19$, $p = .04$) and intensity of emotional exhaustion ($r = .29$, $p = .005$). With salary increase, the burnout dimensions

of frequency of personal accomplishment ($r = .26$, $p = .01$) and intensity of personal accomplishment ($r = .19$, $p = .01$) both correlated positively. This indicates that with a salary increase there tends to be less burnout in midwives.

For the purposes of this study the variable of support was of greatest interest. The data showed that three sources of support, nurses, legislators, and partner/spouse, were found to decrease burnout on the personal accomplishment subscale.

The final conclusion the investigators drew from this study was that

> Burnout in one or more dimensions may occur in: (1) younger nurse-midwives; (2) those caring for children; (3) those receiving support of nurse-midwifery practice from parents; (4) nurse-midwife practices in settings with a high proportion of welfare clients in a service where the nurse-midwives perform a large number of deliveries; (5) those who are relatively newly employed; and (6) those whose salaries are not competitive. Lack of support of the practice and presence of problems also may increase burnout on various dimensions (Beaver et al., 1986, p. 11).

In summary, the review of research literature supports a profile of an individual who is at risk for burnout as young, female, divorced, with limited years in nursing, a baccalaureate or higher degree, working in a setting with a high patient to staff ratio, and receiving a noncompetitive salary. As with all conditions involving risk factors, the more risk factors an individual is exposed to or possesses, the more at risk he/she is for developing the condition.

Work Environment and Burnout

Some researchers questioned that environmental factors might be more responsible for burnout than the personal characteristics of individuals who experienced burnout. Perhaps these environmental factors could be controlled or corrected thus reducing the risk of burnout in professionals working under those conditions.

Kanner, Kafry, and Pines (1978) examined the relationship between (a) the presence of negative life and work conditions, and (b) the absence of positive life and work conditions to individual reported experiences of life and work tedium and job satisfaction/dissatisfaction. They proposed that the presence of negative life and work conditions and the absence of positive life and work features were both significantly related to tedium and satisfaction/dissatisfaction and were independent of each other. Although a random sample was not obtained, the researcher made an effort to include a variety of professionals. The final sample consisted of 84 students and 205 professionals. A research questionnaire was administered to measure three aspects of tedium: physical, emotional, and attitudinal exhaustion. The questionnaire had a test-retest reliability of 0.89. Work features were assessed by 31 seven-point scales with a high score on an item indicating the presence of a positive or negative feature and a low score showing its absence.

The investigators did not state their method of data analysis. The final results supported both hypotheses except in the case of work satisfaction/dissatisfaction, which was related only to the lack of positive features. This study supported the theory that factors in the environment are correlated with the burnout phenomenon.

Pines and Kanner (1982), taking the same theme of positive and negative factors in the work environment, compared dialysis units at two different hospitals in the San Francisco Bay area. Pines and Kanner were interested in the most stressful aspects of individuals' work environment. They measured the level of staff burnout in each unit by administering a 21-item questionnaire which included the three components of burnout: physical exhaustion, emotional exhaustion, and mental exhaustion. The results demonstrated that although negative conditions, such as daily confrontation with death, large patient loads, time pressures, and the sight of blood were mentioned, the most often mentioned stressors were the absence of positive work conditions on the nursing units. Examples of the missing positive conditions were: lack of challenge once the technical aspects of the job were mastered; lack of a sense of completion and success with patients because of the large caseloads; lack of positive feedback; and little professional socialization due to the lack of time. The researchers concluded that,

> when comparing the two dialysis units, it appears that in spite of some difference in the presence of negative work conditions (i.e., the private hospital having a larger patient-to-staff ratio), there was still a great similarity in stressful work conditions . . . . The major difference between the two units in terms of their burnout rates can be attributed to the absence of positive conditions" (Pine & Kanner, 1982, p. 31).

Jenkins and Ostchega (1986) conducted a study of 152 nurses, randomly selected, from members of the Oncology Nursing Society, to evaluate the level of burnout in oncology nurses and variables related to the occurrence of burnout. A self-administered questionnaire which combined the Staff Burnout Scale for Health Professionals (measured reliability was 0.93) and the Yasko survey tool was given and frequency distributions were computed for all variables. The Pearson correlation coefficient was then used to examine the relationship between the variables and the burnout scores. The significance level of 0.05 was set.

The results demonstrated that the following variables correlated significantly with burnout: (a) the availability of psychological support had a negative correlation ($p < 0.01$) (i.e., the more perceived support the lower the burnout scored); amount of job stress or tension experienced had a positive correlation ($p < 0.01$) (i.e., the greater the stress the higher the burnout score); level of job satisfaction had a negative correlation ($p < 0.01$) (the greater the reported job satisfaction the lower the burnout score); and

the presence of certain sources of stress, such as organizational problems or physicians had a positive correlation ($p < 0.01$). Also age ($p < 0.05$) and years of experience ($p < 0.05$) were negatively correlated with burnout (i.e., the younger and less experienced nurses had higher burnout scores).

Cronin-Stubbs (1982b) surveyed 150 enterostomal therapists (ET) attending the burnout workshop at the 1981 IAET Conference to identify the elements in their job environment which they believed contributed to burnout. Data were collected using a questionnaire. She did a content analysis of the answers to the questionnaire to determine meaningful trends from the data.

Cronin-Stubbs (1982b) divided the results into seven major categories according to frequency of occurrence. The first category concerned elements of role conflict, with five subcategories: role overload (n=127), professional-bureaucratic conflict (n=72), incompatible demands (n=27), role ambiguity (n=80), personal-role conflict (n=6). Interpersonal-relationships with staff (n=75) and physicians (n=23) was the next highest reported element of job burnout. The third category was called high expectations and was subdivided into two parts: expectations from others (i.e., staff, physicians, clients, and supervisors) (n=40) and expectations from oneself (n=10). The fourth category of

ET burnout was related to clients (i.e., working with clients who had poor prognoses [n=22] or working with those that had excessive needs for support [n=16]). Lack of social support networks from professional sources (n=19) and from personal sources (n=10) made up the fifth category. Complaints of nonsupport (n=9) and inept supervision (n=7) were the sixth category of burnout. The last category, powerlessness, was concerned with the lack of input into decision-making involving their job (n=6).

The review of research reveals many factors in the work environment that may contribute to an individual's risk of experiencing burnout. Conditions, such as a lack of challenge in the job, of a sense of completion of work objectives, of a sense of success with clients due to increased patient caseloads can increase the risk of burnout. Other factors that exist in the work setting that can lead to burnout are role conflict, little psychological support for the staff, time demands, little or no professional socialization, and lack of positive feedback from supervisors. These factors combined with existing personal characteristics can help paint a picture of the professional who is likely to experience burnout some time during his/her career. Again, in understanding the personal and environmental risk factors for developing burnout may help supervisors or the administration in recognizing and preventing burnout among staff

and perhaps losing productive and quality individuals from the profession.

Some factors are inherent in the job and cannot be expected to change in the near future, such as the nursing shortage, care for more acutely ill patients, a heavy case-load, caring for welfare recipients and homeless people and the professional image of nursing itself. Recent research has begun to look at moderators or buffers of stress to decrease its effects on individuals and lessen the risk of burnout in those exposed to the emotional stress of their chosen profession and keep them functioning productively.

Social Support and Health-Related Behaviors

There is a fast growing body of research that demonstrates social support to be an important protection against the impact of stress on health. The following studies were conducted to evaluate the relationship between social support and health-related behaviors.

Gore (1978) conducted a longitudinal study using a quasi-experimental design to test the hypothesis that social support modified the relationship between unemployment stress and health responses. The men studied, 54 rural and 46 urban "terminees," were married blue collar workers. Data were collected by public health nurses who visited the men after the work shutdown had been announced but prior to the actual job termination, and thereafter at 6, 12, and 24-month

intervals. Social support was measured by a 13-item index covering the extent of support and affiliated relations with wife, friends and relatives. Gore's findings revealed that men who received high levels of social support reported less depression, fewer complaints of illness, and had less elevated cholesterol levels at the time of job loss than did men with low levels of social support. The rural unemployed evidenced a significantly higher level of social support than did the urban unemployed, a difference probably due to strength of ethnic ties in the small community and a more concerned social milieu. Men from rural areas experienced more weeks of unemployment, yet evidenced fewer adverse affects of stress and ill health than did men from urban areas. This suggests that social support plays an important role in adaptation (Gore, 1978).

Lin et al. (1979) examined the potential role of social support in relation to stressful life events and subsequent illness. They proposed that the stronger social support an individual can amass, the less likely he would be to experience illness. The theory was tested with a survey sample of Chinese Americans interviewed in the District of Columbia in the summer of 1972. The sample was comprised of 121 males and 49 females; 59% married, 36% unmarried, and 5% either widowed, divorced or separated. Twenty-four percent of the sample were American born, 38% were born in Hong Kong or

Canton, 9% in Taiwan, and 28% in other countries. Among the American born Chinese, 70% reported that their families had been in the United States for two generations.

Multiple regression analysis was performed on psychiatric symptoms, marital status, occupational prestige, stressful life events and social support. The results of the analysis indicated that stressful life events and social support are important factors in explaining psychiatric symptoms, even when marital status and the occupational prestige of the individual are taken into account in the regression model. Social support was found to contribute significantly and negatively to illness symptoms. There was not strong support for the buffering effect of social support. A weakness of this study is that the population consisted of Chinese Americans representing only a segment of the general population (Lin et al., 1979).

Hubbard, Muhlenkamp, and Brown (1984) used a two study approach to investigate the relationship between individuals' perceived level of social support and their performance of specific positive health practices. The purpose of the investigation was to explore the relationship between what people do to promote healthy lifestyles and how they perceive their level of social support. One sample consisted of 97 adults, age 55 and older, attending activities at a senior citizens' center. The second sample was comprised of adults

attending a health fair. Subjects were surveyed using the Life-Style Questionnaire and the Personal Resources Questionnaire. The primary study hypothesis that a strong positive association would be found between the social support and the health practice variables was upheld for both samples. A secondary hypothesis that married participants would score significantly higher on both the social support and health practices instruments than would their nonmarried counterparts was supported only among the senior center participants.

In view of the nonrandom nature of the two samples, the generalizations presented here are tentative. However, the primary hypothesis was supported by both studies. These studies have affirmed the importance of social support as a variable in positive health-related behavior. Specifically, social support was shown to be positively related to health practices for two samples of volunteer subjects (Hubbard et al., 1984).

In summary, there appears to be a strong positive association between social support and health practices. These three studies support the importance of social support as a variable in health-related behavior.

Social Support, Occupational Stress and Health

The following studies were based on the hypothesis that social support protects the person against the noxious effects of job stress and thus will keep the adverse effects on health low.

House, Wells, Landerman, McMichael, and Kaplan (1979) studied the effect of social support on work stress, health, and the relationship between stress and health in the hourly work force of a large tire, rubber, chemical, and plastics manufacturering plant in a small northeastern city. The population consisted of the entire hourly (nonmanagerial) work force of the plant and included a wide range of blue collar occupations, from skilled craftsmen and technicians to relatively unskilled laborers. The data presented was derived from a mail questionnaire returned by 1,809 (out of 2,854 for a 70% response rate) white male workers in the plant.

A self-administered questionnaire concerning perceived job stress, health, and exposure to physical-chemical hazards was mailed to all 2,856 hourly workers in late April 1974. Repeated follow-ups over eight months resulted in a sample of 1,809 white males. A nonrandom subset of 447 workers from the same population received medical examinations and tests in October 1974; of these, 353 were white males who had also returned questionnaires.

The level of social support was measured via the House and Wells Social Support Questionnaire. House et al. (1979) arrived at a single measure of support from each of four sources: work supervisor, co-worker, spouse, and a combined category of friends and relatives. The score was derived by adding up the appropriate items (six items for the supervisor, three for co-workers, and two each for spouse and friends/relatives). These indices were viewed as measuring primarily emotional support. House et al. (1979) examined the effect of perceived social support from the four different sources individually and also derived a total social support score by summing the scores from the four sources. Perceived stress was significantly associated with ill health. Findings also suggested that workers discriminate between people in reporting their level of support. Many workers perceive one source as supportive but not another. Supervisor support moderately reduced all forms of perceived work stress. As supervisor support increased, satisfaction and esteem increased and job pressure, such as job-related conflict decreased. In addition, as supervisor support reduced stress, a weaker tendency for stress to produce disease symptoms was noted. Co-worker support had a small to moderate main effect on reducing perceived stress, but no effect on health. Thus work related sources of support, especially supervisor support, did reduce work stress and

improve health (indirectly); but nonwork sources of support appeared to have little or no effect on work stress and health (House et al., 1979).

LaRocco et al. (1980) reviewed and compared results from several studies of occupational stress, social support, and health which, despite substantial similarities in their methods and underlying conceptual frameworks, have demonstrated conflicting results (i.e., House & Wells, 1978; LaRocco & Jones, 1978; Pinneau, 1975, 1976). This comparison involved intensive reanalysis of one study (Pinneau, 1975) to make the methodology more similar to the other two studies and more appropriate to the general question of interest: Whether and when social support buffers the impact of occupational stress on job-related strains and health.

The Pinneau (1975) population consisted of 2,010 men in 23 occupations, ranging from physicians to assembly line workers, drawn from 67 organizational or geographic sites spread over the eastern, southern, and midwestern sections of the United States. From this population an occupationally stratified random sample of 636 men was drawn to ensure that all occupations were equally represented.

Measures included in data collection were:

1. **Perceived job stress.** Five indices of perceived stress in the job environment were employed: quantitative workload (the amount of work a person is given to do); role

conflict (the presence of conflicting demands from role senders); job future ambiguity (amount of uncertainty the person has about his job and career security); under-utilization of skills and abilities (lack of opportunity to use one's skills and abilities for which one has received training or had experience); participation (amount of influence that individuals have on decisions affecting them). Caplan, Cobb, French, Van Harrison, and Pinneau (1975) reported reliabilities (coefficient alpha) for these measures ranging from .71 to .89.

2. **Person-environment fit.** This index used measures of person-environment fit with regard to workload, role ambiguity, responsibility for persons, and job complexity. In each case, the respondent rates both the condition of his job environment (E) and his personal preferences for these variables (P) on a commensurate set of items. The discrepancy between the P and E responses represent the measure of fit. Caplan et al. (1975) reported reliabilities for these variables ranging from .71 to .74.

3. **Job-related strain.** Measures of job-related strain were a four-item scale of job dissatisfaction, a three-item scale of workload dissatisfaction, and a three-item scale measuring boredom. Reliabilities for these three indices were .85, .82, and .86, respectively (Caplan et al., 1975).

4. **General mental health strain.** The four indices of general mental health strain comprised a 10-item measure of somatic complaints adapted from Langner (1962) (reliability, .76), and three indices of general affective strains; a six-item measure of depression (reliability, .83), a four-item measure of anxiety (reliability, .75), and a three-item measure of irritation (reliability, .80). The latter three measures were adapted from Cobb and Kasl (1977).

5. **Social support.** Support from three sources: (a) supervisor, (b) co-workers, (c) wife, family, and friends was measured. Participants responded to four items (for each source) designed to tap the presence of psychological and tangible supports. Each set of four items was summed into an index of support from that source. The indices of support from the three sources were not highly correlated (r's = .11, .34, and .39), showed little social desirability influence, and had alpha coefficients ranging from .73 to .83.

In the original analysis, Pinneau (1975) chose a sub-grouping technique in which his sample was split into low and high support groups. The renalaysis reported here used instead the same moderated regression approach employed by House and Wells (1978) and LaRocco and Jones (1978). The significance level chosen as minimally acceptable was $p < .10$.

In summary, Pinneau (1975) reported no more buffering by social support than might occur by chance. However,

reanalysis of Pinneau's data by LaRocco et al. (1980) suggests that social support does buffer the effect of job stress and job strain on overall mental health, but does not clearly buffer the impact of job stress on job-related strain. The pattern of effects reveals that co-worker support has a somewhat more pervasive buffering effect than supervisor or home support, especially in buffering workers against the impact of stress on depression and somatic complaints. Although all three sources of support yielded more buffering effects than would be expected by chance, co-worker support produced about twice as many effects (19) as supervisor support (10) and home support (8) (LaRocco et al., 1980).

In an investigation which resembled the work of LaRocco and Jones (1978), LaRocco et al. (1980), House et al. (1979), and Winnubat, Marcelisser, and Kleber (1982) studied 1,246 employees of 13 different industrial organizations comprised of 1,167 native born males and 79 females, all living in the southeastern part of the Netherlands. The total population numbered 1,600 employees, of which 80% were willing to participate.

The subjects' ages ranged from 34 to 65 years with a mean age of 45 years. The sample was part of a large scale longitudinal study of the psychosocial causes of ischemic heart disease being conducted by the University of Nijmegen.

The medical examinations were part of another large-scale research project, the COPIH project.

The research was based on the hypothesis that social support protects the person against the noxious effects of job stress and will keep the strain and negative health effects low. The measure used was the Organizational Stress Questionnaire, which measures several aspects of perceived job stressors, strains, personality and social support. Five indices of perceived stress in the work environment were used: (a) role conflict, (b) role ambiguity, (c) overload, (d) future uncertainty, and (d) responsibility. Four indices of general psychological strain were employed: irritation, depression, anxiety, and threat. Five indices of health problems were used: heart complaints, general somatic complaints, systolic blood pressure, diastolic blood pressure, and level of cholesterol. Social support from two sources were measured: supervisors and co-workers.

Data were analyzed via moderated regression analysis. In this method, the multiple correlation between the predicted variables and the predictors are determined twice; the first time with an interaction term, the second time without one. If there is a buffering effect, the multiple correlation must increase significantly when the interaction term is included as a predictor. The analysis demonstrated that social support buffers the impact of work-related stressors

on psychological and behavioral strains but that there was no such buffering effect on health strain. Supervisors giving support in the presence of psychosocial problems resulted in buffering employees against high blood pressure (Winnubat et al., 1982).

Quasi-experiments in stressful situations occurring naturally further demonstrated the role of social support in buffering the impact of stress on health. Perhaps the single most widely cited study in the literature on social support is that of Nuckolls (1972). They examined the relationships among psychosocial assets, social stresses as measured by a cumulated life change score and the prognosis of pregnancy. Nuckolls et al. theorized that rather than searching for a specific relationship between social factors and a particular disease or pathological outcome, it might be more valuable to regard the role of such factors as enhancing susceptibility to disease in general. To determine the harmful consequences of any "stressful" situation, they postulated that it would be necessary to attempt to measure the balance between the stressful situation and the nature and strength of the supportive or protective elements involved.

The study was conducted at a large military hospital. The subjects were white primigravidas, married to enlisted men, registered for obstetrical care prior to the twenty-fourth week of pregnancy. Three instruments were utilized in

data collection. The Adaptive Potential for Pregnancy Score (TAPPS) is a questionnaire developed by Nuckolls et al. (1972) to measure psychological or social factors which contribute to a woman's ability to adapt to her first pregnancy from which a single index score could be derived representing the adaptive potential for pregnancy. The score is derived from responses to questions designed to measure the subject's feelings or perceptions concerning herself, her pregnancy and her overall life situation, including her relationship with her husband, her extended family and the community. Life crisis is measured by the Life Change Score which provides for a summed score of the life changes which occurred in the two years before pregnancy, and a second score for more recent changes which occur during pregnancy.

At the time of prenatal registration, the TAPPS questionnaire was administered to all women who met the study criteria. The intake sample was 340. The Schedule of Recent Experiences was mailed to subjects during the thirty-second week of their pregnancies and the medical records were reviewed following delivery and hospital discharge.

The results of the study indicated that in the presence of mounting life change (life change scores high both before and during pregnancy), women with high psychosocial assets had only one-third the complication rate of women whose psychosocial assets were low. Women who had low levels of

life changes or high levels of psychosocial assets experienced a moderate rate (33% to 49%) of complications of all types, but almost all women (91%) with high levels of life change and low levels of assets experienced complications. Thus, life changes increased complications, but only if psychosocial assets, including social support, were low. Women with high psychosocial assets, including social support, were protected or buffered against the adverse effects on health of high rate of life changes. These assets, however, were not especially beneficial to women who experienced low levels of life change. In the absence of such life changes, particularly for the period before pregnancy, the level of psychosocial assets was irrelevant, there being essentially no difference in the complication rate between those having high and low TAPPS scores (Nuckolls et al., 1972).

Norbeck (1985) tested the theoretical model of social support, occupational stress, and health in relation to critical care nurses. In this study, perceived job stress was measured specifically in terms of the types of work-related stressors identified in the critical care literature. Job dissatisfaction was selected to represent job-related strain, and a global score of psychological symptoms was the mental health outcome selected for study. Social support was studied as a single global score in the model, and additional

research questions concerning types and sources of support were explored.

The sample consisted of 164 female respondents from a larger mixed-sex sample (N=180) who were recruited in 1983 from eight hospitals with a total of 18 critical care units in an urban-suburban area of northern California. All critical care nurses who worked at least 80% of the time were invited to participate in the study. Of the population contacted, 57% returned postcards indicating interest in participating; the response rate was 85% from this group.

The age of the female nurses in this sample averaged 31.7 years (SD = 7.0), and their average educational attainment beyond high school was 4.4 years (SD = 1.4). These nurses had worked an average of 7.7 years in nursing (SD = 6.6) of which 4.7 years (SD = 3.9) were in critical care. Most of the respondents were white (85) with approximately equal numbers of Asian, black, and Hispanic nurses comprising the remainder. Forty-three percent were currently married; of the unmarried group, 34% were single, 22% divorced or separated, and 1% widowed.

Four established instruments and a demographic check sheet were mailed to the nurses. The entire questionnaire packet required approximately 30 to 45 minutes to complete. Social support was measured by the Norbeck Social Support Questionnaire (Norbeck, Lindsey, & Carrieri, 1983). Perceived job stress was measured by a revised version of the

Questionnaire of Stressful Factors in the intensive care unit (Huckabay & Jagla, 1979). This 32-item questionnaire uses a situational format and a five-point Likert scale to measure stressful events in critical care nursing identified in prior descriptive research. Only content validity and internal consistency reliability have been established for this instrument.

The variable of job strain was measured by the Nursing Job Satisfaction Scale (Atwood & Hinshaw, 1985). This instrument has 35 items with a five-point Likert scale to measure six dimensions of job satisfaction.

Psychological symptoms were measured by the Brief Symptom Inventory (Derogatis & Spencer, 1982). This 53-item, five-point Likert rating scale measures nine primary symptom dimensions and three global indices of psychological distress.

Pearson correlations between the demographic, work history, and setting variable and the outcome variables were used to determine which of these variables should be controlled in subsequent analysis. T-test results showed that the married and unmarried nurses did not differ significantly on any of the study variables; thus, the full sample was used to test the relationship predicted from the LaRocco et al. (1980) model. The total social support score was entered for social support. Separate hierarchical multiple regressions

for each outcome variable were done, and in each case the control variables of years of work experience and shift were entered before the predictor variables.

The results of the study showed that all the predicted main effects were significant but the interaction terms were not demonstrated. Social support explained 4.9% of the variance in perceived job stress, 2% of the variance in job satisfaction, and 5.4% of the variance in psychological symptoms. The explained variance in psychological symptoms from social support, perceived job stress, and job dissatisfaction was 21.1%, which provides support for the main effects predicted. The findings from this study demonstrate that LaRocco et al.'s model of occupational stress can be successfully applied to the human service area. Also, these results are consistent with House's (1981) observation that in occupational settings the stress-reducing effects of social support are quite general while the buffering effects are more limited.

When and/or whether social support buffers the impact of job stress was the general question of interest in the following study. LaRocco and Jones (1978) explored relationships between job stress (role conflict and ambiguity) and social support (from leaders and co-workers) in terms of direct and moderated relationships with a variety of negative outcomes, namely, job dissatisfaction, lowered self-esteem,

intentions to leave the organization, and increased illness. The sample consisted of 3,725 U.S. Navy enlisted men aboard 20 ships in the Atlantic and Pacific fleets. Average age of the sample was 23.8 years; average time in the Navy was 4.8 years. Individual perceptions of the work environment were measured by a 145-item questionnaire. Two additional components were used to assess leader and co-worker support. Component scores were derived by a direct solution procedure. Job satisfaction was measured by 12 items adapted from Porter and Lawrence (1968) and Hackman and Lawler (1971). Finally, the frequency and reasons for individual visits to the ship's medical treatment facility during the six to eight-month period subsequent to questionnaire administration were recorded and used to compute an individual illness criteria score.

Analysis involved both subgrouping and moderated regression techniques. Results generally failed to provide evidence for the social support buffering hypothesis. Support, whether from leaders or peers, did not appear to be an effective means of removing the negative influences of stress produced by conflict and ambiguity (LaRocco & Jones, 1978).

In summary, social support was found to buffer the effect of job stress on health in both the general population and in the nursing populations studied.

Social Support, Occupational Stress and Burnout in Professionals

Incorporating Cobb's (1976) definition of social support as information that leads individuals to believe that they are cared for and loved, esteemed, and valued, and that they participate in a network of communication and mutual obligation, Pines (1983) examined social support from a slightly different perspective, the function it serves for the individual. The six basic support functions identified were: listening, technical support; technical challenge, emotional support; emotional challenge; and the sharing of social reality. Pines also investigated in this study the relationship between burnout and the availability of social support in professionals.

Listening support involves at least periodically, someone who will actively listen without giving advice or making judgments. To provide technical support and affirm competence, a person must be an expert in one's field and must be someone whose honesty and integrity one trusts. Technical challenge involves exposure to colleagues who know as much or more about the job one does. Pines (1983) maintained if an individual is not challenged, he runs the risk of stagnation and boredom resulting in burnout. A third function of effective support systems is emotional support and appreciation. An emotional supporter is a person who is willing to be on our side in a difficult situation even if he or she is

not in total agreement with what we are doing. Emotional challenge involves questioning the individual if he is really doing the best to fulfill his goals and overcome obstacles. The sixth function, social reliability testing and sharing, requires external validation of one's perceptions.

Pines' (1983) sample included 80 professional subjects: 48 American, 32 Israelis; 35 were males, 45 females; 35 reported self-fulfillment to be the main motivating force in their lives; 45 reported that people were the main motivation in their lives. The subject breakdown in terms of country, sex, and motivation created a 2 x 2 x 2 factorial design. Subjects' professions included psychology, teaching, management, engineering, architecture, chemistry, medicine, nursing, law, song writing, and economics. The average length of involvement in their current jobs was four years and four months, and the average length of involvement in their careers was nine years and eight months.

Subjects were all recruited individually in the San Francisco Bay Area. Each subject was asked to take part in a short interview, lasting from 15 to 30 minutes, in which the relationship between burnout and the availability of social support was investigated. A 21-item burnout measure (Pines et al., 1981) was administered. The 21 items represented the three components of burnout: physical exhaustion, emotional exhaustion, and mental exhaustion. All items were responded

to on a seven-point frequency scale from 1=never to 7=always. Test-retest reliability of the measure was found to be .89 for a one-month interval, .76 for a two-month interval, and .66 for a four-month interval. Internal consistency was assessed by alpha coefficients for most samples studied; value ranged from .91 and .93. All the correlations between individual items and the composite burnout score were statistically significant at the .001 level of significance (Pines et al., 1981).

The second part of the data collection involved the six social support functions. After a short description of the six social support functions, subjects were asked to indicate, on a seven-point scale, how important each function was to them personally (1=not at all important, 4=somewhat important, and 7=extremely important). They were asked to rate the extent to which their need for each of these forms of support was currently being fulfilled (from 1=not at all fulfilled to 7=fulfilled completely); they were also asked to indicate how many people fulfilled each function.

The results of this study indicated that all six of the social support functions were rated as very important (the lowest of the valued function was 5.3 on the seven-point scale). The two most highly rated functions were listening ($x = 6.2$), and emotional support ($x = 6.0$). With the single exception of technical challenge, all of the

other support functions were positively and significantly correlated to burnout. The more that subjects experienced burnout, the more important the support was to them. The highest correlation ($r = .31$, $p = .002$) was between sharing social reality, indicting that the more burned out one is, the most isolated one feels, and consequently the more importance one places on having other people around who share one's social reality. The second highest correlation was between emotional support and burnout ($r = .27$, $p = .007$), demonstrating the burned out person's sense of helplessness and growing isolation.

While all of the correlations between burnout and the ratings of the importance attributed to the six support functions were positive (the more burnout, the more importance attributed), all the correlations between burnout and the actual availability of that support were negative (the more the function was fulfilled for the individual, the less burnout). It is also noteworthy that all the means of availability were lower than the means of importance.

The highest negative correlation found between availability and burnout was between technical support and burnout ($r = -.38$, $p = .001$); the availability of the other work-related function, technical challenge, was also found to be highly correlated with reduced burnout ($r = -.33$, $p = .001$). The availability of emotional support and challenge and the

availability of a listener were also negatively and significantly correlated with burnout.

Concerning the number of people providing the various support functions, it is important to note that the actual number of people providing support was not crucial. Rather, it was the degree to which social support functions were fulfilled which correlated with one's level of burnout. Pines' (1981) results suggest that the more burned out people are, the more importance they place on the support functions. Also, people who had social support readily available were less likely to burn out (Pines, 1982).

Social Support, Occupational Stress and Burnout in Nurses

Firth, McIntee, McKeown, and Britton (1986) examined the nature of interpersonal support (that support which staff get through face-to-face contact with other people) as experienced by nurses, and its relationship to feelings of discouragement, emotional exhaustion, or "burnout." They were particularly concerned with nurses' experiences of what makes for personally supportive behavior in their superiors. Firth et al. (1986) hypothesized that higher degrees of experienced support would be associated with reduced emotional exhaustion, depersonalization, lack of personal accomplishment and less frequent thoughts of leaving the job.

Firth et al. (1986) asked respondents to complete two sets of questionnaires: one describing their feelings about their work, the other describing perceived attributes and behavior of their superior. All questionnaires were coded in such a way that confidentiality was maintained, but information from staff on the same unit could be compared. Nurses approached for the study included all charge nurses, staff nurses and student nurses from three large psychiatric and mental handicap hospitals and the medical units from three small general hospitals; 213 individuals (44% of all qualified staff) agreed to participate and 185 (62 charge nurses, 60 staff nurses and 63 student nurses) returned the questionnaires. Staff who completed questionnaires did not differ in sex, average age or time spent in their grade from the total staff complement. Charge nurses' average age was 35.7 years with 3.6 years in current position, staff nurses' average age was 29.1 with 1.7 years in current position, and the average age of student nurses was 29.1 years with 1.7 years in current position.

The instruments utilized for data collection were the frequency format of the Maslach Burnout Inventory, a 22-item scale assessing Emotional Exhaustion, Depersonalization and Personal Accomplishment (Maslach & Jackson, 1981). Firth et al. (1986) also included items assessing the personal attributes of age, length of service, and frequency of

contact with superiors. In addition, questions included a measure of thoughts on job turnover (How often do you think of leaving for another job or stopping work?), availability of support and rating of quality of interpersonal support from the immediate superior over the past two months. Role ambiguity was measured by five questions (Kahn, Wolfe, Quinn, & Snoer, 1964). Of these, two were particularly relevant: they asked about the clarity of superiors' expectations of them, and the clarity of feedback on their work. These measures were presented as five-point Likert-type scales, excepting the Maslach Burnout Inventory which uses a seven-point format from "never" to "everyday."

Levels of emotional exhaustion and depersonalization were significantly lower in this sample than in the U.S. norms (Maslach & Jackson, 1981). Levels of personal accomplishment were nearly identical. Perceived availability of support was significantly related to reduced emotional exhaustion, depersonalization and fewer thoughts of leaving. In fact, perceived availability of support was the most important correlate of thoughts of leaving. Firth et al. (1986) concluded that supervisor support in the form of respect and empathy contribute to reduced emotional exhaustion (One dimension of burnout) among nursing staff.

Cronin-Stubbs and Brophy (1985) examined the relationship among social support, occupational stress, life stress

and work setting and staff nurse burnout. They theorized that on-the-job and off-the-job social support may lessen occupational distress, while the lack of supportive relationships may enhance one's vulnerability to burnout. The sample studied consisted of 296 randomly chosen, female, staff nurses working full-time in one of four specialty areas (psychiatry [N=66], operating room [N=65], intensive care [N=74], medicine [N=91]) at one of three large (900 to 1,100 beds) metropolitan medical center hospitals. A summary of the demographic data revealed that the respondents were typically single (63.7%), between 21 and 30 years old (76.2%), bachelor's prepared in nursing (63.1%), employed as nurses from 2 to 10 years (65.4%), and involved in providing primary care nursing (72%) while rotating shifts (42.6%) or working only day shift (21.1%).

The research instruments: the Norbeck Social Support Questionnaire (Norbeck et al., 1983), the Nursing Stress Scale (Gray-Toft & Anderson, 1981), the Life Experience Survey (Sarason, 1978) and the Staff Burnout Scale for Health Professionals (Jones, 1980) were administered via self-report questionnaire technique. Data were analyzed using stepwise multiple regression. Multivariate and factorial analysis of variance and post hoc comparisons were performed to determine the differences in social support experiences by the nurses in the four speciality areas.

Consistent with previous research (Pines, 1983), social support was negatively associated with stress and predictive of burnout. In an atmosphere of occupational and personal stressors, a social support system providing emotional support may offset the effects of intense and undesirable stressors and contribute to the prevention of burnout.

Application is limited to medical centers which in and of themselves attract a certain type of population of nurses which is obvious in the demographics (single, BSN, age 21-31).

Constable and Russell (1986) examined the effect of social support and the work environment upon burnout among nurses. In addition, they evaluated the effects of social support in reducing and/or buffering the relationship between negative aspects of the work environment and burnout. They hypothesized:

1. Perceived social support has a direct or main effect on burnout.

2. There will be a positive correlation between adversities in the work environment and burnout at low levels of social support, and this relationship should disappear as the level of social support increases.

3. The work environment as perceived by nurses has a direct effect on the extent of burnout (p. 145-157).

This survey of nurses (with either a four-year degree, three-year diploma, two-year associate degree, or license as as practical nurse) was conducted at the Fitzsimons Army Medical Center (FAMC), Aurora, Colorado. FAMC is a federal military medical center with approximately 550 beds and a nursing staff of 420. An on-site visit was made and questionnaires were completed by respondents during work hours or were taken home for completion and returned the next day. The total nurse population available during the survey was 391. Nurses responding to the survey questionnaire totaled 310, a return rate of 79%.

The questionnaire consisted of four components: a measure of burnout, a measure of work environment, a measure of social support, and demographics. Burnout was measured via the Maslach Burnout Inventory (MBI), developed by Maslach and Jackson (1981). The Work Environment Scale (WES), as developed by Moos and Insel (1974) was used to assess how nurses perceived the hospital environment. The seven nine-item subscales employed in this study were: autonomy, task orientation, clarity, innovation, physical comfort, work pressure, and control. The reliability coefficients for these subscales range from .73 to .86. The WES has been tested in a variety of research projects, including ones involving health care workers. The results provided evidence of the measure's validity. Social Support was assured via

the House and Wells (1978) Social Support Scale. Four sources of social support were measured: supervisor support, co-worker support, spouse support, and friend/relative support.

A multiple regression approach was employed to test the hypothesis. Specifically, analysis was concerned with: (a) how well the three dimensions of the work environment predicted burnout, (b) the direct effects of the four sources of social support on burnout, and (c) whether there was evidence of a interaction or buffering effect by social support on the relationship between negative aspects of the work environment and burnout. Each dimension of burnout was regressed separately on the independent variables, after controlling for possible confounding effects on demographics, such as sex, age, marital status, children, education, on job-related variables such as workload, work area, experience, and supervisory responsibility.

Consistent with the hypothesis, nurses who reported working in a more negative work setting and under greater work pressure also experienced greater emotional exhaustion. Only lack of support from supervisors was a significant predictor of emotional exhaustion. Nurses who evaluated their supervisors as being supportive were less emotionally exhausted. Results also indicated that as supervisor support increased, the negative relationship between emotional

exhaustion and job enhancement disappeared. The pattern of these results is consistent with the buffering hypothesis. Only job enhancement had a significant effect on depersonalization. Nurses who evaluated their work setting more negatively also reported greater levels of depersonalization. None of the social support variables or the interaction terms were significantly related to depersonalization. When the personal accomplishment dimension of burnout was regressed on the three work environment variables, job enhancement was the only significant predictor. Nurses who evaluated their job setting more positively also reported a greater sense of personal accomplishment.

The results of the multiple regression analyses revealed that the major predictors of the three MBI composite variables were job enhancement, work pressure, and supervisor support. The findings also indicated significant moderating effects of supervisor support on the relationship between job enhancement and emotional exhaustion. Results also revealed that as supervisory support increased, the negative relationship between job enhancement and emotional exhaustion virtually disappeared.

Job enhancement was significantly correlated with all three aspects of the burnout syndrome. These results indicate that nurses are more susceptible to burnout when working in areas where there is a lack of encouragement to be

self-sufficient, tasks are not clearly understood, rules and policies are not explicitly communicated, there is a lack of variety and new approaches, and the work environment is less than attractive and comfortable. Work pressure was also positively correlated with burnout. However, a significant association was found only for the emotional exhaustion dimension of burnout. Finally, control was not found to be correlated with any of the aspects of burnout.

Supervisor support was found to be negatively correlated with burnout. However, there was a significant association only with the emotional exhaustion dimension of burnout. These results indicate that high levels of support from supervisors can directly decrease feelings of emotional exhaustion, and therefore affect the potential for burnout among the nurses. Supervisor support also interacted with job enhancement in predicting emotional exhaustion. Thus, the negative effects of the job environment were buffered by high levels of supervisor support, reducing the impact of the job environment on emotional exhaustion. Significant relationship between the other sources of social support (co-worker, spouse, and family/friends) and burnout were not found.

In summary, findings cited in this review indicate that social support from significant sources can reduce the

harmful effects of job stress. The studies on social support and burnout are limited, however, studies completed to date suggest that social support may buffer the effects of job stress and thus interrupt the evolution process of the burnout syndrome.

Summary

In summary, the theoretical framework for this study is based on the nature of social stress. An individual may perceive many objective work situations or conditions as stressful. The individual perceives that the environment demands exceed his abilities; or that environmental supplies and opportunities will leave major needs or motives unmet. Perceived job stress, such as perception of excessive workload or role conflict, many adversely affect general feelings about work, such as job satisfaction, which is termed job-related strain. In the "helping professions" it has been demonstrated via research that job-related stress and strain will result in burnout.

Whether perceived stress affects job strain and whether both of these affect health or result in burnout depends on what are termed conditioning variables, characteristics of the individual or the situation that conditions the relationship between these variables. Social support is one of these conditioning variables. As levels of perceived social support increase a reduction in level of job stress will occur.

With the reduction of job stress a concurrent reduction in burnout will be noted.

The review of research literature supports a profile of an individual who is at risk for burnout as young, female, divorced, with limited years in nursing, a baccalaureate or higher degree, working in a setting with a high patient to staff ratio, and receiving a noncompetitive salary. As with all conditions involved with risk factors, the more risk factors an individual is exposed to or possesses, the more at risk he/she is for developing the condition.

The review of research reveals many factors in the work environment that may contribute to an individual's risk of experiencing burnout. Conditions such as a lack of: challenge in the job, a sense of completion of work objectives, a sense of success with clients due to increased patient caseloads can increase the risk of burnout. Other factors that exist in the work setting that can lead to burnout are role conflict, little psychological support for the staff, time demands, little or no professional socialization, and lack of positive feedback from supervisors. These factors combined with existing personal characteristics can help paint a picture of the professional who is likely to experience burnout sometime during his/her career. Again, understanding the personal and environmental risk factors for developing burnout may help supervisors or the administration

in recognizing and preventing burnout among staff and perhaps losing productive and quality individuals from the profession.

Some factors are inherent in the job and cannot be expected to change in the near future, such as the nursing shortage, care for more acutely ill patients, a heavy caseload, caring for welfare recipients and homeless people and the professional image of nursing itself. Recent research has begun to look at moderators or buffers of stress to decrease its effects on individuals and lessen the risk of burnout in those exposed to the emotional stress of their chosen profession and keep them functioning productively.

Findings cited in this review indicate that social support from significant sources can reduce the harmful effects of job stress. The studies on social support and burnout are limited; however, studies completed to date suggest that social support may buffer the effects of job stress and thus interrupt the evolution process of the burnout syndrome.

CHAPTER THREE

Methodology

In this study the relationship of social support, job stress and burnout in nursing staff was investigated. A descriptive correlation design was used for this research.

Setting, Population, and Sample

Data were collected in two moderate-sized (bed capacity 400-460) midsouthern Atlantic metropolitan acute care hospitals. The population was made up of registered nurses who have been working in the nursing profession for six months or longer. Educational backgrounds were diploma, associate degree, bachelor of science degree, and master's degree in nursing. Nurses working full-time and part-time from all clinical areas, assigned to all shifts in these two hospitals were surveyed. Staff nurses, head nurses and charge nurses participated; however, no attempt was made to differentiate job stress, social support or burnout among the three groups.

The convenience sample was composed of the 171 registered nurses who met the study criteria and who returned completed questionnaires.

Procedure

An introductory letter (Appendix A) containing the abstract and the questionnaire packet was submitted to the Director of Nursing of both hospitals. After the directors' review of the research proposal, the researchers met with the directors to answer any additional questions. A signed consent form (Appendix B) to conduct research at the hospital was obtained and plans were completed for data collection.

The data collection packets were distributed to all registered nurses on their respective units by the head nurses. Completed packets were then returned to collection envelopes which were available on each nursing unit. The completed questionnaires were picked up daily from the collection envelopes by the research team. One week after the initial distribution, a reminder notice was posted on each nursing unit, requesting that staff promptly complete and return the questionnaires. The data collection period lasted 14 days. After that time the completed questionnaires were compiled for analysis.

The data collection packet was made up of a cover letter (Appendix C) stating the purpose of the study, benefits of the study, cost of participation, and assurance of anonymity. Consent was assumed by return of the packet. No signature was required, thus assuring complete anonymity. The data

collection packet (Appendix D) had four components: a demographic information form, House and Wells Social Support Scale, Gray-Toft Nursing Stress Scale, and Maslach Burnout Inventory. The instruments will be explained in detail in the following section.

Measurement Tools

Demographic Information Form

Participants completed a general information section which recorded the age, years worked in nursing, years in current job, full or part-time status, and highest degree of education attained. Demographic correlations examined in this study included age, years in current job, and years in nursing (Appendix D).

Maslach Burnout Inventory (MBI)

This inventory was developed by Maslach and Jackson (1981) to assess the psychological or affective dimensions of the burnout syndrome. Permission to use the MBI was obtained from the Consulting Psychologists Press, Inc., Palo Alto, California (personal communication, 12 December, 1987). The MBI consists of three subscales: a nine-item Emotional Exhaustion subscale (score range 0-78); a five-item Depersonalization subscale (score range 0-102); and an eight-item Personal Accomplishment subscale (score range 0-84). The

frequency of occurrence of each of the 22 items is scaled. The frequency scale ranges from 1 ("a few times a year or less") to 6 ("every day"). A value of zero was given if the respondent indicates "never" by checking the appropriate box. A high degree of burnout was reflected in high scores on the Emotional Exhaustion and Depersonalization subscales and in low scores on the Personal Accomplishment subscales. An average degree of burnout was reflected as average scores on the three subscales. A low degree of burnout was reflected as low scores on the Emotional Exhaustion and Depersonalization subscales and as high scores on the Personal Accomplishment subscale (Table 1).

Table 1

Classification of MBI Burnout Scores

	Range of Burnout Scores		
MBI Subscales	Low	Moderate	High
Emotional Exhaustion	0-16	17-26	$\geq$ 27
Depersonalization	0-6	7-12	$\geq$ 13
Personal Accomplishment*	$\geq$ 39	32-38	0-31

*Personal Accomplishment is scored in the opposite direction of Emotional Exhaustion and Depersonalization

Internal consistency for the MBI had been estimated by Cronbach's alpha from samples of employees in various

helping occupations (Maslach & Jackson, 1986). The reliability for the subscales were as follows: Emotional Exhaustion, r = .90; Personal Accomplishment, r = .79; and Depersonalization, r = .71.

Validity of the MBI had been demonstrated in several ways. In a study reported by Maslach and Jackson (1981) concerning policeman and their wives, the wives were asked to rate their husbands on certain behaviors which were expected to reflect Emotional Exhaustion and Personal Accomplishment dimensions of the MBI. Each of the ratings were compared with the MBI scores for Emotional Exhaustion and Personal Accomplishment. Policemen who scored high on Emotional Exhaustion were rated by their wives as coming home upset and angry ($r = .29$, $P < .001$), tense and anxious ($r = .25$, $P < .001$), and physically exhausted ($r = .29$, $P < .001$). Policemen who scored highest on Personal Accomplishment were rated by their wives as coming home in a good mood ($r = .20$, $P < .05$) and as having pride in their work ($r = .25$, $P < .01$).

MBI scores have also been correlated with the presence of certain job characteristics that would be expected to contribute to burnout. A study cited by Maslach and Jackson (1981) involving physicians found that the amount of time spent in direct contact with patients was positively correlated with Emotional Exhaustion. Pines and Kafry (1978) reported findings from a study involving social service and

mental health workers in which they predicted that higher scores on job dimensions such as variety, autonomy, and feedback would be associated with lower burnout scores. Findings indicated that higher scores on these job dimensions were associated with lower scores on Emotional Exhaustion ($r = -.38$, $P < .001$) and Depersonalization ($r = -.39$, $p = < .01$).

Nursing Stress Scale

This measure was developed by Gray-Toft and Anderson (1981) to assess nursing situations that result in stress. Permission to use the Nursing Stress Scale was obtained from Gray-Toft (personal communication, 10 November, 1987). It consists of 44 items that describe situations that have been identified as causing stress for nurses in the performance of their duties. Nurses were asked to indicate on a four-point scale (never-0, occasionally-1, frequently-2, and very frequently-3) how frequently they experience each of the 44 situations. The Nursing Stress Scale had a possible score range from 0 to 120. It provides a total stress score as well as scores on each of seven subscales. The seven subscales were: (a) workload; (b) death and dying; (c) inadequate preparation to meet the emotional needs of patients and families; (d) need for support; (e) uncertainty concerning treatment; (f) conflict with physicians; and (g) conflict with other nurses and supervisors. In this study the stress

subscales were not used individually in data analysis. Nursing stress was reflected as the total stress score on this instrument.

Test-retest reliabilities exceeded .068 and internal consistency measures exceeded .70 for all subscales except inadequate preparation (.42) and lack of support (.065) (Gray-Toft & Anderson, 1981).

Social Support Scale

This measure of social support was developed by House and Wells (1978). Permission to use the Social Support Scale was obtained from House (personal communication, 19 October, 1987). The items within the measure were divided into indices according to the source of social support (i.e., Supervisor Support, Co-worker Support, Spouse Support, and Friend and Relative Support). Response options range from zero (low support) to three (high support). The Social Support Scale had a possible total score range of 0 to 45. The higher the score the greater the social support. Internal consistency for the social support measure using coefficient alpha for each index, ranged from .75 to .92 based on samples of white factory workers (House, 1981). Studying a nursing population, Constable and Russell (1986) found reliability coefficients ranged from .75 to .98. House (1981) states that this measure of social support was generally as valid

and reliable as other comparable measures. This social support measure was adapted from measures used by Caplan et al. (1975) and Quinn and Sheppard (1974), and therefore indicate the construct validity of this measure.

CHAPTER FOUR

Results

The purpose of this study was to investigate the relationship between social support, job stress, and burnout among nurses. A convenience sample was obtained from nurses working at two hospitals in a Mid-Atlantic state. The nurses were asked to complete a questionnaire packet. Each packet contained a brief demographic sheet, the Maslach Burnout Inventory (MBI), the Gray-Toft Nursing Stress Scale, and the House Social Support Scale. Data were collected over a two-week time period. The level of significance was set at 0.05 for all hypotheses. Pearson's product-moment correlation coefficient and forced entry multiple regression were used to analyze the data. The results of the data analysis will be discussed in this chapter.

Characteristics of the Sample

Five-hundred questionnaire packets were distributed to nurses working 20 hours or more in the two hospital settings. Two-hundred-four packets were returned for a 41% return rate. Thirty-three packets were discarded because of incomplete responses to questionnaires, resulting in a sample size of 171 (84% of the returned packets).

The ages of the sample ranged from 22 years to 65 years of age, with a mean age of 35. Total nursing experience in years ranged from 6 months to 50 years, with a mean of 11 years nursing experience. Time in current nursing job ranged from 1 month to 40 years, with a mean of 5 years in current job (Table 2).

Table 2

Characteristics of the Sample (N=171)

Characteristic	Range	Mean	SD
Age (in yrs)	22-65	35	9.45
Nursing Experience (in yrs)	.5-50	11	9.46
Current Job Experience (in yrs)	.1-40	5	5.46

Part-time (less than a 40-hours) positions were held by 59 nurses (34.5%) and 112 nurses (65.5%) worked full-time (40 hours or more). Distribution of the educational level of the sample was as follows: 55 nurses (32.2%) had associate degrees; 66 nurses (38.6%) had diplomas; 46 nurses (26.9%) had baccalaureate degrees in nursing; 4 nurses (2.3%) had master's degrees; and no nurses reported a doctorate degree (Table 3).

Table 3

Characteristics of the Sample (N=171)

Characteristic	N	%
Job Status		
Part-time	59	34.5
Full-time	112	65.5
Educational Level		
Associate	55	32.2
Diploma	66	38.6
Baccalaureate	46	26.9
Master's	4	2.3
Doctorate	0	0.0

Level of Burnout for the Sample

The degree of burnout based on the Maslach Burnout Inventory (MBI) scoring key (Maslach & Jackson, 1986) was "high" for the nurses in this study. The burnout dimension of Emotional Exhaustion (EE) showed a mean score of 37.64 (standard deviation of 7.35) which indicated a high level of frequency in the dimension of EE. The burnout dimension of Depersonalization (DP) showed a mean score of 57.6 (standard deviation of 11.78) which indicated a high level of frequency in feelings of DP. The burnout dimension of Personal Accomplishment (PA) showed a mean score of 29.9 (standard deviation of 14.86) which indicated a low level of frequency in feelings of PA (Table 4).

Descriptive Statistics for the Major Variables

Burnout

The Maslach Burnout Inventory (MBI) was divided into three subscales referred to as dimensions for scoring. Scores for the Emotional Exhaustion (EE) dimension ranged from 9 to 61 (possible range from 0 to 78) with a mean score of 37.6 and a standard deviation of 7.4 (N=171). Scores for the Depersonalization (DP) dimension ranged from 17 to 90 (possible score range from 0 to 102) with a mean score of 57.6 and a standard deviation of 11.8 (N=171). The remaining dimension of the MBI, Personal Accomplishment (PA), had a score range of 2 to 68 (possible score range from 0 to 84) with a mean score of 29.9 and a standard deviation of 14.9 (N=171). The PA was scored in the opposite direction from EE and DP, which meant that the higher the score the less the frequency of feelings of personal accomplishment (Table 4).

Nursing Stress

The Nursing Stress Scale (Gray-Toft & Anderson) had a score range of 11 to 96 (possible score range from 0 to 120) with a mean score of 49.4 and a standard deviation of 14.3 (N=171). The higher the score on the scale the more stress perceived by the individual (Table 4).

Table 4

Descriptive Statistics for the Major Variables (N=171)

Variable Name	Mean	SD	Range
Maslach Burnout Inventory Subscales:			
Emotional Exhaustion	37.6	7.4	9-61
Depersonalization	57.6	11.8	17-90
Personal Accomplishment	29.9	14.9	2-68
Nursing Stress Scale (Gray-Toft & Anderson)	49.4	14.3	11-96
House Social Support Scale	27.5	7.7	6-45

Social Support

The House Social Support Scale had a score range from 6 to 45 (possible range from 0 to 45) with a mean score of 27.5 and a standard deviation of 7.7 (N=171). The higher the score on the scale the more social support is perceived by the individual (Table 4).

Hypotheses Testing

The level of significance was set at 0.05 for all hypotheses. Pearson's product-moment correlation coefficient was used to test hypotheses one and two of this study.

Hypothesis One

Hypothesis one: There will be a positive correlation between job stress and the three dimensions of burnout: Emotional Exhaustion (EE), Depersonalization (DP), and Personal Accomplishment (PA); therefore, the null hypothesis tested was that there would be no correlation between job stress and the three dimensions of burnout: Emotional Exhaustion (EE), Depersonalization (DP), and Personal Accomplishment (PA).

Emotional Exhaustion (EE): The relationship ($r = 0.08$, $p > .05$) between stress and EE was not significant, therefore the null hypothesis was accepted for the dimension of EE (Table 5).

Table 5

Correlation Coefficients for the Major Variables

Variable	EE	DP	PA	Stress	Social Support
1 EE	1.00				
2 DP	0.69**	1.00			
3 PA	0.40**	0.71**	1.00		
4 Stress	0.08	0.34**	0.50**	1.00	
5 Social Support	0.09	-0.15	-0.26*	-0.27**	1.00

*Significant at $p < .01$

**Significant at $p < .001$

Depersonalization (DP): There was a significant relationship ($r = 0.34$, $p < .001$) between stress and DP. The positive relationship indicated that as the level of stress increased the frequency of feelings of depersonalization also increased. Therefore, hypothesis one was not supported for the dimension of DP and the null hypothesis was rejected (Table 5).

Personal Accomplishment (PA): There was a significant relationship ($r = 0.49$, $p < .001$) between stress and PA. The positive relationship indicated that as the level of stress increased the frequency of feelings of personal accomplishment decreased (remember the PA is scored in the opposite direction of EE and DP). Therefore, hypothesis one was not supported for the dimension of PA and the null hypothesis was rejected (Table 5).

Hypothesis Two

Hypothesis two: There will be a negative correlation between social support and the three dimensions of burnout: EE, DP, and PA; therefore, the null hypotheses tested was that there would be no correlation between social support and the three dimensions of burnout: EE, DP, and PA.

Emotional Exhaustion (EE): The correlation ($r = 0.09$, $p > .05$) between social support and EE was not significant. No relationship was found between EE and social support; therefore, the null hypothesis was accepted for the dimension of EE (Table 5).

Depersonalization (DP): Social support and DP demonstrated a correlation of $r = -0.15$, $p > .05$ which was not significant. There was no relationship demonstrated between DP and social support; thus the null was accepted for the dimension of DP (Table 5).

Personal Accomplishment (PA): The correlation ($r = -0.26$, $p < .01$) between social support and PA demonstrated a significant negative correlation. This indicated that as the level of social support increased the frequency of feelings of personal accomplishment also increased (remember that PA is scored in the opposite direction of EE and DP). Therefore, the null hypothesis was rejected for the dimension of PA (Table 5).

Data Analysis for Hypotheses Three and Four

A forced entry multiple regression was used to analyze the data to test hypotheses three and four. Multiple regression assists in understanding which independent variables account for the most variance found in the dependent variable. This analysis provided the investigators with an indication of which independent variables are the most powerful predictors of the dependent variable (in this study, the three dimensions of burnout). The resulting R^2 value represented the amount of variance that was explained by considering the combined independent variables. In a forced entry multiple regression the best

predictor is entered first and then the next best predictor of the dependent variable (the one that produces the next largest R^2 value after considering the first variable) is entered.

Hypothesis Three

Hypothesis three: There will be an additive relationship in which job stress and social support combine to predict the three dimensions of burnout: EE, DP, and PA; therefore, the null hypothesis tested was that job stress and social support in combination will not significantly predict the three dimensions of burnout: EE, DP, and PA.

Emotional Exhaustion (EE): Together stress and social support accounted for less than 2% of the variance for EE. The R^2 value for stress in step one was 0.07 and when social support was added in step two, the R^2 value was 0.02. They were not significant predictors in combination of the burnout dimension of EE (Table 6). This supported hypothesis three for the dimension of EE; therefore, the null was accepted.

Table 6

Hypothesis 3: Regression Results for Emotional Exhaustion (EE)

Step		Variable Name	R	R^2	Significant F Change
1	IN	Stress	0.08	0.07	0.33
2	IN	Social Support	0.14	0.02	0.14
3	OUT	Stress	0.09	0.01	0.18
4	OUT	Social Support	0.00	0.00	0.25

Depersonalization (DP): Stress was the best predictor of DP. Stress (R^2 = 0.11, $p < 0.001$) in step one accounted for 11% of the variance. In step two social support was added and the R^2 value became 0.12, which accounted for only 0.3% more of the variance and was not significant. Therefore, only stress was a significant predictor of DP. The results demonstrated that the combination of stress and social support did not significantly predict DP (Table 7). The null was accepted for this dimension of burnout.

Table 7

Hypothesis 3: Regression Results for Depersonalization (DP)

Step		Variable Name	R	R^2	Significant F Change
1	IN	Stress	0.34	0.11	0.00
2	IN	Social Support	0.34	0.14	0.44
3	OUT	Social Support	0.34	0.11	0.44

Personal Accomplishment (PA): Personal accomplishment was the only dimension in which two independent variables in combination significantly predicted a percentage of the variance. Stress and social support (R^2 = 0.26, p = 0.05) accounted for 26% of the variance in the personal

accomplishment dimension (Table 8). Therefore, the null was rejected for the personal accomplishment dimension of burnout.

Table 8

Hypothesis 3: Regression Results for Personal Accomplishment (PA)

Step		Variable Name	R	R^2	Significant F Change
1	IN	Stress	0.49	0.24	0.00
2	IN	Social Support	0.51	0.26	0.05*

*Significant at $p < .05$

Hypothesis Four

Hypothesis four: The interactive effect of social support with job stress will predict the three dimensions of burnout: EE, DP, and PA; therefore, the null hypothesis tested was that the interactive effect of social support with job stress will not significantly predict the three dimensions of burnout: EE, DP, and PA.

An interactive statement of social support with job stress was added to the multiple regression analysis for each of the dimensions of burnout.

Emotional Exhaustion: The interaction of social support with job stress was not significant in predicting emotional exhaustion. The forced entry for multiple regression

resulted in an R^2 value of 0.02 ($p > 0.05$) accounting for only .1% more of the variance. After social support (R^2 = 0.01, $p > 0.05$) and stress (R^2 = 0.02, $p > 0.05$) were entered in step one and two (Table 9). Therefore, the null was accepted for the emotional exhaustion dimension of burnout.

Table 9

Hypothesis 4: Regression Results for Emotional Exhaustion (EE)

Step		Variable Name	R	R^2	Significant F Change
1	IN	Social Support	0.09	0.01	0.25
2	IN	Stress	0.14	0.02	0.18
3	IN	Social Support x Stress	0.14	0.02	0.73
4	OUT	Stress	0.13	0.02	0.98
5	OUT	Social Support	0.14	0.02	0.88

Depersonalization (DP): The interaction of social support with job stress was entered in the third step (R^2 = 0.12, $p > 0.05$) and accounted for .2% of the variance. The interaction was not a significant predictor of the variance

in DP (Table 10). Therefore, the null was accepted for the dimension of depersonalization.

Table 10

Hypothesis 4: Regression Results for Depersonalization (DP)

Step		Variable Name	R	R^2	Significant F Change
1	IN	Social Support	0.15	0.02	0.06
2	IN	Stress	0.34	0.12	0.00
3	IN	Social Support x Stress	0.34	0.12	0.60
4	OUT	Social Support	0.34	0.12	0.78
5	OUT	Social Support x Stress	0.34	0.11	0.37

Personal Accomplishment (PA): Again, the interactive statement of social support and job stress was entered in the third step ($R^2 = 0.12$, $p > 0.05$) and accounted for 0.1% of the variance in PA (Table 11). This was not a significant predictor of the dimension of personal accomplishment, therefore the null was accepted.

Table 11

Hypothesis 4: Regression Results for Personal Accomplishment (PA)

Step		Variable Name	R	R^2	Significant F Change
1	IN	Social Support	0.26	0.07	0.00
2	IN	Stress	0.51	0.26	0.00
3	IN	Social Support x Stress	0.51	0.26	0.68
4	OUT	Social Support	0.51	0.26	0.87

Other Findings

Correlations with the Demographic Variables

The three subscales of burnout, Emotional Exhaustion (EE), Depersonalization (DP), and Personal Accomplishment (PA) were correlated with the demographic variables using the Pearson's product-moment correlation.

Age: Age ($r = -0.22$, $p < 0.01$) was negatively correlated with the Personal Accomplishment dimension. This indicated that as age increased, the Personal Accomplishment score decreased and indicated an increase in the frequency of feelings of personal accomplishment. Age did not significantly correlate with Emotional Exhaustion or Depersonalization.

Years in Nursing and Current Job: The variable of years in nursing did not significantly correlate with any of the three dimensions of burnout: EE ($r = -0.15$, $p > 0.05$), DP ($r = -0.14$, $p > 0.05$), and PA ($r = -0.13$, $p > 0.05$). The variable years in current job ($r = -0.21$, $p < 0.01$) did show a negative correlation with EE. As the number of years in current nursing job increased, the score for EE decreased, indicating a decrease in frequency of feelings of EE (Table 12).

Table 12

Correlation Coefficients of the Burnout Dimensions and Demographic Variables

Variable	EE	DP	PA
Age	-0.10	-0.13	-0.22*
Yrs in Nursing	-0.15	-0.14	-0.13
Yrs in Job	-0.21*	-0.11	-0.10

*Significant at $p < 0.01$

Correlations with the Nursing Stress Scale Subscales

The Nursing Stress Scale was composed of seven subscales reflecting specific areas of stress in the work environment of the nurse. These subscales were: (a) relationship with physicians, (b) emotional demands, (c) communication on the unit, (d) workload, (e) death, (f) supervisor, and (g) floating between units.

Emotional Exhaustion (EE): The burnout dimension of EE did not significantly correlate with any of the stress subscales. This was not unexpected as EE did not significantly correlate with the overall stress scale (Table 3, p. 79).

Depersonalization (DP): The burnout dimension of DP positively correlated with the following subscales in order of significance: workload ($r = 0.40$, $p < 0.001$), emotional demands ($r = 0.30$, $p < 0.001$), communication on the unit ($r = 0.28$, $p < 0.001$), relationship with physicians ($r = 0.23$, $p < 0.01$), supervisor ($r = 0.19$, $p < 0.05$), and death ($r = 0.17$, $p < 0.05$). AS the stress score in these areas increased so did the score for Depersonalization indicating an increase in the frequency of feelings of depersonalization (Table 13).

Personal Accomplishment (PA): The PA dimension of burnout showed a significant positive correlation with all the subscales on stress. The correlations in order of

Table 13

Correlation Coefficients for the Burnout Dimensions with the Nursing Stress Subscales

Nursing Stress Subscales	Burnout Dimensions EE	DP	PA
Relationship with Physicians	0.08	0.23**	0.37***
Emotional Demands	0.11	0.29***	0.41***
Communication on Unit	0.03	0.28***	0.45***
Workload	0.05	0.40***	0.40***
Death	0.03	0.17*	0.29***
Supervisor	-0.00*	0.19*	0.35***
Floating	0.04	0.10	0.27***

*Significant at $p < 0.05$
**Significant at $p < 0.01$
***Significant at $p < 0.001$

significance were: communication on the unit ($r = 0.45$, $p < 0.001$), emotional demands ($r = 0.41$, $p < 0.001$), workload ($r = 0.40$, $p < 0.001$), relationship with physicians ($r = 0.37$, $p < 0.001$), supervisor ($r = 0.35$, $p < 0.001$), death ($r = 0.29$, $p < 0.001$), and floating between units ($r = 0.27$, $p < 0.001$). The score for Personal Accomplishment increased as the score for the subscales increased, indicating a decrease in the frequency of feelings of personal accomplishment (Table 13).

Correlations with the Social Support Subscales

The House Social Support Scale was divided into four areas of social support sources: supervisor, co-worker, spouse, and friends and relatives.

Emotional Exhaustion (EE): Emotional Exhaustion ($r = 0.16$, $p < 0.05$) positively correlated with supervisor support; as support from the supervisor increased the score for EE increased, indicating an increase in the frequency of feelings of emotional exhaustion. The remaining three social support subscales (co-worker, spouse, and friends and relatives) were not significantly correlated with emotional exhaustion (Table 14).

Depersonalization (DP): Depersonalization ($r = -0.17$, $p < 0.05$) showed a significant negative correlation with support from co-workers. That is, as support from co-workers

Table 14

Correlation Coefficients for the Burnout Dimensions with the Social Support Subscales

Subscale	EE	DP	PA
Supervisor	0.16*	-0.03	-0.12
Co-worker	-0.08	-0.17*	-0.30**
Spouse	0.02	-0.12	-0.16*
Friends and Relatives	0.01	-0.12	-0.18*

*Significant at $p < 0.05$

**Significant at $p < 0.001$

increased, the score for DP decreased, indicating a decrease in frequency of feelings of depersonalization. Correlations were not significant between DP and the other three social support subscales: supervisor, spouse, and relatives and friends (Table 14).

Personal Accomplishment (PA): Personal Accomplishment significantly correlated with three areas of support: co-worker ($r = -0.30$, $p < 0.001$), friends and relatives ($r = -0.02$, $p < 0.05$), and spouse ($r = -0.16$, $p < 0.05$). This negative relationship indicated that as these areas of support increased, frequency of feelings of personal accomplishment also increased. The subscale of supervisor support did not significantly correlate with personal accomplishment (Table 14).

Correlation Between the Independent Variables

The use of the Pearson's product-moment correlation coefficient demonstrated a significant correlation between the independent variables, stress and social support ($r = -0.27$, $p < .001$). This was a negative correlation between stress and social support, indicating that as the level of social support increased, then the level of stress decreased (Table 3, p. 79).

Correlations of the Nursing Stress Subscales with the Social Support Subscales

A further examination of the subscales of each of the independent variables, social support and job stress, was accomplished using the Pearson's product-moment correlation. The following subscales were found to have significant correlations.

Supervisor Support. Supervisor support negatively correlated with workload ($r = -0.23$, $p < 0.01$), supervisor stress ($r = -0.23$, $p < 0.01$), and communication on the unit ($r = -0.22$, $p < 0.05$). The greater the supervisor support, the less stress was perceived as a workload, interaction with the supervisor, and communication on the unit. The remaining Nursing Stress subscales (relationship with physicians, emotional demands, death, floating between units) were not significantly correlated with supervisor support (Table 15).

Co-worker Support. Co-worker support showed a significant negative correlation with communication on the unit ($r = -0.26$, $p < 0.01$) and workload ($r = -0.19$, $p < 0.05$). The greater the level of co-worker support, the less stress resulted from communication on the unit and workload problems. The remaining Nursing Stress subscales (relationship with physicians, emotional demands, death, supervisor, and floating between units) were not significantly correlated with co-worker support (Table 15).

Table 15

Correlations of the Nursing Stress Scale Subscales with the Social Support Subscales

Subscale	Supervisor	Co-Worker	Spouse	Friends
Relationship with Physicians	-0.09	-0.10	-0.09	-0.15
Emotional Demands	-0.08	-0.06	-0.21**	-0.10
Communication on Unit	-0.22**	-0.26**	-0.15*	-0.15*
Workload	-0.23**	-0.19*	-0.19*	-0.04
Death	-0.03	-0.10	-0.13	-0.13
Supervisor	-0.23**	-0.06	-0.13	-0.05
Floating	-0.04	-0.08	-0.21**	-0.10

*Significant at $p < 0.05$

**Significant at $p < 0.01$

Spouse Support. Support from the spouse significantly correlated with emotional demands ($r = -0.21$, $p < 0.01$), workload ($r = -0.18$, $p < 0.05$), and communication on the unit ($r = -0.15$, $p < 0.05$). These negative correlations indicate that the greater the support from the spouse, the less stress was perceived as a result of emotional demands, workload, and communication on the unit. Spouse support was significantly correlated with the remaining Nursing Stress subscales (relationship with physicians, death, supervisor, and floating between units)(Table 15).

Friend/Relative Support. Support from friends and relatives showed a significant negative correlation with only one of the stress subscales, communication on the unit ($r = -0.15$, $p < 0.05$). Stress as a result of communication on the unit decreased as support from friends and relatives increased. The remaining subscales (relationship with physicians, emotional demands, workload, death, supervisor, and floating between units) were not significantly correlated with friend/relative support (Table 15).

Summary

Restatement of Hypotheses from Chapter One

Hypothesis one. There will be a positive correlation between job stress and the three dimensions of burnout: Emotional Exhaustion (EE), Depersonalization (DP), and Personal Accomplishment (PA).

Hypothesis two. There will be a negative correlation between social support and the three dimensions of burnout: EE, DP, and PA.

Hypothesis three. There will be an additive relationship in which job stress and social support combine to predict the three dimensions of burnout: EE, DP, and PA.

Hypothesis four. The interactive effect of social support with job stress will predict the three dimensions of burnout: EE, DP, and PA.

The data analysis supported hypotheses one, two, and three for one or more of the dimensions of burnout. Hypothesis four was not supported in this study. The findings will be discussed in Chapter 5.

CHAPTER FIVE

Summary

The purpose of this research was to investigate the relationship between social support, job stress, and burnout among nurses. Burnout, the dependent variable, consisted of three separate dimensions: Emotional Exhaustion (EE), Depersonalization (DP), and Personal Accomplishment (PA). The convenience sample consisted of 171 nurses working in two hospitals in a Mid-Atlantic state. The nurses were asked to complete a questionnaire packet. Each packet contained a brief demographic sheet, the Maslach Burnout Inventory (MBI), the Gray-Toft Nursing Stress Scale, and the House Social Support Scale. Data were collected over a two-week time period. Pearson's product-moment correlation coefficient and forced entry multiple regression were used to test the hypothesis. The level of significance was set at 0.05 for all hypotheses.

Stress was found to have a significant positive relationship with the Depersonalization and Personal Accomplishment dimensions of burnout. As job stress increased there was a decrease in the frequency of feelings of personal accomplishment. Social support showed a significant negative relationship with the burnout dimension of Personal Accomplishment only. As social support increased there was an

increase in the frequency of feelings of personal accomplishment.

In combination, social support and job stress were found to be a significant predictor of the burnout dimension of Personal Accomplishment only, accounting for 26% of the variance in the dependent variable. Finally, the interaction of social support with job stress was not found to significantly account for the variance in any of the three dimensions of burnout: Emotional Exhaustion, Depersonalization, or Personal Accomplishment.

Other findings regarding the demographic variables, the independent variables of job stress and social support, and the subscales of the Nursing Stress Scale and the House Social Support Scale were noted.

The demographic variables which demonstrated significant correlations with the dimensions of burnout were age and years in current job. As age increased so did frequency of feelings of personal accomplishment. Additionally, as years in current job increased there was a decrease in frequency of feelings of emotional exhaustion.

The three dimensions of burnout showed the following relationships with the Nursing Stress Subscales. Emotional Exhaustion did not show a relationship with any of the stress subscales. There was an increase in the frequency of feelings of depersonalization with an increase in stress as a

result of workload, emotional demands, communication on the unit, relationship with physicians, supervisor, and death. There was a positive relationship between the stress subscales and the dimension of Personal Accomplishment with the three most significant subscales being communication on the unit, emotional demands, and workload. As stress increased as a result of these variables, there was a decrease in the frequency of feelings of personal accomplishment.

The subscales of the House Social Support Scale (support from supervisor, co-worker, spouse, friends/relatives) showed significant relationships with one or more of the three dimensions of burnout. Frequency of feelings of emotional exhaustion increased as levels of perceived supervisor support increased. Frequency of feelings of depersonalization decreased as the levels of perceived co-worker support increased. Frequency of feelings of personal accomplishment increased as the levels of perceived support from co-workers, spouse, and friends and relatives increased.

There was a negative relationship between the independent variables: social support and job stress. As social support increased, job stress decreased. More specifically, the relationships between the stress and social support subscales were as follows. The level of stress as a result of workload, supervisor, and communication on the unit decreased as levels of perceived support from the supervisor increased.

The level of stress as a result of communication on the unit and workload decreased as perceived support from co-workers increased. The level of stress as a result of emotional demands, workload and communication on the unit decreased as perceived support from the spouse increased. The greater the support from friends and relatives the less the stress as a result of communication on the unit.

Discussion

Burnout and Stress

Stress was found to have a significant positive relationship with the Depersonalization and Personal Accomplishment dimensions of burnout in this study. More specifically, the study results demonstrated that level of burnout increased as a result of an increase of certain sources of stress. The three most significant sources of stress were workload, communication on the unit, and emotional demands.

It is of interest to note that in light of the recent concern regarding the nursing shortage that workload and emotional demands were stressors reported by this study sample demonstrated a "high" degree of burnout as a whole. Also, the sample's scores indicated a higher degree of burnout than the population (N=11,067) that Maslach and Jackson (1986) reported on in 1981 in developing the MBI. All dimensions had much higher mean scores for this sample than did

Maslach's sample, especially in the dimension of Depersonalization. The sample's mean score for DP was 57.6 and Maslach's sample mean score was 8.73. This sample's mean score for EE was 37.6 and Maslach's sample mean score was 20.99. This sample's mean score for PA was 29.9 and Maslach's sample mean score was 34.58. The difference in the mean score may be a reflection of the current nursing shortage crisis and resulting increase in workload. This sample did report significant levels of stress as a result of workload in the job setting. Burnout might be expected to increase over the next few years as the nursing shortage becomes more acute. This is an important reason to start researching ways of either decreasing the stress or providing information to increase an individual's resistance to burnout.

These findings support previous research on environmental factors and burnout. Pines and Maslach's (1977, 1978) studies reported an increase in burnout with higher client to staff ratios. Cronin-Stubbs' (1982b) survey of enterostomal therapists showed areas of concern reported which can be considered sources of stress, such as role conflict, interpersonal relationships, and working with clients with poor prognoses. Jenkins and Ostchega (1986) reported the amount of job stress experienced by nurses working in the field of oncology that had a positive relationship with burnout (i.e.,

the greater the stress the greater the level of burnout experienced). Beaver et al. (1986) reported that nurse-midwives practicing in settings with a high proportion of welfare clients in a service where there was a large number of deliveries experience higher degrees of burnout in one or more of the dimensions of burnout.

Burnout and Demographic Variables

In this study, age and years in current job negatively correlated with the Personal Accomplishment and Emotional Exhaustion dimensions of burnout, respectively.

Age. Previous research (Bartz & Maloney, 1986; Beaver et al., 1986) reported that as age increased frequency of feelings of depersonalization decreased. Although in this study, age correlated with Personal Accomplishment and not Depersonalization. Young nurses may lack the experience to cope with new situations. They need time to become comfortable with a new job and a new role at the same time. Many are on their own for the first time and accountable for their decisions and actions in the job setting.

Years in Current Job. A review of the research related to years in present position and burnout revealed no studies in this area. However, time or experience in nursing have been studied. Research findings do show a negative relationship between time or experience in nursing and one

or more of the dimensions of burnout. As the length of time in nursing increased, frequency of feelings of emotional exhaustion and depersonalization decreased (Bartz & Maloney, 1986). In another study (Beaver et al., 1986) only frequency of feelings of depersonalization was shown to decrease with number of years in nursing. Jenkins and Ostchega (1986) reported a decrease of total experienced burnout with an increase in years of nursing experience. This study showed a decrease in frequency of feelings of emotional exhaustion with and increase of years in current position, but not time in nursing.

In starting a new job, the demands will be the same in many respects for a novice nurse or a nurse with years of nursing experience. The new job requires the nurse to adapt to a different environment, client population, different organizational structure and expectations, and new role expectations. These represent only some of the demands a new job places on a nurse.

Relationship Between Social Support and Burnout

Personal Accomplishment. It was expected as the sources of social support increased (supervisor, co-worker, friends and relatives, and spouse) feelings of personal accomplishment would increase. As anticipated, as the total social support score increased an increase in frequency

of personal accomplishment was noted. Relationships between Personal Accomplishment and the social support subscales were examined to determine which sources of social support contributed to the Personal Accomplishment dimension of burnout. Personal Accomplishment negatively correlated with three sources of social support: co-worker, spouse, and friends and relatives. As these scores increased, an increase in the frequency of feelings of personal accomplishment was noted. In previous studies, findings related to co-worker support have been inconsistent. Caplan et al. (1975) and LaRocco et al. (1980) found support from co-workers to be an important source of social support. However, Constable and Russell (1980) found no significant relationship between co-worker support and burnout. House (1981), in his study involving factory workers, found no relationship between co-worker support and burnout.

Relationships between friend and relative support and spouse support with the dimensions of burnout have not been demonstrated in previous studies. Constable and Russell (1980), House (1981) and LaRocco et al. (1980) reported that support is most important from job-related sources. Likert's (1961, 1967) research identified supervisor support as the major component which helped workers to feel more self-confident and worthwhile.

In this study failure of supervisors to be identified as sources of support for the Personal Accomplishment dimension of burnout has significant implications. When there is a lack of personal accomplishment the worker develops a sense of inadequacy to perform the job, and with this comes a loss of self-esteem and feelings of failure. This sample of nursing supervisors were not identified as supportive for this dimensions of burnout. The mean Personal Accomplishment score for this study sample was 29.9 in comparison with 34.58 in the Maslach and Jackson (1981, 1986) sample. The lower the mean scores in this subscale, the higher the degree of burnout experienced. Thus this sample demonstrated low Personal Accomplishment and did not identify supervisors as significantly supportive for this dimension of burnout.

Depersonalization. The relationship between Depersonalization and the total social support scores was not found to be significant. However, when relationships with the social support subscales were completed, Depersonalization negatively correlated with support from co-workers. Thus as co-worker support increased the feelings of depersonalization decreased.

These findings support previous research on co-worker support. Caplan et al. (1975) and LaRocco et al. (1980) found social support from co-workers to be an important source of social support. However, Constable and Russell

(1980) and House (1981) reported that significant relationships between co-worker support and burnout were not found.

Why has such inconsistency in the value of co-worker support been found? The authors offer two possible contributing factors for consideration. First, as noted previously, this sample was experiencing significantly more burnout than the Maslach and Jackson (1986, 1981) sample and the Pines' (1983) sample. Perhaps the existing degree of burnout impacted on both the individuals' perception of social support as well as the value of social support to that individual. Pines (1983) reported that the more subjects experienced burnout, the more important support became for them. The strongest relationship was with Sharing Social Reality, indicating that the more burned out one is the more isolated one feels, and consequently the more importance one attributes to having other people around who share one's social reality. Social reality testing and sharing requires external validation of one's perceptions. Co-workers would be the group most readily able to complete the social reality testing function. The second significant relationship in the Pines (1983) study was Emotional Support. Thus, the more burnout an individual was experiencing, the more important emotional support became. An emotional supporter was defined in the study as a person who was willing to be on your side in a difficult situation

even if he or she was not in total agreement with what you were doing. Co-workers once again may be the group most able to meet this need.

Secondly, the effects of co-worker support on burnout may be dependent on the type of stress inherent in the specific work environment. For example, hypothetically, co-worker support may be of more importance to a nurse working in an intensive care unit than to a nurse working in a nursery. Co-worker support may be more important to military nurses than to civilian nurses. In this study, no effort was made to differentiate between specific work environments.

Emotional Exhaustion. The Emotional Exhaustion dimension of burnout, according to Maslach (1982), is at the heart of the Burnout Syndrome. her theory also predicts that as emotional exhaustion evolves and increases, it develops more fully into depersonalization and lack of personal accomplishment.

The relationship between Emotional Exhaustion and social support was not significant. However, relationships between Emotional Exhaustion and the social support subscales revealed some interesting results. As social support from supervisors increased, frequency of feelings of emotional exhaustion increased as well. Thus as supervisor support increased, feelings of emotional exhaustion increased.

These findings were inconsistent with all studies noted in the review of research. Constable and Russell (1980) found Emotional Exhaustion to be the only dimension of the MBI which was significantly related to social support. Constable and Russell (1986) concluded that support from supervisors can decrease feelings of emotional exhaustion, and therefore the potential for burnout among nurses. Likewise, Firth et al. (1986) concluded that supervisor support in the form of respect and empathy contribute to reduced emotional exhaustion among nursing staff.

In order to gain insight into this unexpected finding, relationships of the Nursing Stress Scale subscales with the social support subscales were examined. These relationships revealed that the greater the supervisor support the less stress was reported as a result of workload, interaction with the supervisor, and communication on the unit.

Supervisor support did effectively diminish stress associated with workload, interaction with the supervisor, and communication on the unit. All three of these are sources of nursing stress upon which the supervisor can impact directly. Registered nurses in addition to performing nursing functions frequently assume a wide range of duties which increases their workload. They can provide all the services of nurse's aides and licensed practical nurses. Also, they can perform several of the functions assigned to

clerical personnel, laboratory technicians, pharmacists, physical therapists, and social workers. Nurses substitute for physicians under some circumstances and commonly assume hospital administrative roles after regular working hours. In the presence of a shortage of registered nursing staff, nursing administrators must attempt to change the "do all" function of nursing and refocus on nursing practice. The further development of auxiliary staff is essential if supervisors expect to impact on workload in this era of shortage of nursing staff.

Lack of supervisor support and lack of communication are to additional sources of nursing stress identified by this sample upon which nursing supervisors can impact directly. In this sample, supervisor support was ineffective in reducing the following sources of nursing stress: death and dying, inadequate preparation to meet the emotional needs of patients and families, need for support, uncertainty concerning treatment, and conflict with physicians. These are support areas in which the supervisor has less direct control.

The death and dying subscale measures stress resulting from suffering and death of patients. The inadequate preparation subscale examines feelings of inadequacy in meeting the emotional needs of patients and families. These two nursing stress components were certainly not

enlightening new concepts. However, the fact that they are still contributing to the burnout of nurses, even with the presence of new graduate transition and preceptorship programs, has implications for nurse educators.

The need for support subscale involves the availability of opportunities to share experiences with other nurses and to ventilate negative feelings of anger and frustration. The nursing stress subscales which related specifically to interactions with physicians included undertainty concerning treatment and conflicts with physicians. Uncertainty concerning treatment results when a physician fails to communicate information about a patient's condition. Conflict with physicians involves criticism by a physician, fear of making an error in treatment in the absence of a physician, or disagreement concerning treatment.

These last three sources of nursing stress were areas in which supervisors were not successful in reducing job stress for their nursing staff. All three were related specifically to co-worker support or support by other professions, in this instance, physicians. Historically, a lack of support among co-workers in the nursing profession has been noted.

Additional Findings

The burnout dimension of Emotional Exhaustion did not significantly correlate with any of the stress subscales.

The Emo ·onal Exhaustion subscale assesses feelings of being emotional· · over-extended by one's work. Maslach maintains that emotional exhaustion is at the heart of burnout and predicts as emotional exhaustion increases it develops more fully into depersonalization and lack of personal accomplishment. Interestingly, stress was found to have significant positive relationship with Depersonalization and Personal Accomplishment dimensions in burnout. If Maslach's projections are correct, why in this sample did the EE subscale prove to be the only dimension of burnout which did not significantly correlate with any of the stress subscales?

The mean EE score for this sample was 37.6, much higher than the 20.99 mean score of the Maslach sample. This sample demonstrated significantly more emotional exhaustion, yet EE did not significantly correlate with the total stress scale nor any of the stress subscales. The three most important sources of stress identified by this sample were workload, communication, and emotional demands.

Job Stress and Social Support in Combination to Predict Burnout

An additive relationship in which job stress and social support combine to predict the three dimensions of burnout (EE, DP, and PA) was expected. However, Personal Accomplishment was the only dimension of burnout in which job stress and social support in combination predicted a significant percentage of variance.

The Personal Accomplishment subscale assesses feelings of competence and successful achievement in one's work with people. The PA is independent of the other subscales and its component items do not load negatively on the other subscales. The correlations between the PA and the other subscales is known to be low (Maslach and Jackson, 1986). Thus it is not unexpected that a significant percentage of variance was noted with PA and not with the other subscales.

Job stress and social support in combination may significantly predict personal accomplishment. Thus by increasing social support and minimizing nursing job stress, one may be able to facilitate high levels of personal accomplishment in nursing staff.

Interactive Effect of Social Support with Job Stress to Significantly Predict Burnout

The interactive or buffering effect of social support with job stress was not found to be a significant predictor of emotional exhaustion, depersonalization, or personal accomplishment in this study. According to the buffering hypothesis, social support has no beneficial effect on job stress at low levels of stress, but the beneficial effects of social support become increasingly apparent as stress increases. Social support will be of significant value to people experiencing moderate to high levels of stress but of lesser, or even no value to people experiencing little

or no stress (House, 1981). The results in this study did not conform to the buffering theory.

Past research on buffering effects of social support have been limited and results have been inconsistent. House (1981) and House and Wells (1978) found that supervisor support has both direct and buffering effects on stress in the work environment of factory workers. LaRocco et al. (1980) also found supervisor support to have both direct and buffering effects in a study which involved a more diversified population (men from 23 different occupations).

Cross-sectional designs will detect main or additive effects of social support much easier than detecting buffering effects. House (1981) stated that cross-sectional studies were not well suited for detecting the buffering effects of social support, or more generally what are termed conditioning effects. Social support may have main or additive effects on burnout apart from any additive effects.

Conclusions

1. As stress levels in a job increase, then nurses working in that job may be at greater risk for experiencing burnout.

2. As the total social support increases, an increase in feelings of personal accomplishment will be noted.

3. As the level of social support increases, the level of nursing stress decreases.

4. The buffering effects of social support were not demonstrated in this study.

These findings should alert nursing administrators and nurse educators that as stress increases in the work setting, burnout may increase. Specifically, nursing administrators should be aware that the significant sources of stress for nurses were workload, communication on the unit, and emotional demands. Young and inexperienced nurses may be more susceptible to burnout; therefore, nursing administrators should consider these findings in planning their orientation and educational programs, staffing assignments, organizational structure, and how communication lines work on the unit and within the organization as a whole. Nursing educators should structure course material and clinical experience to include appropriate experience and knowledge to aid the young nurse entering the nursing profession. These young nurses should be as prepared as possible for the challenges that a nursing career entails.

Social support is not the answer for all the problems of job stress in nursing. Co-workers and supervisors can be a source of both stress and support. Also, all people vary in their need for support. Consequently, efforts to enhance work-related social support may not always be the most efficient or effective way to decrease job stress. Other

conditioning variables, such as hardiness and work environment, must be considered. However, making levels of support more adequate at work will be beneficial to the individual and the organization.

How does one build social support into an organization, or even broader in this instance into a profession? Making all nurses more supportive towards each other seems impossible and idealistic. The health care system, like most industries in the United States, tends to be pragmatic and instrumental. The skills of empathy, consideration, and sensitivity which are involved in giving and receiving social support are often devalued as "soft," "nonproductive," or "nonmasculine" (House, 1981). However, a positive change may be attainable. In order to proceed, nurses need to recognize the significance of social support and then focus energies and resources on developing key relationships which involve each nurse. The most obvious group to target for training to become supportive are first-line managers. As noted in the social support review of literature, social support from one significant other person can be effective in reducing occupational stress (House, 1981). In order to enhance social support among nurses, one needs to try to insure that as many nurses as possible have a supportive relationship with a significant person. One nurse can be supportive of a number of other nurses. In fact, support

from additional sources may have little or no additive benefits in many cases (House, 1981). Whether the support is from supervisor, co-worker, spouse, or friends and relatives, the effect appears to be the same.

Recommendations

The MBI with its three dimensions for evaluating the level of burnout was confusing in evaluating the data and results. An instrument that has one overall score might provide more definitive findings, or if the three dimensions could be combined for a single score to correlate with a specific level of burnout.

Work-related social support is clearly an area for further research and action to understand and enhance social support as a means of reducing job stress in nursing. Several additional research designs would be of value. Prospective longitudinal studies to test the effects of stress and social support on the development of burnout of nurses are indicated. Also, intervention studies to evaluate programs targeted at reducing causal factors, such as supervisor support, would be of value.

This descriptive study examined the effects of social support and job stress on burnout in nurses. The authors do not maintain that social support is the mecca for all of the problems of job stress in nursing. However, this and previous research suggests that social support (supervisor,

co-worker, spouse, or friend or relative) is negatively correlated with job stress. Also, the current levels of social support experienced by nurses is less than they could and should be. Nurses have relied on medical technology to improve the quality of their professional practice. It is time to acknowledge that the quality of social relations is a major determinant of well-being. Why not develop and use research and technology to improve the quality of our social interactions and thus our professional practices?

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APPENDIX A

PERMISSION LETTER TO CONDUCT RESEARCH

Shirley Fry
3023 Woodsong Dr.
Midlothian, VA 23113

Shirley Roddy
8620 Battlefield Park Rd.
Richmond, VA 23231

February 5, 1988

St. Mary's Hospital
Nursing Administration
5801 Bremo Rd.
Richmond, VA 23226

Dear Nursing Department Chairman:

We are graduate students at the Virginia Commonwealth University/Medical College of Virginia in Richmond. We are currently pursuing our master's degree in Nursing and are conducting a research project as part of the thesis requirement for completion of the program. We would like to use St. Mary's nursing staff as our resource population for this study.

We would like to meet with you and discuss our study and start the proper procedures for St. Mary's Hospital to obtain permission to use your institution. Enclosed you will find a copy of our proposal that was approved by the Nursing Department's Research Committee and an authorization letter.

We will give you time to review the enclosed materials and call in a week to set up a personal appointment with you.

Thank you for your time and consideration in this matter.

SHIRLEY FRY, RN, BSN
SHIRLEY RODDY, RN, BSN
Graduate Students
Virginia Commonwealth University
Medical College of Virginia
School of Nursing
1220 E. Broad St.
Richmond, VA 23298
(804) 786-0722

Enclosures

APPENDIX B

CONSENT FORM

Research Authorization

TO: Virginia Commonwealth University
Medical College of Virginia
School of Nursing
Research Committee
1220 E. Broad St.
Richmond, VA 23298

FROM: St. Mary's Hospital
Nursing Administration
5801 Bremo Rd.
Richmond, VA 23226

The research proposal submitted by Shirley Fry and Shirley Roddy has been reviewed. The study on "The Effects of Social Support on Job Stress and Burnout" may be conducted at St. mary's Hospital under the guidelines stated in the proposal for the purpose of completing thesis requirements for a master's degree in Nursing at the Virginia Commonwealth University/Medical College of Virginia, School of Nursing.

Permission is granted to Shirley Fry and Shirley Roddy to conduct their research project at St. Mary's Hospital.

_____ _____
Signature Date

_____ _____
Signature Date

_____ _____
Signature Date

APPENDIX C

COVER LETTER

Dear Colleague:

Your participation in this study will be greatly appreciated. This research is being conducted by Shirley Fry, RN, BSN and Shirley Roddy, RN, BSN, graduate students at the Virginia Commonwealth University/Medical College of Virginia (VCU/MCV) in Richmond, VA. We are conducting a study on job stress in nursing. The study is part of a thesis requirement for a master's degree. The results of this study will benefit the nursing profession by providing information on the stress of our chosen career, therefore, suggestings ways of combating the stress and its negative effects on nursing personnel.

Enclosed is a packet with three questionnaires and a demographic sheet. Please answer all questions. Most questions can be answered by checking one of the answers or by circling the appropriate response. If you do not find the exact answer you wish to give, please check the one closest to it. There is no cost to you for involvement in this study except for your personal time. It should take you only 15-20 minutes to complete the questionnaires and the demographic sheets.

Please complete the packet and place them in the large envelope provided in your report room with the title MCV RESEARCH PROJECT. The packets will be collected each day for two weeks.

All information provided by you will remain confidential. Names will never appear anywhere in this study or on the packets. Data from the packets will be entered into the computer and hard copies will be destroyed. Any publication will utilize tallied scores only.

Do not discuss your answers or feelings regarding this study with any other individual for at least two weeks; however, if you have any questions about this study, please contact Shirley Fry or Shirley Roddy at the VCU/MCV School of Nursing Department (804) 786-0722 and leave a message. Your call will be returned promptly.

Your completion and return of this packet to the envelope in your report room will serve as indication of your consent to participate in this study. If you do not wish to participate there will be no adverse effects on your job.

Thank you for your time and consideration.

SHIRLEY FRY, RN, BSN
SHIRLEY RODDY, RN, BSN
Graduate Students

VCU/MCV School of Nursing
Richmond, VA 23298
Telephone (804) 786-0722

APPENDIX D

RESEARCH PACKET

Part I
General Information

1. What is your age?

   _____

2. How long have you worked in nursing?

   _____

3. How long have you been employed in your present position?

   _____

4. Are you considered:

   ( ) Part-time
   ( ) Full-time

5. Highest degree of education in nursing?

   ( ) Associate Degree
   ( ) Diploma
   ( ) Baccalaureate
   ( ) Graduate Degree
   ( ) Doctorate

Part II

The purpose of this survey is to discover how various persons in the human services or helping professions view thier jobs and the people with whom they work closely. Because persons in a wide variety of occupations will answer this survey, it uses the term recipients to refer to the people for whom you provide your service, care, treatment, or instruction. When answering this survey please think of these people as recipients of the service you provide, even though you may use another term in your work.

On the following pages there are 22 statements of job-related feelings. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, circle a 0" (zero) below the statement. If you have had this feeling, indicate how often you feel it by circling the number (from 1 to 6) that best describes how frequently you feel that way. An example is shown below

EXAMPLE:

Frequency of Feeling: How Often

0	1	2	3	4	5	6
Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

---

00. I feel depressed at work:

How often? 0 1 2 3 4 5 6

If you never feel depressed at work, you would circle the number "0" (zero) under the statement. If you rarely feel depressed at work (a few times a year or less) you would circle the number "1". If you feelings of depression are fairly frequent (a few times a week, but not daily) you would circle a "5".

Please begin.

1. I feel emotionally drained from my work.

How often? 0 1 2 3 4 5 6

2. I feel used up at the end of the workday.

How often? 0 1 2 3 4 5 6

3. I feel fatigued when I get up in the morning and have to face another day on the job.

How often? 0 1 2 3 4 5 6

4. I can easily understand how my recipients feel about things.

   How often? 0 1 2 3 4 5 6

5. I feel I treat some recipients as if they were impersonal objects.

   How often? 0 1 2 3 4 5 6

6. Working with people all day is really a strain for me.

   How often? 0 1 2 3 4 5 6

7. I deal very effectively with the problems of my recipients.

   How often? 0 1 2 3 4 5 6

8. I feel burned out from my work.

   How often? 0 1 2 3 4 5 6

9. I feel I'm positively influencing other people's lives through my work.

   How often? 0 1 2 3 4 5 6

10. I've become more callous toward people since I took this job.

    How often? 0 1 2 3 4 5 6

11. I worry that this job is hardening me emotionally.

    How often? 0 1 2 3 4 5 6

12. I feel very energetic.

    How often? 0 1 2 3 4 5 6

13. I feel frustrated by my job.

    How often? 0 1 2 3 4 5 6

14. I feel I'm working too hard on my job.

    How often? 0 1 2 3 4 5 6

15. I don't really care what happens to some recipients.

    How often? 0 1 2 3 4 5 6

16. Working with people directly puts too much stress on me.

How often? 0 1 2 3 4 5 6

17. I can easily create a relaxed atmosphere with my recipients.

How often? 0 1 2 3 4 5 6

18. I feel exhilarated after working closely with my recipients.

How often? 0 1 2 3 4 5 6

19. I have accomplished many worthwhile things in this job.

How often? 0 1 2 3 4 5 6

20. I feel like I'm at the end of my rope.

How often? 0 1 2 3 4 5 6

21. In my work, I deal with emotional problems very calmly.

How often? 0 1 2 3 4 5 6

22. I feel recipients blame me for some of their problems.

How often? 0 1 2 3 4 5 6

Part III

GENERAL INSTRUCTIONS:

This questionnaire contains a list of situations that commonly occur in a hospital unit. For each item indicate by means of a Check ( ) how often in your present unit you have found the situation to be stressful.

For example, if you frequently experience stress in suctionning a patient you would respond to the item as follows:

Suctioning a patient.

___(0) Never
___(1) Occasionally
___(2) Frequently
___(3) Very Frequently

Note that some of the items may appear to be quite similar. However, each statement describes a different of your work that may be stressful. Please respond to each item independently even though some items may be similar.

Please answer every statement. Yours answers will be confidential.

Please begin.

Below is a list of situations that commonly occur in a hospital unit. For each item indicate by means of a check ( ) how often in your present unit you have found the situation to be stressful. Your responses are strictly confidential.

1. Breakdown of the computer.

___ (0) Never
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequently

2. Criticism by a physician.

___ (0) Never
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequently

3. Performing procedures that patients experience as painful.

___ (0) Never
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequently

4. Feeling helpless in the case of a patient who fails to improve.

___ (0) Never
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequently

5. Insufficient opportu;nities to express my anger or frustration.

___ (0) Never
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequently

6. Conflict with a supervisor.

___ (0) Never
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequently

7. An emergency situation involving the life of a patient.

___ (0) Never
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequently

8. Listening or talking to a patient about his/her approaching death.

___ (0) Never
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequently

9. Lack of an opportunity to talk openly with other unit personnel about problems on the unit.

___ (0) Never
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequently

10. The death of a patient.

___ (0) Never
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequently

11. Conflict with a physician.

___ (0) Never
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequently

12. Fear of making a mistake in treating a patient.

___ (0) Never
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequently

13. Lack of an opportunity to share experiences and feelings with other personnel on the unit.

___ (0) Never
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequently

14. The death of a patient with whom you have developed a close relationship.

___ (0) Nev
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequently

15. Physician not being present when a patient dies.

___ (0) Never
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequently

16. Disagreement concerning the treatment of a patient.

___ (0) Never
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequently

17. Feeling indequately prepared to help with the emotional needs of a patient's family.

___ (0) Never
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequently

18. Lack of an opportunity to express to other personnel on the unit my negative feelings towards patients.

___ (0) Never
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequently

19. Inadequate information from a physician regarding the medical condition of a patient.

___ (0) Never
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequently

20. Inadequate preparation for the job I'm expected to do.

___ (0) Never
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequently

21. Being asked a question by a patient for which I do not have a satisfactory answer.

___ (0) Never
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequently

22. Making a decision concerning a patient when the physician is unavailable.

___ (0) Never
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequently

23. Floating to other units that are short-staffed.

___ (0) Never
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequently

24. Watching a patient suffer.

___ (0) Never
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequently

25. Difficulty in working with a particular nurse (or nurses) outside the unit.

___ (0) Never
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequently

26. Having to deal with a particularly demanding, angry or depressed patient.

___ (0) Never
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequently

27. Feeling inadequately prepared to help with the emotional needs of a patient.

___ (0) Never
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequently

28. Criticism by a supervisor.

___ (0) Never
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequently

29. Unpredictable staffing and scheduling.

___ (0) Never
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequently

30. A physician ordering what appears to be inappropriate treatment for a patient.

___ (0) Never
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequently

31. Too many non-nursing tasks required, such as clerical work.

___ (0) Never
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequently

32. Not enough time to provide emotional support to a patient.

___ (0) Never
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequently

33. Difficulty in working with a particular nurse (or nurses) on the unit.

___ (0) Never
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequently

34. Not enough time to complete all of my nursing tasks.

___ (0) Never
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequently

35. The discharge of a patient with whom you developed a close relationship.

___ (0) Never
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequently

36. A physician not being present in a medical emergency.

___ (0) Never
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequently

37. Not knowing what a patient or a patient's family ought to be told about the patient's medical or condition and its treatment.

___ (0) Never
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequently

38. Uncertainty regarding the operation and functioning of specialized equipment.

___ (0) Never
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequently

39. The death of a young patient.

___ (0) Never
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequently

40. Not enough staff to adequately cover the unit.

___ (0) Never
___ (1) Occasionally
___ (2) Frequently
___ (3) Very Frequent

Part IV

This part of the questionnaire deals with your present job and life-situation. People around us (both on and off the job) sometimes are very supportive and helpful and sometimes hinder or offer little or no support in our work. This section asks how people around you affect you in such matters. Please circle the response to each question as to how true the statement is concerning the person or persons indicated. If you are not married please circe NOT MARRIED for question 1C and 2C.

1. How much can each of these people be relied on when things get tough at work?

		Not at all	A little	Some-what	Very much	
a.	Your immediate supervisor (boss)	0	1	2	3	
b.	Other people at work	0	1	2	3	
c.	Your spouse	0	1	2	3	Not Married
d.	Your friends and relatives	0	1	2	3	

2. How much is each of the following people willing to listen to your work-related problems?

a.	Your immediate supervisor (boss)	0	1	2	3	
b.	Other people at work	0	1	2	3	
c.	Your spouse	0	1	2	3	Not Married
d.	Your friends and relatives	0	1	2	3	

3. How much is each of the following people helpful to you in getting your job done?

		Not at all	A little	Some-what	Very much	
a.	Your immediate supervisor (boss)	0	1	2	3	
b.	Other people at work	0	1	2	3	
c.	Your spouse	0	1	2	3	Not Married
d.	Your friends and relatives	0	1	2	3	

Please indicate how true each of the following statements is of your immediate supervisor.

		Not at all true	Not too true	Somewhat true	Very true
4.	My supervisor is competent in doing (his/her) job.	0	1	2	3
5.	My supervisor is very concerned about the welfare of those under him/her.	0	1	2	3
6.	My supervisor goes out of his/her way to praise good work.	0	1	2	3

The space below is for your general comments and/or explanations pertaining to specific questions. Please use back of questionnaire if more space is needed.

Thank you for your time and cooperation in contributing your input to this study.

VITA

Shirley Ann Mills Fry [redacted]. She is a 1977 graduate from Berea College, Berea, Kentucky, where she received her bachelor's degree in nursing.

She is currently a Major in the United States Air Force Nurse Corp and has been on active duty since January, 1978. Past nursing experience in the Air Force has included staff and charge positions in medical-surgical nursing and pediatrics. She has had experience as a Quality Assurance Coordinator and an Education Coordinator. She has received two Air Force Commendation Medals for service in the Air Force Nurse Corp.

Ms. Fry is a member of Sigma Theta Tau and the American Nurses' Association. She served as a co-chairman for the Graduate Student Nurses' Association (1987-1988) at the Virginia Commonwealth University/Medical College of Virginia. Ms. Fry has served as a first aid volunteer for the March of Dimes annual walk-a-thon in Richmond, Virginia.

VITA

Shirley Roddy [redacted]. She received a Diploma in Nursing from Uniontown Hospital School of Nursing in 1977, and a Bachelor of Science in Nursing from Penn State University in 1984.

Professional experience has included staff nursing and/or management in coronary intensive care, medical intensive care, surgical intensive care, cardiac surgery intensive care and neuroscience intensive care. She is currently employed as the unit coordinator of neuroscience intensive care at the Medical College of Virginia Hospitals, Richmond, Virginia.

She is a member of the American Association of Critical Care Nurses, Sigma Theta Tau and the American Nurses' Association.