

THE RELATIONSHIP BETWEEN DEGREE OF BURNOUT, LOCUS
OF CONTROL, AND PERCEIVED STRESS IN
PRIMARY NURSES

by

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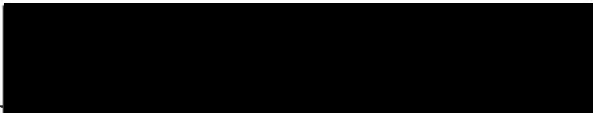
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CHAPTER I

INTRODUCTION

This study examines the relationship among the concepts of primary nursing, locus of control, and burnout.

A number of nurses today are dissatisfied with their careers. "Nurses are becoming disenchanting and are leaving the nursing profession" (Russell, 1977, p. 12). The nurses who remain are demanding changes. One of the reasons these nurses leave nursing is because of the emotional stress. Burnout is one type of emotional stress experienced by members of this helping profession, who assist others with intent to benefit them physically, psychosocially, emotionally, or mentally (Edelwich, 1980). Burnout, an emotional stress reaction found among nurses, may lead to decreased efficiency and consequently decreased self esteem. This in turn may lead to the nurse either remaining in nursing and demanding changes, or leaving the profession. This study will focus on those nurses remaining in the profession.

The public is aware of this disenchantment via the media's coverage of the shortage and unrest of nurses remaining in the profession. An example of this is the prevalence of strikes in the past couple of years by nursing staff in hospitals. Because nurses serve the public, public concern is stimulated by press coverage that nursing strikes may affect availability and quality of health care. Changes are being supported by both nurses and potential patients, evidenced by current available funding for studies on nurses' unrest, dissatisfaction, and personnel shortages.

Average turnover rates among all specialties of hospital nursing staff are estimated to be from 37-67% per year (Price, 1977). Costs resulting from this high rate of turnover include financial outlay for recruiting and training, and disruption to the patient care system (Weisman, Alexander & Chase, 1981). The focus of this study was the examination of burnout among nurses on four primary nursing units with turnover rates from 23% to 46% over a period of one year. Turnover rates such as these may reflect mobile professionals who are dissatisfied. The public is made aware of these turnover rates through decreased staffing in hospitals and unhappy RNs. The public wants the individuals who care for them to be stable, knowledgeable, and invested in their work. If the high turnover rates are reflective of units where primary nurses experience burnout, then the qualities of stability looked for in primary nurses may not be present.

Leaving one's job may be indicative of job dissatisfaction. The measurement of a turnover rate is an indirect measure of job dissatisfaction. It has been commonly used in past studies. Many individuals who are dissatisfied, however, do not terminate their employment. Job dissatisfaction can be both a reason for and an indication of burnout among those who remain in their jobs. The degree to which those who remain exhibit characteristics of burnout was examined in this study.

Though burnout is currently a popular term, it has been studied infrequently. Factors similar to burnout, such as job dissatisfaction, turnover rate, and stress have been measured more frequently and in terms of the work setting (organizational level) as opposed to the individuals themselves (non-organizational level). The focus of these

studies has been a search for problems within the organization as the cause for dissatisfaction, stress, or turnover among staff.

Research on organizational factors as an explanation for the presence of job stress was reviewed. Studies describing a personality factor clarifying how characteristics of individuals interact with the organizational factors were also examined.

Studies completed on burnout among helping professionals identify that some individuals experience more burnout than others (Maslach, 1979). Burned-out individuals have common characteristics which are not present in those who do not experience burnout. Though nurses have been included in these studies, no study has been completed on either primary nurses or with nurses who organize delivery of care around a specific conceptual model.

Definitions

The following definitions are presented to clarify concepts developed within the conceptual framework of the study.

Burnout. Burnout is defined here as a state of physical, emotional, and mental exhaustion. It is marked by physical depletion and chronic fatigue, by feelings of hopelessness and helplessness, and by the development of a negative self-concept and negative attitude toward life, work, and other people (Pines, 1981, p. 3).

This definition was chosen because of Pines' extensive work and compilation of data about burnout. It is an appropriate definition to apply in nursing because it includes all aspects of exhaustion that nurses in hospital settings may experience.

Primary nursing. Primary nursing is a system for delivery of nursing care in which an RN assumes an eight or 24 hour (depending on the setting) responsibility and accountability for patient care. The ratio of nurse to patient is between 1 to 4 and 1 to 7. Primary nursing is a fairly new system of organizing patient care, first tested in 1963 (Bolder, 1977).

Locus of control. Locus of control is the extent to which individuals attribute the responsibility of reinforcement to themselves or to forces outside themselves. It is a relatively stable personality characteristic present in everyone, and can be modified. This concept was developed in 1966 by Julian B. Rotter and based on social learning theory (Rotter, 1966). Locus of control has been studied using many different target populations, with varying results.

Internal locus of control describes the individual who attributes the results of his behavior mostly to himself and his own characteristics. External locus of control describes the individual who attributes the results of his behavior mostly to the power of others or to luck or fate.

Inpatient unit. The inpatient unit is a geographical area within a hospital designated for the care of certain types of patient illnesses. Four inpatient units were included in this study: one cardiac unit, one psychiatric unit, and two neurology/neurosurgery units.

Bearing the above definitions in mind, this study was built on the following eleven assumptions.

1. Nursing is a helping profession.
2. A professional nurse is a licensed RN who is employed on one of the designated units.

3. Burnout occurs in the helping professions.
4. All nurses have the potential to experience degrees of burnout.
5. Burnout is a result of stress.
6. Stress leads to physical, emotional, and mental exhaustion.
7. Nurses who experience burnout may or may not leave their work.
8. Burnout is related to job dissatisfaction.
9. Burnout affects patient care in undesirable ways.
10. Burnout impairs nurses' ability to give optimal care.
11. Burnout is one of the reasons nurses leave nursing.

Purpose

The purpose of this study was to attempt to discover if there was a link between burnout, a primary nurse's locus of control, and perception of stress. Once a link was established, then the knowledge would be used to promote prevention of burnout among primary nurses.

Review of Literature

This study examined the primary nurse's locus of control, perceived stress and support, and degree of burnout, and correlations between these variables. This literature review focuses on primary nursing, locus of control, and burnout.

As discussed, there is a body of literature describing nursing turnover and its potential correlate, job satisfaction. This literature suggests the severity of concern and significance of the problem.

Price (1977) reviewed studies examining employee turnover. It was found that overall satisfaction and job content were consistently and inversely related to turnover. Sample populations included certified public accountants, hospital employees (including nurses),

salesmen, clerical workers, and retail clerks. Personality variables were not examined. This review presented a base from which primary nursing and burnout may be examined. It established a correlation between job satisfaction and turnover. Both of these concepts have been identified as a concern and problem in nursing. Job dissatisfaction may be a reason for and an indication of burnout.

Weisman, Alexander & Chase (1981) used personal interviews of full-time RNs on primary (N=31) and non-primary (N=20) units in two university hospitals to compare the degree to which nurses were satisfied with their jobs. Job satisfaction did not seem to be influenced by the type of nursing system in which the nurses worked.

Job satisfaction among staff nurses in primary and team nursing settings has also been examined (Carlsen & Malley, 1981). In this study of 115 primary nurses and 65 team nurses it was found that primary nurses reported greater job satisfaction, but expressed a need for greater opportunity for independent judgment. Theoretically, primary nursing should produce greater independence compared with other types of nursing systems such as team nursing.

In a panel study of 1259 nurses employed at two university hospitals (Weisman, Alexander & Chase, 1981), determinants of hospital staff turnover rates were examined. These were autonomy, job satisfaction, intent to leave, and turnover rate. Weisman found that nursing turnover was a product of a process in which both personal attributes and job-related attributes contribute. It was found that of the personal attributes, internal locus of control of the subject led to greater job satisfaction ($r=.25$). In summary, there is a correlation between turnover rate and

job satisfaction. Increased job satisfaction may be associated with greater internal locus of control, and primary nursing, but not in all samples examined. It was also found that though primary nursing may increase job satisfaction, it also increases other stressors.

Literature on primary nursing identifies primary nursing as stressful (Friel, 1980). The processes of decision-making, the nurse-patient relationship, and interaction with superiors may affect the primary nurse's level of stress. These areas of stress provoke an emotional reaction (Skinner, 1979, Edelwich, 1980, Pines, 1981). This emotional stress potentially can lead to burnout (Pines, 1981, Edelwich, 1980). Studies completed on burnout in nursing have focused on nurses in neonatal intensive care units (Jacobsen, 1977, Marshall, 1980), adult intensive care units (Dossett, 1978), and cancer units (Marino, 1981, Friel, 1980).

Pines and Maslach (1978) looked at burnout using a burnout tool developed by Pines, a 21-item questionnaire with a Likert-type format. In this study they were able to identify characteristics of individuals who experienced burnout. Some of those identified characteristics were the lesser amount of control the individual felt he had over the situation (work), the inability to express feelings, thoughts, and frustrations, the increased amount of time working in mental health, and the increased intensity of the relationship of the worker with the patient. Information obtained suggested that burnout was a major factor in workers' low morale, absenteeism, and high job turnover. This study was completed on 76 mental health staff (psychiatrists, psychologists, nurses, social workers, attendants and volunteers) in the San Francisco area (Pines and Maslach, 1978).

Pines (1981) identified a coping skill of sharing responsibility with co-workers as being one method of decreasing burnout. Primary nursing may increase burnout because of the nurse's increased responsibility, accountability, and autonomy necessary to maintain the system.

The literature has focused on turnover among nurses and primary nurses specifically. Primary nursing has also been identified as stressful, but also more satisfying (at times) than team nursing. Primary nursing has been identified as emotionally stressful. Because the primary nurse does not share her responsibility, the likelihood of burnout is increased, which leaves her physically, emotionally, and mentally exhausted (Pines, 1981).

Personality factors may be an explanation for the primary nurse's degree of burnout. Locus of control is a personality factor which may serve as a type of filter that ameliorates the perception of stress or its severity. Thus perceptions of stressors inherent in primary nursing may be influenced by one's locus of control.

The majority of studies examining locus of control suggested that an individual's locus of control was related to job satisfaction and turnover rate. Research has demonstrated that individuals with internal locus of control were more satisfied with their jobs than those who were external (Majumder, 1977, Kimmons, 1976).

The Majumder (1977) study examined 111 rehabilitation counselors' locus of control, attitudes toward job, and attitudes toward supervisors, using Rotter's Locus of Control Scale. The more internal the counselors were, the greater their satisfaction was with their supervisors and job, $r = -.30$, $p < .01$, and $r = -.17$, $p < .10$, respectively. This study, though not of nurses and not using the tool in this study,

is significant in that rehabilitation counselors are members of a helping profession, suggesting results may be similar for nurses.

Studies on locus of control among nurses have been completed, though few. One longitudinal study (Bruhn, Floyd & Brunce, 1978) examined pediatric nurse practitioners before and after completing graduate school. It was discovered, again using Rotter's IE Scale, that the majority of graduates at one month after leaving school, were more externally controlled than before beginning the program.

Bledsoe and Baber (1978), in a study of 205 college women, examined personality correlates of locus of control with the use of Rotter's IE Scale. Their results suggested that persons with an internal locus of control were more emotionally stable, controlled, and conscientious, while externals were more excitable and insecure. This research is helpful because it presents specific information on locus of control in females and describes additional characteristics of internal and external individuals.

The above information has been presented because of its significance regarding job satisfaction and its relationship with locus of control. Although the historical significance of the Rotter IE Scale cannot be forgotten in terms of populations examined and statistical significance with those specific populations, it has recently been criticized. One of the major criticisms is that the IE Scale produces confusion regarding social, political, and ideological causation (Gurin, Gurin, Lao, Beattie, 1969; Silvern and Nakamura, 1971). The forced-choice format and difficult reading level may make it inappropriate for any large population (Nowicki, 1972). Within this study,

the Adult Nowicki-Strickland Internal-External Control Scale (ANS-IE) was used due to its use with differing populations and its easier readability.

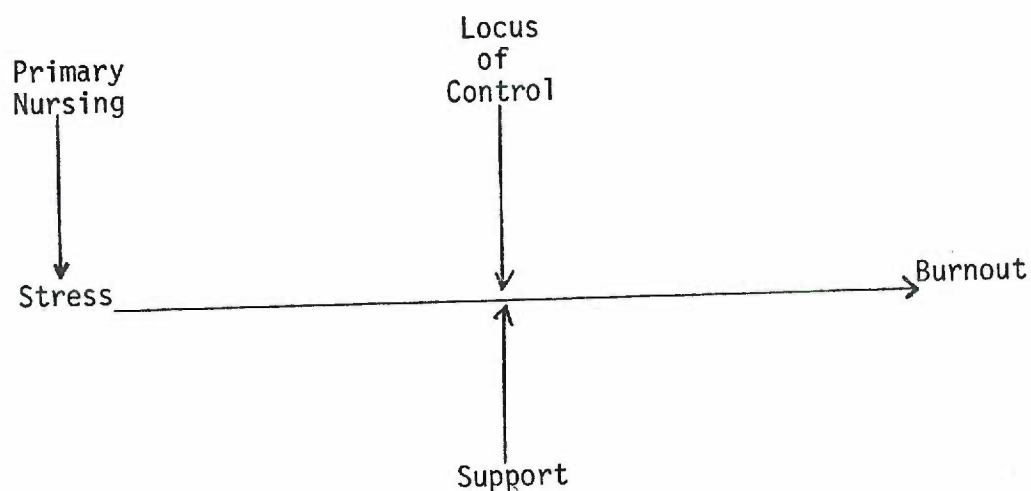
Data collected with the ANS-IE Scale has been helpful in describing some personality correlates of individuals. It was found that internal locus of control individuals are higher in self-concept, moral judgment (Dortzbach, 1976), and self-esteem (Mallow, 1976). External individuals have demonstrated more interpersonal distance (Duke & Nowicki, 1972; Skinner, 1976), debilitating anxiety (Kendall, Finch & Montgomery, 1976), and less self actualization (Hjelle, 1975).

The above studies summarize the major research available on the concepts examined in this study. Primary nursing has been recognized as stressful and having problems that must be examined. Support for the instruments used to measure burnout and locus of control was presented. The burnout tool has been used to examine health professionals, but not primary nurses. The locus of control tool is easier to answer by the subjects and more appropriate for the study.

Development of a Conceptual Framework

The conceptual framework developed for this study involves three concepts: locus of control, primary nursing, and burnout. In this section each is discussed separately and then linked to the others in the framework from which the hypotheses were derived. Figure 1 depicts the conceptual framework developed in this section and outlines the potential relationships studied.

Figure 1. Conceptual Framework



Locus of Control

The concept of locus of control deals with individual interpretations of the causality of behavioral outcomes or reinforcements. It is the extent to which individuals attribute the responsibility for occurrence of reinforcement to themselves (internal) or to forces outside themselves (external) (Rotter, 1966).

The concept is based in social learning theory, which contends that individuals have a choice in how they will behave. Before deciding on an action, individuals first must consider both the value of the outcome, and their estimation of the likelihood of its occurring (expectancy). People judge their chances of success by assessing the immediate situation (situation expectancy) and by drawing upon what they have learned from similar past experiences (generalized expectancy) (Arakelian, 1980).

Locus of control is a generalized expectancy. It is a relatively stable personality factor which develops over time and is acquired

through social learning experiences. Locus of control can be changed. Changes in one's expectancies occurs through new experiences that alter perceptions of previous success and failure, producing an opportunity for changing one's locus orientation (Arakelian, 1980).

Locus of control may be represented by degrees along a continuum. At one end is external locus of control, where reinforcement is perceived as being less contingent upon one's own action. It is perceived as a result of luck, chance, fate, under the control of powerful others, or as unpredictable because of the complexity of surrounding forces (Arakelian, 1980). At the other end of the continuum is internal locus of control, which is identified by the perception that events are more contingent on one's own behavior or one's relatively permanent characteristics. Locus of control is characterized by having a perception as to the cause of the result of one's behavior, whether it be internal or external.

A high degree of external locus of control is characterized by:

1. A belief in luck or fate or feeling the results of actions are controlled by others,
2. Being affected more frequently by one's surroundings, and
3. Acting quickly on information given (Bledsoe, 1978).

A high degree of internal locus of control is characterized by:

1. A belief that one's own actions and results are controlled mostly by oneself,
2. Actively seeking information about oneself in various situations, and
3. Spending more time in decision-making before acting on information (Bledsoe, 1978).

The expectancy of the nature of the causal relationship between one's own behavior and its consequences affects a variety of behavior choices in different life situations. These generalized expectancies result in characteristic differences in behavior of the individual within specific circumstances. The specific circumstances examined within this study are those of primary nursing, where the potential for burn-out is present. Though burnout is possible in all professions and in many types of organized delivery systems, primary nursing is being examined due to the nurse's potential intense emotional patient involvement, increased decision-making and increased responsibility, and therefore stress in this type of setting. As all aspects of an individual's personality affect how one interacts, thinks, and makes decisions, locus of control is another potential factor by which primary nursing and burnout may interact.

Primary Nursing

Primary nursing is a philosophy and a modality of humanistic health care delivery. "The primary nurse has authority, autonomy, and is accountable and directly available to the patient" (Russell, 1977, p. 17).

Primary nursing is characterized by:

1. Organization of nursing care for patients via a model that includes:
 - a) caring for a patient from hospital admission to discharge by one primary RN,
 - b) being responsible for patient care 8 or 24 hours per day,
 - c) having the authority to carry out decisions and be accountable for them, and

2. Performance evaluation by self, peers, and patients.

Primary nursing is not characterized by:

1. A team method of organizing nursing care for patients or
2. Performance evaluation only by one's supervisor.

Primary nursing is similar to private duty nursing though primary nursing does involve caring for more patients than the one-to-one relationship characteristic of private duty nursing. Primary nursing has gained popularity along with concurrent disenchantment with team nursing. An examination of private duty nursing and the disenchantment with team nursing that led to the rise of primary nursing is helpful in understanding why primary nursing is now being advocated.

The one-to-one nurse-patient relationship was described decades ago as private duty nursing in the early part of the 20th century. This type of nursing was a live-in situation, and "nursing" included cooking, cleaning, and management of the patient's affairs (Hegyvary, 1977). Private duty nursing was an attempt to meet all of the patient's needs with the skills available.

During WWII, the demand for nursing services led to the use of nurses' aides. The diversity of tasks performed and the continued use of aides led to team nursing, which was an organizational method to deliver patient care more effectively by utilizing the capabilities of all staff members. In team nursing, care of the individual patient was the responsibility of many nurses, aides, and technicians. Accountability was shared, and theoretically, the team planned the nursing care (Carlsen & Malley, 1981).

Some of the problems encountered with team nursing included excessive demands on the team leader, who had limited management skills.

Coordination of patient care was emphasized. These factors, along with the rising number of baccalaureate prepared nurses and increased responsibilities of nursing, led the hospital administrators and nursing staff to look for another form of nursing care.

Along with the above factors, the impetus for primary nursing developed out of the need for increased public access to the health care delivery system and the quest for improved quality of care. The first trial of primary nursing was at Loeb Center in 1963 (Bolder, 1977).

The theoretical framework for primary nursing is a decentralized decision-making theory (Manthey, 1980). "The emphasis is decision-making at the level of action (Manthey, 1980, p. 11). The individual performing the action is thought to be best qualified to make the decisions. "Recognition of the value of the individuals and authorization to control **one's** own actions and environment in which these actions take place is present in primary nursing" (Manthey, 1980, p. 11). In team nursing the opportunity to control one's own actions and environment within the hospital setting is not as great because of less autonomy and independence within the system of patient care.

Decentralized decision-making is not the basis for team nursing. Team nursing was developed for its organization of patient care, to increase services to more patients. This system for delivery of patient care suggested that patient care would be improved when each team member was utilized to their fullest capacity. In team nursing, "care from the patients' point of view was extremely fragmented" (NodoIny, 1979, p. 13). Primary nursing was an attempt to increase the quality of patient care by decreasing fragmentation.

Primary nursing allows the nurse's relationship with individual patients to be as direct and undiluted as possible. The key objective is quality care provided by the individual primary nurse to patients. Primary nursing facilitates health teaching to patients and their families, can improve the exchange of ideas and feelings between patient, primary nurse and other staff, and includes patients more frequently in planning their care (Bolder, 1977). There is a decrease in fragmentation and increase in continuity of care, and potentially patient recuperation. The patient potentially receives a higher quality of care for the same or less expenditure (Flynn, 1979).

The nurse who becomes part of the primary nursing system is faced with the values of autonomy, independent decision-making and risk-taking, and performance evaluation by peers, patients, and self. Relationships with supervisors, physicians, and nurse colleagues are on a more equal basis than in team nursing, where aides and other nurses are under the supervision of the team leader and may have less contact with physicians. The following discussions regarding the primary nurse and relationships with supervisors, physicians, and nurse colleagues, is an aspect of the work environment.

Primary nurse and supervisor. The primary nurse is responsible for giving quality care to patients and requesting support as needed from the supervisor. The primary nurse makes all decisions regarding his/her patients, but keeps the supervisor informed of those decisions.

The supervisor on a primary nursing unit is responsible for providing a nurturing relationship among staff, being supportive of primary nurse's decisions, and being present to assist the primary nurse

if necessary (Ciske, 1980). The supervisor is responsible for the quality of care patients receive on the unit.

Primary nurse and physician. Theoretically, the primary nurse has professional parity with the patient's physician. The physician can rely on the primary nurse to be aware of the patient's condition and to make appropriate decisions as needed. This organizational mode for delivery of care supports the independent and parallel practice of the primary nurse and physician.

Primary nurse and nurse colleague. The nurse colleague is another primary nurse who is available for consultation and support as needed by the primary nurse. Nurse colleagues are responsible for peer review, and should feel free to ask for assistance from other primary nurses as needed.

Modular nursing. Modular nursing is a type of primary nursing. It is also sometimes identified as comprehensive nursing. Modular nursing is differentiated within this framework. In modular nursing the nurse is responsible, accountable, and autonomous for eight as opposed to 24 hours per day. Initially, the patients may be assigned geographically. One primary nurse cares for patients in the same rooms consistently, and aides do minimal physical work, such as helping pass meal trays, helping patients to transfer, distributing beverages, and completing intake and output if so directed by the primary nurse. The primary nurse remains the major care-giver, thereby increasing the quality of care due to the increased awareness of patients' needs and knowledge base on the nurse's part (Ciske, 1980).

Primary nursing recognizes the value of individual decision-making and the authorization to control one's own actions. In being accountable

for the consequences of those actions, the primary nurse must feel comfortable with all expected responsibilities. It may be that if the RN is not able to accept the concepts and requirements of primary nursing, then more stress than usual may be experienced and burnout may occur more easily.

Nursing is a physically and emotionally demanding profession. While all organizational systems of nursing are stressful, primary nursing may intensify that stress with aspects such as increased autonomy, responsibility, and accountability. Primary nursing's qualities make it seemingly more demanding, but also potentially more personally satisfying. At times the nurse may feel the need to be "super nurse" and "all things to all patients." Intense involvement can be taxing on a one-to-one basis. When an RN must spend eight of 24 hours a day with patients and be totally responsible and accountable for all of his/her decisions and actions (especially if feeling ill-prepared to assume this responsibility), stress may occur, leading to physical, emotional and mental exhaustion. Primary nursing has the potential to be more stressful than other types of nursing care systems because of the increased physical and psychosocial demands of the patient and the increased responsibility and accountability demanded of the nurse. Locus of control and perceived stress and support are personal characteristics which might also affect the degree of burnout experienced by primary nurses.

Stress. Stress is the response one has to negative conditions or a lack of positive conditions (Kanner, Kafry & Pines, 1978). Burnout suggests that there is a depletion of energy and the diminished capacity to cope with stressors. Stressors within primary nursing settings are 1) the process

by which the primary nurse makes decisions, 2) the process by which the nurse and his/her patients interact, and 3) the process of interaction with the primary nurse's superiors.

1) The process by which the primary nurse makes decisions can be stressful. Through informal interviews, some primary nurses have described what happens with their decision-making processes. Some nurses have found that their decisions were made without guidelines from supervisors, under pressure and without feedback, or support from the supervisor. At times the decisions were reversed later by supervisors. This process potentially undermines the autonomy of the primary nurse within the system. It also undermines the primary nurse's self esteem, potentially leading to a degree of burnout.

2) The process by which the nurse and his/her patients interact can create stress from the intensity, duration and constancy of the relationship. It can also be stressful due to the lack of knowledge regarding others' patients and because responsibility towards one's own patients leaves little time to become knowledgeable about all of the other patients on the unit. When a primary nurse cares for his/her patients, stress is induced by the responsibility for the welfare of the patients. This stress can continue on one's day off, when someone else takes the place of the primary nurse. Not even an appropriately filled-in kardex totally relieves this concern. Also, if a primary nurse needs help with his/her patients, it will take time, energy, and the experiencing of stress to explain the patient's needs to another nurse colleague. Not being aware of all the patients may produce a sense of uneasiness which can hinder the primary nurse's own patient

care. This may increase one's physical, emotional, and mental exhaustion, leading to some degree of burnout.

3) The process of interaction with superiors can potentially be a stressful experience to the primary nurse. The stressors within this process may involve unclear or over-extended job expectations, unclear communication resulting in mixed messages, and a lack of provided resources. It is difficult to function as a primary nurse when job expectations are unclear. It is also stressful if there are few professional resources from which to work. The primary nurse is affected in this case both emotionally and mentally. If the primary nurse is unclear about the job and has few resources with which to learn more about it, confusion and frustration can develop. The primary nurse's self esteem can then be diminished. The stress the primary nurse experiences in acute care areas may be increased over other areas of primary nursing due to the increased intensity of the relationships with the patients.

The way a primary nurse experiences stress depends on what the nurse perceives as stressful, his/her support or coping skills, and possibly his/her locus of control. Support is defined as the amount of assistance or help the primary nurse perceives as available from persons with whom one works and with whom one lives.

The types of support examined within the framework of this study are the primary nurses' perceptions of support from home and on the job. The amount of stress, or burnout, may be inversely related to the amount of support perceived from within and outside the primary nurse's work setting. Perceived support may also be affected by the primary nurse's locus of control. A type of stress reaction, identified as

burnout, is also examined. This reaction may result from emotional stress occurring when primary nurses experience stress associated with decision-making, intense nurse-patient relationships, and interactions with colleagues and superiors, as discussed above. This study examines the relationship between the primary nurse's locus of control and degree of burnout.

Burnout

Burnout is a specific type of stress reaction experienced by helping professionals. Typical characteristics of burnout are listed below. Not every descriptor need be present in its full degree for burnout to occur.

An individual experiencing burnout is:

1. Emotionally and mentally exhausted,
2. Physically tired,
3. Frequently absent from work,
4. Displays negative, cynical attitudes,
5. Isolates self from work and others, and
6. Displays disgust with self and job.

An individual who is burned-out is more than depressed or apathetic.

Burnout is an emotional response and occurs over a period of time. It is the result of intense emotional involvement with people, increased responsibility and decision-making, and increased uncertainty in situations that are emotionally demanding (Skinner, 1979, Edelwich, 1980).

Such intense involvement occurs on a large scale and a continuous basis in many of the helping professions. Within the helping professions

there are built-in sources of frustration which can lead to burnout. They are: 1) noble aspirations and enthusiasm to "save all", when "all" don't want help, 2) a lack of criteria for measuring accomplishments, 3) low pay for all areas of expertise and responsibility, 4) inadequate support, and 5) high public visibility coupled with popular misunderstanding and suspicion (Edelwich, 1980). These aspirations, hopes, and frustrations, along with the emotional stressors which accompany each position, produces a high burnout faction among individuals within the helping professions.

Burnout as a concept first appeared in the nursing literature in 1978 (Berg). Prior to that time it was described in terms of low morale or job stress. It is an appropriate and important concept for nursing as a helping profession to examine because it may partially explain why many individuals leave the profession.

Burnout is different from other similar concepts. Burned-out nurses display some characteristics of depression, for instance, but the etiology, symptoms and treatment are different. Depression can be caused by many things: chemical imbalances, a loss, or anxiety. Burnout is caused by exhaustion from primarily emotional stressors. Symptoms of depression may include suicidal ideation, hopelessness, helplessness, and decreased self esteem. While burnout may include hopelessness and helplessness and negative self esteem, it also includes cynicism, a patterned absenteeism from work, and negative attitudes towards self and others, without suicidal ideation. Treatment for depression includes drug therapy, psychotherapy, and behavioral changes, to name a few. Treatment in the case of burnout depends on the degree of burnout. Behavioral change is a possible option for the individual,

or some type of change within the system itself. Other treatment options may include group therapy with other burned-out individuals, and a general increased awareness on the individual's part.

Apathy is another concept which may be confused with burnout.

Apathy is one symptom among many in burnout. It keeps the primary nurse from working out issues or identifying the surrounding lack of support. Apathy alone can be found in any individual with or without any type of job. Burnout, within the realm of this study, is examined among working nurse professionals. Burnout connotes an intense emotional involvement and negative attitude, whereas an apathetic individual is indifferent.

Stress can arise from intense emotional involvement with others. "The degree of severity of the manifestations of the stress depends on the individual's adaptive coping mechanisms" (Huckabay, 1980, p. 105).

The amount of control one exerts over the stress is a type of coping skill. One view is that the extent to which the individual feels he/she has control over the situation is inversely related to how stressful the circumstances are perceived to be. Locus of control may function as a type of coping skill, depending on the situation and where the individual lies along the locus of control continuum. If one's locus of control is more internal, the individual may perceive the situation to be less stressful. If the locus of control is more external, the individual may perceive the situation to be more stressful and feel powerless to change it (Huckabay, 1980). Another view suggests that if the individual is more externally controlled, he/she would be less affected by a stressful situation because there was no feeling of responsibility for the outcome. An internal individual, then, would be more affected by stressful events under this conceptualization. This study

was based on the former view due to the previous literature regarding this conceptualization. Locus of control among primary nurses was measured to determine, in a situation conducive to burnout, which individuals exhibit more burnout.

Conclusion

Locus of control is a personality factor exhibited by every individual. It deals with how one perceives the results of one's actions. All aspects of our environment are filtered through an environment-person interface, including stress from work situations, perceived support, and feelings of burnout. Locus of control may be an important factor in that it may be able to absorb some of the impact of perceived stress and thus minimize its effects and possibly reduce burnout.

Primary nursing is a system of care where the nurse is accountable and responsible for decisions concerning the welfare of his/her patients. The primary nurse is responsible for his/her own actions. As in any system, stressors are present within primary nursing. They may even be increased by the system itself. The categories of stressors described can be responded to emotionally. Pines (1978) has indicated that burnout is caused primarily through emotional stress.

Some categories of stressors identified within this discussion have included the process of decision-making, interaction with superiors, and the intense nurse-patient relationship. These stressors are experienced to some degree in many patient care delivery systems, but may be potentially augmented among the primary nurses in acute care settings. The way the primary nurse responds to these stressors may be mediated through locus of control.

This study hoped to determine if external locus of control was correlated with the degree of burnout resulting from emotional stressors potentially inherent within primary nursing. The way stressors are perceived depends on the primary nurse's locus of control and perceived support. Locus of control may mediate the degree of burnout by affecting the perception of stress. The extent to which emotional stress results in burnout may also be influenced by the nurse's perception of support.

This study examined locus of control as a possible pathway through which the perception of stressors in primary nursing are mediated.

Hypotheses

The literature review and conceptual framework suggested potential relationships between primary nursing and stress, burnout and job satisfaction, burnout and aspects of personality, and internal-external locus of control and job satisfaction. This study explored the relationship between locus of control and burnout among cardiac, neurological, and psychiatric primary nurses. The study was done to determine if there was a relationship between the amount of stress perceived and the degree of burnout, and also if an inverse relationship existed between perceived support and degree of burnout.

Two major hypotheses were tested in this study:

1. The greater the amount of stress perceived by the primary nurse, the greater the degree of burnout experienced.
2. The more internal a primary nurse's locus of control, the less burnout experienced, and the more external a primary nurse's locus of control, the more burnout experienced.

A third hypothesis for this study was:

3. The greater the primary nurse's perceived support from home and work, the less degree of burnout experienced.

CHAPTER II

METHODS

This study proposed relationships between locus of control and burnout, perceived stress and burnout, and perceived support from both home and work and burnout. The method by which these relationships were examined are described in this Chapter. This section includes discussions of subjects, instruments, procedures, design, and analyses.

Subjects

The target population was identified as all cardiac, neurology, and psychiatric primary nurses in inpatient settings. The accessible population was identified as all cardiac, neurology, and psychiatric primary nurses in inpatient settings in the "k" City area.

The sampling elements were all full-time cardiac primary nurses from one unit at Hospital A, all neurology primary nurses from two units at Hospital A, and psychiatric primary nurses from one unit at Hospital B. The sample was non-random and accidental, as all primary nurses in each setting were invited to participate in the study. These four units were chosen due to their accessibility, varying forms of primary nursing, and stressful settings. In addition, these units represented turnover rates from 23% to 46% over a period of one year (calculated similarly). General characteristics of the four units and of the subjects are described in the following sections and summarized in Tables 1 and 2.

Table 1
General Characteristics of Individual Hospital Units

Characteristics	Hospital Units			
	A-1	A-2	A-3	B-1
Type of Unit	cardiac	neuro	neuro	psych
Primary Nursing System	8 hour	8 hour	8 hour	24 hour
Yearly Turnover Rate	46%	30%	25%	23%
Number of Beds	32	32	24	28
Average Length of Patient Stay (in days)	6	30	30	11

Unit A-1 (cardiac)

The 32 bed inpatient unit post CCU/ICU telemetry unit included 29 RNs with an average age of 27.9 years. Full-time primary nurses from this unit were representative of all three shifts. Modular, or comprehensive nursing was used during the 24 hour day, with each "primary nurse" being responsible, accountable, and autonomous for eight hours. The average length of patient stay was six days. Patients were admitted to the unit as medical patients and surgical patients, before and after surgery, or for monitoring by telemetry. There were 16 telemetry monitors on the unit, and nurses generally took care of four, five, and six patients on days, evenings, and nights, respectively. The RN turnover rate on this unit was 46% over a period of one year.

Prior to data collection, information was obtained from the head nurse regarding this unit. Some of the aspects of this unit that the head nurse described as stressful for the primary nurse included: the

need to make quick decisions with critically ill patients, the lack of knowledge regarding other RNs' critically ill patients, the lack of time to share thoughts and feelings, and the potential lack of acknowledgement by others for work completed or quality care given.

Units A-2 and A-3 (neurology/neurosurgery)

The two neurology and neurosurgery units at Hospital A contained a total of 56 beds (see Table 1). The type of patients and care given did not differ significantly between units, but due to the number of beds, the 56 beds were divided into two separate units of 24 and 32 beds, with separate staff.

The 32 bed unit included 24 full-time RNs with an average age of 31.2 years. Primary nurses from this unit represented all three shifts. Modular, or comprehensive nursing was used during the 24 hour day, with each "primary nurse" being responsible, accountable, and autonomous for eight hours. The average length of patient stay was 30 days. Patients were admitted to the unit as medical or surgical patients, before and after surgery. The nurse to patient ratio was 4-5 on days, 5-6 on evenings, and 6-7 on nights. The turnover rate of this unit was 30% over a period of one year.

The 24 bed unit included 20 full-time RNs with an average age of 29.1 years. The type of patient care was similar to the 32 bed unit. The average length of patient stay was also 30 days. The nurse to patient ratio was also similar to Unit A-2. The RN turnover rate for this unit was 25% over a period of one year.

As identified in interviews with the head nurses from these two units prior to data collection, stressful aspects of the units included:

long-term patients, some staying up to one year, patients (especially young) who had little chance for recovery, working with comatose patients, and being very physically active while at work.

Unit B-1 (psychiatry)

The 28 bed unit included 14 full-time RNs from the day and evening shifts (see Table 1). Nurses assigned to the night shift were not primary nurses, but followed other primary nurses' patients. The primary nursing system on the unit involved 24 hour responsibility by the primary nurse. The nurse to patient ratio on days and evenings was one to three. The average age of the primary nurses was 38.6 years. The average length of patient stay was 11 days. The RN turnover rate on this unit was 23% over a period of one year.

Prior to data collection, various primary nurses (who also participated in the study) identified some stressful aspects of working on the unit. These stressful aspects included: working with potentially dangerous and threatening patients, difficulty communicating with superiors, and the constancy of dealing with some of the same patients over a period of time.

Some of the stressful elements common to these four units focused around the processes of decision-making, interaction with superiors, and the intense nurse-patient relationships. In addition, the potential physical threat experienced by psychiatric nurses provided additional stress to these primary nurses.

Total Sample

Ninety-one, or 99% of those invited participated in the study. Eighty-two percent of the subjects were employed on units using the modular (8 hour) system of primary nursing, while the other 18% were

employed on the unit using the 24 hour primary nursing system of care.

Table 2
Characteristics of Subjects Participating in Study

Characteristics	Sample Statistics
Sex	
Male	n=13
Female	n=78
Age in Years	
Mean	31.7
Range	(under 25) to (50-60)
Education	
AD	n=15
DIP	n=52
BSN	n=19
GRAD	n=5
Years in Nursing	
Mean	4.6
Range	(1) to (10)
Years in Primary Nursing	
Mean	2.8
Range	(1) to (10)
Years on Unit	
Mean	2.2
Range	(1) to (5-10)

The majority of the sample was female (85.7%) with the remaining 14.3% being male (see Table 2). Subjects ranged from less than 25 years in age to less than 60, with the average age being 31.7 years.

Units A-1, A-2 and A-3 employed 92% of the Diploma RNs participating in the study. Graduate degree RNs were employed only on Units A-1 and B-1. The average number of years in nursing was 4.6 for nurses across all the units.

Instruments

The instruments used in this study measured the three independent variables, locus of control, perceived stress, perceived support, and the dependent variable, the burnout experienced by the primary nurse.

Locus of Control

Locus of control was measured in this study by the Adult Nowicki-Strickland Internal-External Control Scale (ANS-IE). It was first developed in 1974 due to difficulties experienced by the authors in using the Rotter IE Scale. The ANS-IE was constructed for use with adults in general, and was intended to differentiate more clearly between internal and external individuals, and be more readable.

When initially developed, the ANS-IE was tested with three groups of college students (N=156) and one group of community members (N=33). The ANS-IE is a 40-item questionnaire with yes and no answer possibilities. To compute the results of the scale, one must compare answers with the key. One point is given for each answer that corresponds with the key. Scorers are then divided into categories, low scorers (0-8), average scorers (9-16), and high scorers (17-40); low scorers are more internally controlled, and high scorers are more externally controlled. This study did not collapse the scores into categories, but used the actual numerical value for analysis.

The internal consistency reliability of this instrument for college and community samples was .60 (Duke & Nowicki, 1974). Test-retest reliability for college students over a six week period was .83 (Duke & Nowicki, 1974), and for one year was .56 (Mink, 1976).

Construct validity was established by correlating scores from the Nowicki-Strickland Scale with scores from Rotter's IE Scale using two college samples and one community adult sample. In all three samples the correlations between the two measures were significant (Nowicki & Duke, 1974).

Perceived Stress and Support

The independent variables of perceived stress and support were measured by a Likert-type scale developed by this investigator (see Appendix D). After pilot-testing an initial version of the instrument, a 21-item final version was administered during data collection.

Item-analysis procedures resulted in the construction of two stress scales and one support scale. One 12-item stress scale (Stress Scale 1) contains items relating to pressures of decision-making and nurse-superior interactions. The second 4-item stress scale (Stress Scale 2) contains items concerning the nurse-patient relationship. The 3-item support scale (Support Scale) measures aspects of support from home and work.

Two items, a decision-making item and a support item were not statistically compatible with any of the three scales but were retained as single items for further analysis. Method of scoring for each item and the scale to which it belongs can be found in Appendix D.

Scores for each scale were computed by averaging the items on the scale. Subjects with missing responses received a missing score value.

Cronbach alpha reliabilities for Stress Scales 1 and 2 were .91 and .62, respectively. Cronbach alpha for the Support Scale was .70.

Burnout

The burnout variable was measured in this study by "A Self Diagnosis Instrument," a burnout scale developed by Ayalá Pines and first used in 1978. It is a 21-item questionnaire representing three components: physical exhaustion (feeling weak, tired, rundown), emotional exhaustion (feeling depressed, trapped, hopeless), and mental exhaustion (self-perception of worthlessness, resentment). Items were presented in random order and responded to on a seven-point frequency scale. Standardized instructions for computing the burnout score result in values having a possible range from 1.33 to 5.85; lower scores represent a lower degree of burnout. A score of 4.0 or above is interpreted to be a considerable degree of burnout. A score of 2.5 or below is considered to be a low degree of burnout.

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 ranged from .91 to .93 (Pines & Kafry, 1978).

Construct validity of the burnout scale was examined by means of correlational analysis with several other theoretically relevant measures. Burnout was found to be significantly and negatively correlated with self-ratings of satisfaction from work, life, and dissatisfaction with oneself (Pines & Kafry, 1978).

Secondary Variables

The other variables assessed in this study were as follows: age, sex, education, years in nursing and primary nursing, length of time on

unit, number of hours responsible for patients (8 or 24), type of unit, and shift worked. All variables were measured using the demographic questionnaire.

Procedure

The following steps were taken in collecting the data:

1. A proposal was submitted to the School of Nursing Human Subjects Committee.
2. Directors of Nursing at Hospitals A and B were contacted to obtain a personal interview and present them with a copy of the proposal to receive permission to conduct the study.
3. The Head Nurses were contacted and given a copy of the proposal to obtain permission to conduct the study on their unit.
4. Staff members' names were obtained from the head nurse of each unit being studied. The head nurses indicated that there would not be a problem with using work time to complete the questionnaires.
5. A personal written invitation was sent to all personnel to be studied on each respective unit. The letter was addressed to each individual and put in his/her mailbox on each unit. This letter contained a brief explanation of the study, including a statement that participation was voluntary, confidential, and refusal would in no way affect the individual's position on the unit. Participants were also told that the completed data would be available only in combined form; no individual results would be available. Dates and times as to when this investigator would be available on each unit for any questions regarding the study and an approximate date and time for data collection were also included in the letter.
6. Subjects were not identified by name on any of the questionnaires

or when reporting the combined results. A letter code identified the participant by unit only. After the participant returned the completed questionnaires to the investigator, the investigator assigned each sealed envelope with a numerical code for organizational purposes. Employers and supervisors did not have access to the data except for the combined reported results. Confidentiality and anonymity was assured each participant. Return of the completed questionnaire was evidence of informed consent.

7. Data collection was completed on each unit within a one week period, allowing a variety of days to contact individuals who were absent or unable to complete the questionnaires in one day.

8. A workshop was provided to each unit, presenting the results of the study to all staff, whether they chose to participate in the study or not. At that time, if the subjects were interested in knowing their own results, they could retake the questionnaires and their results would be provided to each individually.

The tools were administered to the staff from the designated units at Hospitals A and B in Fall, 1981. The tools were administered in the same area on each unit, and during blocks of time most convenient for the staff during each shift. Staff were asked to answer the questions independently and not to discuss the questionnaire until the data collection was completed on their unit. Written directions preceded each tool; the investigator and one assistant administered all forms. The approximate length of time estimated to complete the tools was less than 20 minutes per subject. After completing the questionnaires, each subject placed his/her answers in an envelope, sealed it, and handed it to the investigator.

Design

A descriptive correlational design was used. The independent variables (the individual's locus of control, perceived stress, and perceived support) were measured rather than manipulated experimentally.

The external validity of this study was limited in that results could be generalized only to primary nurses from cardiac, neurology, and psychiatric units in a Northwest urban area.

Summary of Data Analysis Procedures

The data analysis was completed using the computer. Pearson's correlations were computed to test the relationships stated in the hypotheses. To provide a more integrated view of the results, multiple regression was used to determine the extent to which the measures of support, stress, and locus of control predicted the outcome variable, burnout. Since this research was exploratory in nature, an alpha level of .10 was employed with the multiple regression so as not to miss potentially important variables.

CHAPTER III

RESULTS AND DISCUSSION

This chapter presents the study results as related to each hypothesis as well as some additional findings of interest. A discussion follows the presentation of results.

The following hypotheses were investigated in this study:

1. The greater the amount of stress perceived by the primary nurse, the greater the degree of burnout.
2. The more internal a primary nurse's locus of control, the less burnout experienced, and the more external a primary nurse's locus of control, the more burnout experienced.
3. The greater the primary nurse's perceived support from home and work, the less the degree of burnout.

Results

The results presented in this section will pertain directly to the hypotheses and other findings. A summary of descriptive statistics can be found in Table 3. The means and standard deviations for the units on the burnout measure are presented in Appendix H.

Examination of Hypotheses

All three hypotheses were supported by the correlation analyses.

Hypothesis 1. It was found that the greater the amount of stress reported by the primary nurse, the greater the degree of burnout experienced. This relationship between stress and burnout held for stress regarding the nurse-patient relationship ($r = .32, p. < .001$) and for stress regarding decision-making and interaction with superiors ($r = .18, p. < .05$) (see Table 4).

Table 3
Descriptive Statistics for the Major Variables

Variable	Subjects	
	M	Range
Self-reported sick days ^a	2.7	0 to 10
Burnout Score ^a		
Male	3.4	1.8 to 4.5
Female	3.1	1.7 to 4.4
Total	3.2	1.7 to 4.6
Locus of Control Score ^a		
Male	10	2 to 21
Female	7.8	0 to 14
Total	8.2	0 to 21
Stress Score ^a		
SS1		
Male	2.8	2.4 to 6.7
Female	3.9	2.1 to 6.5
Total	3.3	2.1 to 6.7
SS2		
Male	3.1	2.2 to 6.8
Female	3.1	2.1 to 6.6
Total	3.1	2.1 to 6.8

^aMean

Table 4
Correlations of Dependent and Independent Variables

	Burnout	SS1	SS2	Support	Locus of control	Item 8	Item 8
Burnout	1.00	.18* (n=89)	.32*** (n=89)	-.33*** (n=87)	-.30** (n=91)	.22 (n=90)	-.26 (n=91)
SS1		1.00	.13 (n=88)	-.61*** (n=87)	.12 (n=89)	.02 (n=89)	-.05 (n=89)
SS2			1.00	-.34*** (n=87)	.13 (n=89)	.04 (n=89)	-.30* (n=89)
Support				1.00	-.16 (n=87)	-.05 (n=87)	.13 (n=87)
Locus of Control					1.00	.01 (n=90)	.07 (n=91)
Item 8						1.00	.19* (n=90)
Item 16							1.00

* p < .05; ** p < .01; *** p < .001

Hypothesis 2. As seen in Table 4, the more external the locus of control reported by the primary nurse, the greater the degree of burnout ($r = .30, p < .01$).

Hypothesis 3. The greater the amount of support the primary nurse perceived, the less the degree of burnout ($r = -.33, p < .001$).

Correlations Among Independent, Dependent, and Secondary Variables

Other correlations among the dependent and independent variables can be found in Table 4. Correlations of the dependent and independent variables with secondary variables can be found in Table 5.

Table 5

Correlations of Dependent and Independent Variables with Other Variables

	Years R.N.	Years Primary Nursing	Years on Unit	Age	Days Sick (in past 6 mo.)
Burnout	.07 (n=91)	-.008 (n=91)	.06 (n=91)	-.02 (n=91)	.14 (n=90)
SS1	.38*** (n=89)	.18* (n=89)	.07 (n=89)	.38*** (n=89)	.06 (n=88)
SS2	.05 (n=89)	-.04 (n=89)	.25** (n=89)	.007 (n=89)	-.02 (n=88)
Support	-.29** (n=87)	-.19* (n=87)	-.15 (n=87)	-.26** (n=87)	-.21* (n=86)
Locus of Control	-.03 (n=91)	-.18* (n=91)	.15 (n=91)	.05 (n=91)	-.03 (n=90)
Item 8	.20* (n=90)	.19* (n=90)	.16 (n=90)	-.08 (n=90)	-.02 (n=89)
Item 16	-.03 (n=91)	-.03 (n=91)	-.16 (n=91)	-.02 (n=91)	0.06 (n=90)

* p < .05
 ** p < .01
 *** p < .001

Two items not included in the stress and support scales were related to burnout. The greater the primary nurse's perceived stress regarding decision-making under pressure (Item 8, see Appendix D), the more burnout experienced ($r = .22, p < .05$). The less support perceived at home (Item 16, see Appendix D), the greater the burnout the primary nurse experienced ($r = -.26, p < .01$).

Significant correlations between independent variables are evident. The more stress (SS1) the primary nurse perceived, the less was the support ($r = -.61, p < .001$). The more stress perceived from the nurse-patient relationship (SS2), the less support experienced ($r = -.34, p < .001$).

In referring to Table 5, one observes that the older and more experienced primary nurse perceived greater stress (SS1) ($r = .38, p < .001$). The more time a primary nurse spent on the unit (length of time worked), the more stress experienced from the nurse-patient relationship (SS2) ($r = .25, p < .01$).

Other Findings

A stepwise multiple regression was computed to determine the extent to which the variables of stress (SS1 and SS2), locus of control, and support predicted burnout (see Table 6). In this hierarchical regression analysis, the two stress measures were entered first in order of their statistical significance; then the two intervening measures of locus of control and support were entered in order of their statistical significance. As Table 4 indicates, of the two stress measures, stress related to the nurse-patient relationship (SS2) was the stronger predictor of burnout. At step 3 of the analyses, the contributions of stress (SS1 and SS2) to burnout were taken into account. Locus of

Table 6

Predicting Burnout From Stress Scales, Locus of Control, and Support:
A Stepwise Multiple Regression

Predictor Variable	Outcome Measure: <u>Burnout</u>					
	Percent of Variance Accounted for at Each Entry Step	F to Enter Predictor	Multiple R	Beta Wt. at Final Step	Adjusted R ²	Overall F Statistic
<u>Types of Stress</u>						
Stress 2 (patient)	10.0	9.46** df (1,85)	.316	.22	.090	9.46** df (1,85)
Stress 1 (interact. w/superiors & decision-making)	2.06	1.96 df (1,84)	.347	-.01	.121	5.77** df (2,84)
<u>Intervening Variables</u>						
Locus of Control	6.5	6.57* df (1,83)	.430	.24	.156	6.29*** df (3,83)
Support	3.7	2.77 ^a df (1,82)	.460	-.22	.173	5.51*** df (4,82)

Note: Following each F Statistic, the appropriate degrees of freedom are presented in parentheses.

^ap < .10; *p < .05; **p < .01; ***p < .001

control was found to be significantly related to burnout ($F(1,83)=6.57$, $p=.012$), and support approached a significant relationship with burnout ($F(1,83)=3.34$, $p=.071$). Locus of control was then entered as the third predictor and support as the fourth. The multiple correlation between burnout and this set of four predictors was .460 indicating that these predictors accounted for approximately 21% of the variance in burnout.

Discussion

In this section, results previously outlined will be discussed in greater detail. The discussion will focus on the supported hypotheses, correlations among variables, and other findings.

Hypothesis 1. It was found that the more stress (SS1 and SS2) the primary nurse perceived to have, the more burnout experienced. Though both types of stress were significantly correlated with burnout, it is interesting to note that the correlation with the nurse-patient relationship (SS2) was of greater significance and magnitude (see Table 4). This scale included such items as the ability to limit unnecessary demands from patients, the intensity of the nurse-patient relationship, the ability to feel adequately informed regarding other RN's patients, working with too many patients, and being overly concerned with patients when not at work.

The conceptual framework of this study discussed the stress potentially experienced by the primary nurse. It was proposed that this stress was caused by the increase in autonomy, responsibility, and accountability experienced within the primary nursing system. It was further discussed that the stress could be delineated into processes of decision-making under pressure and interaction with superiors (SS1), and

the nurse-patient relationship (SS1). The correlation between perceived stress from the nurse-patient relationship (SS2) and burnout leads to a postulation of its significance in the nursing profession today.

Has nursing been premature in its acceptance of the primary nursing model? This study found that the stress experienced from the nurse-patient relationship within a primary nursing setting is a major correlate of nurses' burnout. In searching for the "perfect" system of nursing care, the profession may not examine the stresses of a system prior to its acceptance, and may not orient its staff nurses to the changes that will occur. Further studies should be completed to establish the reliability of this information and to examine stress related to other forms of nursing care systems. If future results indicate similar stresses evolving from only primary nursing, then the profession may choose to re-examine use of primary nursing and reconsider its benefits and side effects.

Stress related to decision-making under pressure and interaction with superiors (SS1) was not correlated with stress related to the nurse-patient relationship (SS2). This led to the development of two stress scales. Secondly, SS1 only marginally correlated with burnout. It is acknowledged that the methods by which these aspects of stress were delineated may not have been comprehensive enough to adequately capture all important concepts. The unstructured interviews did allow the primary nurse to state the stresses personally experienced, as opposed to having to conform the experience to preconceived categories. This process, however, may have excluded specific and important aspects of stress related to primary nursing that were not present within this sample. More research is needed to identify if stress (SS2) experienced by the primary nurse is the major stress related to burnout (from work)

encountered by nurses today. Continued refinement of all three scales (SS1, SS2, and Support) would be a helpful process for addition of any overlooked aspects of stress.

Hypothesis 2. It was discovered that primary nurses who had an external locus of control also reported more burnout. The externally focused primary nurse would be more apt to attribute occurrences on the work unit to others and be more influenced by the environment. As discussed in the conceptual framework (see Figure 1), locus of control was seen as an intervening variable, or "buffer", which may or may not have had an effect on the primary nurse's degree of burnout.

Rotter (1966) stated that the personality trait locus of control is stable, but changeable. If this study was repeated on the same subjects a year from now, would similar results be found? Another study may answer this question. This investigator does not adhere to the misconception that to be externally focused is "bad", and to be internally focused is "good". This study has, however, indicated a direct relationship between external locus of control, and a greater degree of burnout in primary nurses.

The specific characteristics of the externally focused primary nurse have been discussed. This individual can feel powerless, out of control, and helpless. One study discussed in the review of literature indicated that individuals who were externally focused were more excitable and insecure (Bledsoe & Baber, 1978). Other information presented does not present a clear relationship to the above question. Continued research examining characteristics of externally focused individuals would be helpful in answering this question; nursing research must begin within this area of conceptualization.

Other discussion needed is related to the environment. The primary nurse's external locus of control is related to the greater degree of burnout. Does the stressful environment itself lead to burnout, which, in turn, leads to a change in one's locus of control? External locus of control may be an adaptive response to a stressful environment. Nursing has not examined the primary nursing environment as a stress, and is not prepared at this point in the profession to deal with it. Review of literature has revealed that primary nursing, as compared to other forms of nursing care systems, is more stressful (Carlsen, 1981). Locus of control is a personality factor which develops over time and is acquired through social learning experiences. It changes as one's environment and new learning experiences change. It may be possible, then, for the relationship stated within this second hypothesis to be reversed. The stressful environment which leads to burnout may initiate an adaptive response by the primary nurse to become more external and thus not deal with the surrounding atmosphere. This was not examined within this study; future research can examine this aspect of locus of control and the environment.

The review of literature within this study examined some characteristics of individuals who were internally focused. Bledsoe and Baber (1978) found that internally focused individuals were more emotionally stable, controlled, and conscientious. Can the primary nurse who has an internal locus of control manipulate and/or control the environment to either decrease apparent stress or remain oblivious to it? If so, can primary nurses who are externally controlled be "changed" to internally focused so as to deal with stress similarly? These findings may stimulate further nursing research in this area.

Hypothesis 3. Support, as locus of control, was postulated to be an intervening variable between stress and burnout (see Figure 1). Results demonstrated that the greater the support perceived by the primary nurse, the less was the burnout (see Table 4). Though nursing management within the work setting has no control over the primary nurse's support from home, there are a variety of opportunities to develop support networks for staff nurses. One method might be providing a healthful working environment for primary nurses. This situation would be conducive to the primary nurses having time and energy to share both physical and moral support with their colleagues. This could be accomplished by maintaining the nurse-patient ratio at a minimum, providing a physical environment conducive to having discussions, and providing ample time during regularly scheduled meetings for discussion of problem patients, complaints, and support.

Another method by which management may begin to provide a supportive environment would be to periodically evaluate the primary nurses' stress (perhaps using this study's stress and support tool) and develop methods by which the components of stress would be decreased.

Correlations Among Variables

Other results indicated that the more perceived stress (SS1 and SS2) the primary nurse experienced, the less was the perceived support. It is interesting to note that the older and more experienced primary nurses perceived more stress related to decision-making under pressure and interaction with superiors, but no significant stress related to the nurse-patient relationship (SS2). The primary nurse who spent a longer time on one unit also experienced more stress arising from the nurse-

patient relationship (SS2). It would seem logical that the more experienced primary nurse would have less stress related to the nurse-patient relationship because of the number and variety of relationships possible. While the stress from decision-making under pressure and interaction with superiors would vary from unit to unit, it would always be a potential source of stress leading to burnout. Younger primary nurses, on the other hand, may have less experience with the nurse-patient relationship, and perceive that as a greater stress than decision-making and interaction with superiors.

There was no item on the questionnaires in this study to determine if the primary nurse had recently specialized. Length of experience in a nursing specialty should be ascertained if the study is repeated.

Other Findings

It is interesting to note that male nurses comprised 14.3% of the sample in this study (see Table 2). This is a higher percentage than typically found among the predominantly female nursing profession. A possible reason for this high percentage of male RNs may be due to the type of units (neurology/neurosurgery units), which are known to require more physical patient care such as turning, lifting, and transferring patients. Male RNs may be assigned more frequently to these types of units.

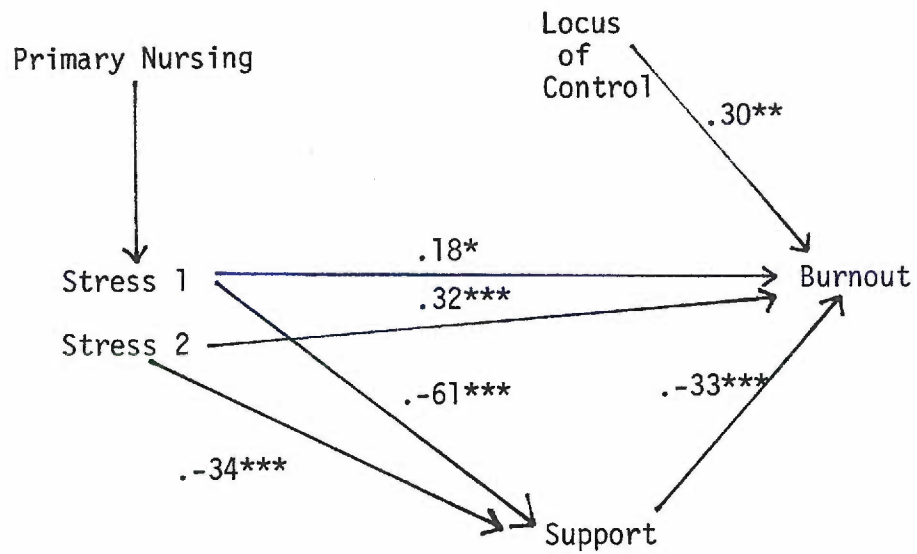
In general, those individuals who reported feeling greater burnout, worked the evening or night shift and reported more sick days than those less burned-out. It is important to note that the sick day information was gathered by self-report. In future studies it is suggested that employee records be used.

The multiple regression analysis examined the extent to which variables of stress (SS1 and SS2), locus of control, and support predicted burnout.

The nurse-patient relationship (SS2) was clearly the best predictor of burnout. When SS1 and SS2 were statistically controlled for, first locus of control, and then support, presented as significant variables in predicting burnout. The less external the locus of control, the less the degree of burnout reported by the primary nurses. The greater the perceived support, the less burnout experienced by the primary nurse. This may explain why a primary nurse is not burned-out even though stress is perceived, possibly because of greater perceived support or internal locus of control. Also, the primary nurse who is burned-out, though not under any significant amount of perceived stress, may exhibit an external locus of control and lack of support. Administration must not only evaluate stress within the work environment in their attempt to alleviate burnout, but also examine the primary nurse's perceived support and locus of control, intervening variables which have an effect on burnout.

Figure 2 presents a revised conceptual framework identifying specific correlations as well as additional relationships and variables evident as a result of this study. Interesting differences between Figure 1 and Figure 2 include the separation of the stress variable into SS1 (decision-making under pressure and nurse-superior interaction) and SS2 (nurse-patient relationship) and the correlations related to the split as well as to other variables.

Figure 2. Revised Conceptual Framework



Note. * $p < .05$
** $p < .01$
*** $p < .001$

CHAPTER IV

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

This study examined the relationships between a primary nurse's perceived stress and support, locus of control, and burnout. The conceptual framework described the relationship between the major concepts of primary nursing and its related stress, locus of control, and burnout. These relationships established support for the hypotheses. The hypotheses proposed a direct relationship between external locus of control and burnout and perceived stress and burnout, and an indirect relationship between perceived support and burnout. A review of literature revealed support for the stress of primary nursing and its relationship to burnout, the relationship between stress on the job and forms of job dissatisfaction, and reported the reliability and utility of the locus of control and burnout tools.

This study was designed to determine if relationships did exist between a primary nurse's perceived stress and support, locus of control, and burnout. A descriptive correlational design was used to complete the research. Ninety-one subjects participated in the study, completing four questionnaires. These volunteers were obtained from four different units within two different hospital settings. The three hypotheses postulated were supported with correlational data.

Conclusions

The findings of the study indicated there was a direct relationship between the primary nurse's perceived stress and burnout, locus of control and burnout, and an indirect relationship between perceived

support and burnout.

The results of this study introduces additional nursing research to the predominantly psychological literature regarding locus of control. The results also raise questions about the primary nursing care system: its benefits, liabilities, and comparisons to other forms of nursing.

Results of this study are only generalizable to primary nurses within the settings studied. It is interesting to speculate as to whether these findings may be applicable to other primary nurses of cardiac, neurology/neurosurgery, and psychiatric units. A broader study may discover this.

Recommendations

In order to validate and further interpret the findings of this study, the following recommendations are suggested. Replication of this study with a larger sample size is needed to validate and generalize the study's findings to a larger primary nurse population. A greater number of 24 hour primary nurses as subjects would also aid in continued validation.

Examination of the primary nursing model and other nursing care systems in terms of burnout would be beneficial in determining if nursing has jumped on a "bandwagon" or is justified in using the primary nursing model. It would specify whether or not the primary nursing system and the professionals within experienced more stress and burnout than in other types of nursing care systems. A study on a clearer conceptualization of orientation for primary nursing if switching from another system would also be helpful.

Continued refinement of the stress and support tool developed by this investigator are needed. Additional types of stress related to primary nursing may be discovered.

A closer examination of burnout and locus of control is needed to determine if stress and burnout lead to a change in the primary nurse's locus of control, as opposed to the direction hypothesized in this study. Another question to be asked is whether the internally focused primary nurse has the ability to manipulate the environment so as to decrease apparent stress and/or become oblivious to it.

It would be worthwhile to examine primary nursing units with different overall burnout scores in an attempt to discover if there is a difference in the amount or type of support they appear to receive on the work unit. Use of primary nurse personnel attendance records to identify the number of sick days may provide more valid and reliable data.

Lastly, based on this study and others on burnout and interventions, an experimental study should be conducted with an intervention workshop providing information and support aimed at decreasing the burnout in our profession.

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APPENDIX A
Cover Letter to Participants
General Directions for Questionnaires

OREGON HEALTH SCIENCES UNIVERSITY
SCHOOL OF NURSING

Dear

I am a graduate student currently working on my master's thesis, "The Relationship Between Degree of Burnout, Locus of Control, and Perceived Stress in Primary Nurses", under the supervision of Kathy Crabtree, RN, MSN, ANP.

I am inviting you to participate in this study. Your participation is voluntary and there will be no consequence if you choose not to participate or decide to withdraw. Your part in this study includes filling out a demographic questionnaire and three other questionnaires measuring burnout, locus of control, and perceived stress and support. It will take approximately 20 minutes of your time. Your response will not be identified individually, but combined with others for reporting results. Employers and supervisors will not have access to information about individuals or whether or not you participate. I will be available for questions and/or comments during and after completion of the questionnaires.

The benefits will include a workshop held by this investigator to share with you the results of this study and more information on burnout (whether you participated or not), and your part in initiating future research in burnout and nursing.

I will be visiting your unit on _____, and will be available for questions at that time. We will then set up times for completing the questionnaires, which will be approximately between

November 5th and 17th, 1981. I am looking forward to meeting you and sharing more information about my study.

Sincerely,

Janelle P. McLeod, RN

Thank you for participating in this study. Please read all directions for each questionnaire prior to beginning that questionnaire. Please answer all questions.

You may notice a letter placed in the corner of each of your questionnaires. This is a designation for hospital and unit only; it does not identify you individually.

THANK YOU!!!!

APPENDIX B
Demographic Questionnaire

Demographic Questionnaire

64

DIRECTIONS: Please check the () that applies most specifically to you in each question. Do not skip any questions.

1. What is your gender?
 - () Male
 - () Female
2. What shift do you work?
 - () Days
 - () Evenings
 - () Nights
3. What type of unit do you work on regularly?
 - () Cardiac unit
 - () Psychiatric unit
 - () Neurology/Neurosurgery unit
 - () Other (please specify): _____
4. How many hours are you responsible and accountable for your patients?
 - () 8 hours (modular/comprehensive)
 - () 24 hours (primary)
5. What is the approximate total length of time that you have worked as an RN?
 - () Less than one year
 - () Between 1-3 years
 - () Between 3-5 years
 - () Between 5-10 years
 - () Over 10 years
6. What is the total length of time that you have worked in primary or comprehensive nursing (whichever applies)?
 - () Less than one year
 - () Between 1-3 years
 - () Between 3-5 years
 - () Between 5-10 years
 - () Over 10 years

7. What is the total length of time you have worked on this nursing unit?
- Less than one year
 - Between 1-3 years
 - Between 3-5 years
 - Between 5-10 years
 - Over 10 years

8. How old are you?
- Less than 25 years
 - 25-29 years
 - 30-34 years
 - 35-39 years
 - 40-49 years
 - 50-59 years
 - 60 years or over

9. How much professional schooling have you had?
- B.S. in Nursing
 - Diploma then B.S.N.
 - A.D. then B.S.N.
 - Diploma
 - A.D.
 - Graduate Degree(s)

10. How many patients are you working with today? _____ (fill in #)

11. I have called in sick _____ (fill in #) days during the past 6 months.

**REMEMBER: ALL INFORMATION YOU GIVE ON THESE QUESTIONNAIRES WILL REMAIN
CONFIDENTIAL AND ANONYMOUS!!!!**

APPENDIX C
Locus of Control Scale

Locus of Control Scale

DIRECTIONS: Please answer the following questions the way you feel. There are no right or wrong answers. Read the question, then check yes or no next to the corresponding number on the answer sheet. Please answer all questions.

<u>YES</u>	<u>NO</u>	<u>YES--</u>	<u>NO</u>
1. _____	1. _____	21. _____	21. _____
2. _____	2. _____	22. _____	22. _____
3. _____	3. _____	23. _____	23. _____
4. _____	4. _____	24. _____	24. _____
5. _____	5. _____	25. _____	25. _____
6. _____	6. _____	26. _____	26. _____
7. _____	7. _____	27. _____	27. _____
8. _____	8. _____	28. _____	28. _____
9. _____	9. _____	29. _____	29. _____
10. _____	10. _____	30. _____	30. _____
11. _____	11. _____	31. _____	31. _____
12. _____	12. _____	32. _____	32. _____
13. _____	13. _____	33. _____	33. _____
14. _____	14. _____	34. _____	34. _____
15. _____	15. _____	35. _____	35. _____
16. _____	16. _____	36. _____	36. _____
17. _____	17. _____	37. _____	37. _____
18. _____	18. _____	38. _____	38. _____
19. _____	19. _____	39. _____	39. _____
20. _____	20. _____	40. _____	40. _____

1. Do you believe that most problems will solve themselves if you just don't fool with them?
2. Do you believe that you can stop yourself from catching a cold?
3. Are some people just born lucky?
4. Most of the time do you feel that getting good grades meant a great deal to you?
5. Are you often blamed for things that just aren't your fault?
6. Do you believe that if somebody studies hard enough he or she can pass any subject?
7. Do you feel that most of the time it doesn't pay to try hard because things never turn out right anyway?
8. Do you feel that if things start out well in the morning it's going to be a good day no matter what you do?
9. Do you feel that most of the time parents listen to what their children have to say?
10. Do you believe that wishing can make good things happen?
11. When you get punished does it usually seem it's for no good reason at all?
12. Most of the time do you find it hard to change a friend's opinion?
13. Do you think that cheering more than luck helps a team to win?
14. Did you feel that it was nearly impossible to change your parents' minds about anything?
15. Do you believe that parents should allow children to make most of their own decisions?
16. Do you feel that when you do something wrong there's very little you can do to make it right?
17. Do you believe that most people are just born good at sports?
18. Are most of the other people your age stronger than you are?
19. Do you feel that one of the best ways to handle most problems is just not to think about them?
20. Do you feel that you have a lot of choice in deciding who your friends are?
21. If you find a four-leaf clover, do you believe that it might bring you good luck?
22. Did you often feel that whether or not you did your homework had much to do with what kind of grades you got?
23. Do you feel that when a person your age is angry at you, there's little you can do to stop him or her?
24. Have you ever had a good-luck charm?
25. Do you believe that whether or not people like you depends on how you act?
26. Did your parents usually help you if you asked them to?
27. Have you felt that when people were angry with you it was usually for no reason at all?
28. Most of the time, do you feel that you can change what might happen tomorrow by what you do today?
29. Do you believe that when bad things are going to happen they just are going to happen no matter what you try to do to stop them?
30. Do you think that people can get their own way if they just keep trying?
31. Most of the time do you find it useless to try to get your own way at home?
32. Do you feel that when good things happen they happen because of hard work?
33. Do you feel that when somebody your age wants to be your enemy there's little you can do to change matters?
34. Do you feel that it's easy to get friends to do what you want them to do?
35. Do you usually feel that you have little to say about what you get to eat at home?
36. Do you feel that when someone doesn't like you there's little you can do about it?
37. Did you usually feel that it was almost useless to try in school because most other children were just plain smarter than you were?
38. Are you the kind of person who believes that planning ahead makes things turn out better?
39. Most of the time, do you feel that you have little to say about what your family decides to do?
40. Do you think it's better to be smart than to be lucky?

APPENDIX D
Stress and Support Scale

Stress and Support Scale

DIRECTIONS: Please answer the following statements by circling the number which best describes the frequency of occurrence of that situation.

1 2 3 4 5 6 7
 Never Once in a Rarely Sometimes Often Usually Always
 great while

	NEVER	ONCE IN A GREAT WHILE	RARELY	SOME-TIMES	OFTEN	USUALLY	ALWAYS
- 1. My nursing superiors support the decisions I make regarding my patients. (SS1)	1	2	3	4	5	6	7
- 2. I am able to limit the unnecessary demands of my patients on my time. (SS2)	1	2	3	4	5	6	7
+ 3. The relationship I have with my patients is too intense. (SS2)	1	2	3	4	5	6	7
- 4. I feel adequately informed about other RN's patients to respond to their needs. (SS2)	1	2	3	4	5	6	7
+ 5. I am unclear as to what my superiors expect of me. (SS1)	1	2	3	4	5	6	7
- 6. I have the authority to make nursing decisions regarding my patients. (SS1)	1	2	3	4	5	6	7
+ 7. My nursing colleagues are available for sharing ideas and feelings. (Support)	1	2	3	4	5	6	7
+ 8. I make decisions under pressure. (SS1)	1	2	3	4	5	6	7
+ 9. I receive enough moral support from people I work with. (Support)	1	2	3	4	5	6	7
- 10. There are adequate guidelines set up for me from which to make decisions. (SS1)	1	2	3	4	5	6	7
+ 11. I have to work with too many patients. (SS2)	1	2	3	4	5	6	7
- 12. My superiors provide an adequate supply of professional resources (e.g., available clinical specialist, journals, etc.) for the unit. (SS1)	1	2	3	4	5	6	7

	NEVER	ONCE IN A GREAT WHILE	RARELY	SOME-TIMES	OFTEN	USUALLY	ALWAYS
+13. My friends give me encouragement regarding my work. (Support)	1	2	3	4	5	6	7
-14. My superiors appreciate the complexities of my nursing role on the unit. (SS1)	1	2	3	4	5	6	7
+15. The decisions I make regarding my patients are reversed. (SS1)	1	2	3	4	5	6	7
-16. At home my family gets annoyed when I talk about my problems at work. (Support)	1	2	3	4	5	6	7
+17. I feel that I am concerned too much about my patients on my days off. (SS2)	1	2	3	4	5	6	7
-18. If there is a problem on the unit, my superiors will help to solve it. (SS1)	1	2	3	4	5	6	7
-19. I have confidence that my nurse colleagues are well-informed regarding my patients' needs. (SS2)	1	2	3	4	5	6	7
-20. I receive helpful feedback from superiors regarding my decisions about my patients. (SS1)	1	2	3	4	5	6	7
-21. My superiors share enough information with me. (SS1)	1	2	3	4	5	6	7

+ - Method of Scoring

APPENDIX E
Burnout Scale

A Self Diagnosis Instrument

73

People can compute their burnout score by completing the following questionnaire.

How often do you have any of the following experiences?
Please use the scale:

1	2	3	4	5	6	7
Never	Once in a	Rarely	Sometimes	Often	Usually	Always
	great while					

- 1. Being tired.
- 2. Feeling depressed.
- 3. Having a good day.
- 4. Being physically exhausted.
- 5. Being emotionally exhausted.
- 6. Being happy.
- 7. Being "wiped out."
- 8. Feeling "burned out."
- 9. Being unhappy.
- 10. Feeling rundown.
- 11. Feeling trapped.
- 12. Feeling worthless.
- 13. Being weary.
- 14. Being troubled.
- 15. Feeling disillusioned and resentful about people.
- 16. Feeling weak.
- 17. Feeling hopeless.
- 18. Feeling rejected.
- 19. Feeling optimistic.
- 20. Feeling energetic.
- 21. Feeling anxious.

APPENDIX F
Permission to Collect
Data From Hospital A and Hospital B
Permission to Use
Tools

Nursing Research Committee
School of Nursing
Oregon Health Sciences University
3181 SW Sam Jackson Park Rd.
Portland, OR
Attn: Katherine Crabtree, Chairperson

Dear Ms. Crabtree,

Janelle P. McLeod, RN, graduate student in mental health nursing has discussed her proposed study, "The Relationship Between Degree of Burnout, Locus of Control, and Perceived Stress in Primary Nurses" with the appropriate individuals at this hospital. Permission has been given for Janelle to obtain a list of staff members on the unit from which she will be collecting data; we understand that individual employees will remain anonymous and information they give Janelle via the questionnaires will remain confidential.

Janelle P. McLeod has permission to collect data from the subjects she has discussed with us. We understand that she will be providing the unit with a workshop after her study has been completed.

Sincerely,

Jean Coverstone, PhD
Jean Coverstone

Assistant Director of Nursing

October 28, 1981

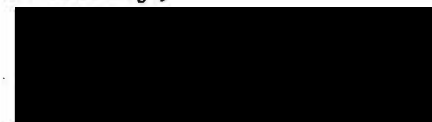
Nursing Research Committee
School of Nursing
Oregon Health Sciences University
3181 S.W. Sam Jackson Park Road
Portland, Oregon 97201

Attn: Katherine Crabtree, Chairperson

Dear Ms. Crabtree,

Janelle P. McLeod, R.N., graduate student in mental health nursing has discussed her proposed study, "The Relationship Between Degree of Burnout, Locus and Control, and Perceived Stress in Primary Nursing" with the appropriate individuals at this hospital. Permission has been given for Janelle to obtain a list of staff members on the unit from which she will be collecting data. We understand that individual employees will remain anonymous and information they give Janelle via the questionnaires will remain confidential.

Sincerely,

A solid black rectangular box redacting the signature of Sharon Jones.

Sharon Jones, R.N., M.S.
Assistant Director,
Mental Health Unit

SJ/mc

Nursing Research Committee
School of Nursing
Oregon Health Sciences University
3181 SW Sam Jackson Park Rd.
Portland, Oregon

To Whom It May Concern:

Janelle P. McLeod, RN, has my permission to copy and use the Adult Nowicki-Strickland I E Control Scale in her study on burnout, locus of control, and perceived stress and support on primary nurses.

She has agreed to send me a copy of her results when her study is completed.

Sincerely,


Dr. Stephen Nowicki

August 13, 1981


Nursing Research Committee
School of Nursing
Graduate Department
Oregon Health Sciences University
3181 SW Sam Jackson Park Rd.
Portland, OR

To Whom It May Concern:

Janelle P. McLeod has my permission to copy the tool, "A Self Diagnosis Instrument" for use in her study on burnout in nurses.

The conditions that Janelle and I have discussed include her sharing her results with myself, to which she has agreed.

Sincerely,


Ayala Pines, PhD
Dept. of Psychology
Univ. of California
Berkeley, CA 94720

APPENDIX G
CORRESPONDENCE

June 12, 1981

Stephen Nowicki, Ph.D.
Dept. of Psychology
Emory University
Atlanta, Georgia

Dear Dr. Nowicki:

I am a graduate student in Mental Health Nursing at Oregon Health Sciences University, Portland, Oregon. I am currently working on my master's thesis, examining the relationship between burnout, locus of control, and perceived stress in primary nurses. It was suggested by Elliott Weiner that I contact you regard a locus of control instrument that you developed, the Adult Nowicki-Strickland Internal External Scale.

I would appreciate your sending me a copy of the tool and scoring directions as well as permission to use your tool in my study. I would be most happy to share my results with you upon completion of the study. Thank you for your consideration and cooperation.

Sincerely,

Janelle P. McLeod, R.N., B.S.
Graduate Student, Mental Health Nursing
Oregon Health Sciences University
Portland, Oregon

Please send information to:

Janelle P. McLeod
13159 S.W. 63rd Place
Portland, Oregon 97219

May 14, 1981

Ayala Pines, Ph.D.
Dept. of Psychology
University of California
Berkeley, CA 94720

Dear Dr. Pines:

Per our telephone conversation of yesterday, I am very much interested in obtaining a copy of your burnout tool, "A Self Diagnosis Instrument" for use in my study examining burnout in primary nurses.

As mentioned, I am currently a graduate student at the Oregon Health Sciences University in Portland, Oregon, and hope to complete my master's thesis in the area of burnout. In addition to a copy of the tool and scoring instructions, I would appreciate any additional material you might have on the instrument's reliability and validity.

I would be most happy to share my results with you upon completion of the study. Thank you for your consideration and cooperation.

Sincerely,

Janelle P. McLeod, R.N., B.S.
Graduate Student, Mental Health Nursing
Oregon Health Sciences University
Portland, OR

Please send tool to:

Janelle P. McLeod
13159 S.W. 63rd Place
Portland, OR 97219

November 24, 1981

Sharon Jones, R.N., M.S.N.
Assistant Director
Portland, Oregon

Dear Ms. Jones:

A letter to acknowledge the completion of my data collection on the mental health unit. I would like to express my appreciation to you and all the staff for being so helpful and cooperative regarding the data collection.

As soon as my study is completed, I will return as discussed to present my findings to the staff. Thank you again for your cooperation and help.

Sincerely,

Janelle P. McLeod, R.N., B.S.
Graduate Student, Mental Health Nursing
Oregon Health Sciences University

November 24, 1981

Marge Hanley, Director of Nursing
Portland, Oregon

Dear Ms. Hanley:

A note to let you know that I have completed my data collection on the units at Good Samaritan Hospital and Medical Center. I want to express my appreciation to you and all of the staff participating in my study for being so helpful and accepting of my presence on the individual units.

As soon as my study is completed, I will return as discussed to present my findings as well as a burnout workshop for the staff of the three units tested.

Thank you again for your cooperation and help.

Sincerely,

Janelle P. McLeod, R.N., B.S.
Graduate Student, Mental Health Nursing
Oregon Health Sciences University

APPENDIX H
CHARACTERISTICS OF SUBJECTS AND BURNOUT AND LOCUS
OF CONTROL SCORES BY UNIT

Characteristics of Subjects and Burnout and
Locus of Control Scores by Unit

Characteristics	Unit				Total
	A-1	A-2	A-3	B-1	
Male	3	4	5	1	13
Female	26	20	19	13	78
Age in years ^a	27.9	31.2	29.1	38.6	31.7
Education					
Diploma	19	16	13	4	52
AD	1	3	8	3	15
BSN	7	5	3	4	19
GRAD	2	0	0	3	5
Years in Nursing ^a	3.5	4.0	3.6	7.2	4.6
Years in Primary Nursing ^a	2.6	2.6	2.3	3.7	2.8
Years on Current Unit ^a	1.5	3.0	2.5	1.7	2.2
Self-reported sick days - past 6 months ^a	2.1	3.4	2.3	3.1	2.7
Burnout Score ^a					
Male	3.1	3.9	3.0	3.7	3.4
Female	3.2	3.3	2.7	3.1	3.1
Total	3.2	3.4	2.8	3.2	3.2
Locus of Control Score ^a					
Male	8.3	10	8.4	13	10
Female	7.8	7.4	8.2	7.9	7.8
Total	7.9	7.8	8.2	8.8	8.2

^a Mean

AN ABSTRACT OF THE THESIS OF

JANELLE PINKNEY MCLEOD

FOR THE MASTERS OF NURSING

DATE OF RECEIVING THIS DEGREE: June 11, 1982

TITLE: THE RELATIONSHIP BETWEEN DEGREE OF BURNOUT, LOCUS OF CONTROL,
AND PERCEIVED STRESS IN PRIMARY NURSES

APPROVED:

M. KATHERINE CRABTREE, R.N., M.S.

THESIS ADVISOR

Burnout in nursing is one of the more popular terms in our profession today. Research in this area, however, has been minimal. Available research examines nurses and other professionals in intensive care and other settings. Primary nurses from medical, surgical, and psychiatric units within hospital settings have not been examined. A review of literature and the development of a conceptual framework established postulated relationships between the stress of primary nursing and burnout, perceived support and burnout, and locus of control and burnout. This descriptive correlational study examined three hypotheses:

1. The greater the amount of stress perceived by the primary nurse, the greater the degree of burnout experienced.
2. The more internal a primary nurse's locus of control, the less burnout experienced, and the more external a primary nurse's locus of control, the more burnout experienced.
3. The greater the primary nurse's perceived support from home and work, the less the degree of burnout.

Ninety-one full-time primary nurses employed by two hospitals within a Northwest urban area were included in this study's nonprobability, accidental sample. The dependent variable, burnout, was measured by Pines' burnout scale, "A Self Diagnosis Instrument". The primary nurse's perceived stress and support was measured using a tool developed by this investigator. Locus of control was measured using the Adult Nowicki-Strickland IE Scale.

All three hypotheses were supported by the findings of this study, indicating direct relationships between a primary nurse's perceived stress and burnout and locus of control and burnout, and an indirect relationship between a primary nurse's perceived support and burnout. A stepwise multiple regression procedure was completed to determine the extent to which the measures of support, stress, and locus of control predicted the outcome variable, burnout. The stress from the nurse-patient relationship was significantly related to the primary nurse's burnout. When stress was statistically controlled for, first locus of control and then support presented as significant variables in burnout.

These findings are generalizable to primary nurses within specific specialties and inpatient settings in this Northwest urban area. The findings provide topics worthy of future nursing research as well as implications for nursing practice in areas of support, stress as related to primary nursing, burnout, and the personality trait, locus of control.