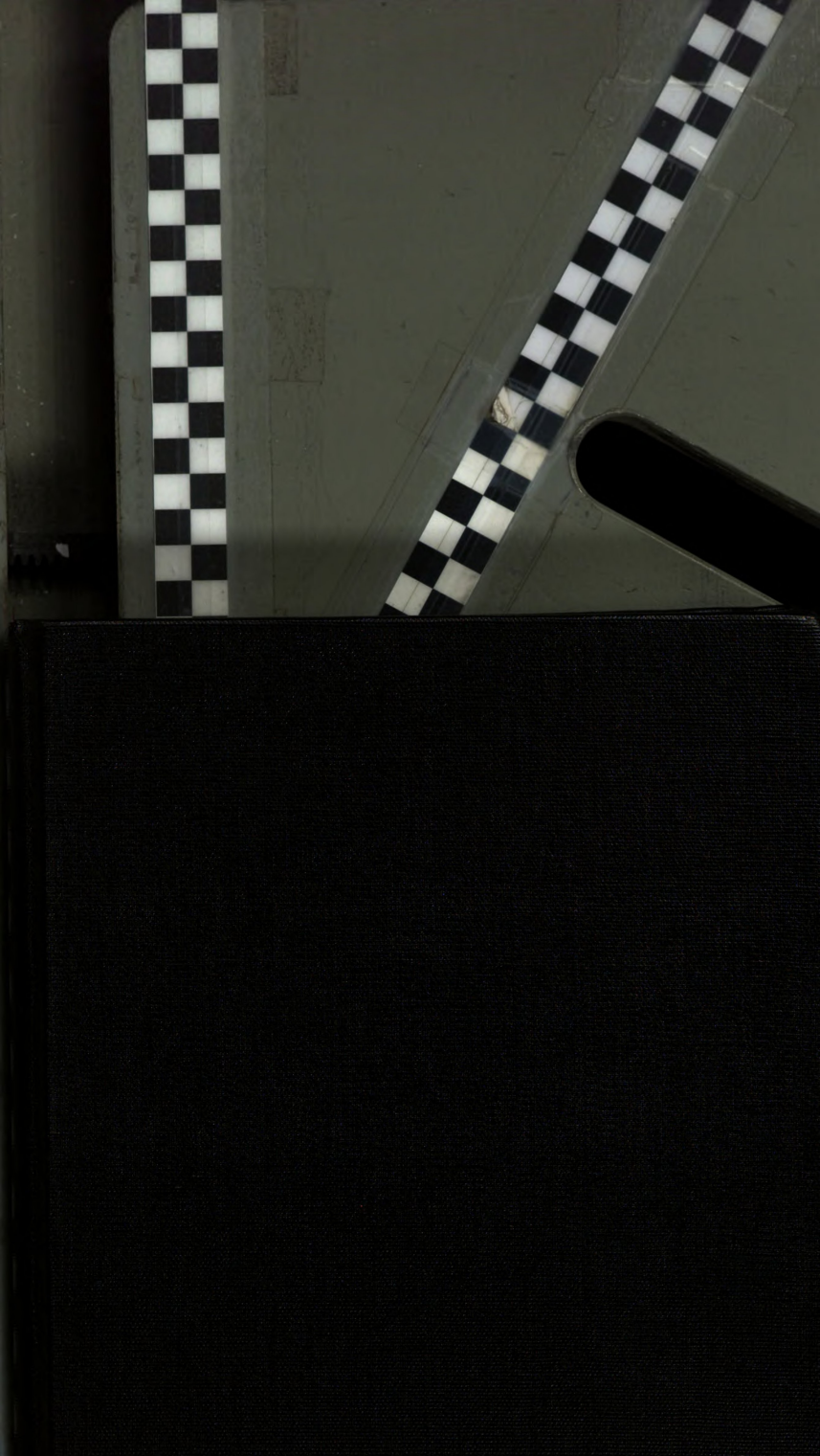

This is to certify that the

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Nurses' Communicative Relationships and the Prediction of Organizational Commitment, Burnout, and Retention in Acute Care Settings

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By

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ABSTRACT
NURSES' COMMUNICATIVE RELATIONSHIPS AND THE PREDICTION OF ORGANIZATIONAL COMMITMENT, RETENTION, AND BURNOUT IN ACUTE CARE SETTINGS

By
Beth Hartman Ellis

This research considers the role of nurses' communicative relationships in acute care hospitals as predictors of retention, organizational commitment, and burnout. Three relationships were investigated: nurses' communication with physicians, the communication between and among nurses, and the communication between nurses and patients. Focus group interviews with nurses, as well as extant theory and research from organizational communication and nursing, provided the basis for hypotheses. Tests of hypotheses were based on data from full-time and part-time nurses employed at a large midwestern hospital. Results indicate that participation in decisions about patient care issues with physicians was significantly related to personal control but not to retention; personal control was significantly related to retention as well as to burnout. Instrumental, informational, and emotional support for nurses was significantly related to personal control, however, the strength of the correlations were weak. The only support variable related to retention was emotional support. Finally, the results of communication for nurses and patients indicates that nurses' perceptions of communicative responsiveness was significantly related to all dimensions of burnout and organizational commitment. The implications for theory and research are discussed.

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CHAPTER ONE
THEORY AND LITERATURE REVIEW

"Hospitals...are complex, heterogeneous organizations characterized by multiple levels of authority superimposed on professional personnel who generally receive their training in professional schools and pay allegiance to professional associations." Numerof, 1983

The American hospital has undergone radical shifts in overall goals since its inception. Several primary factors in the evolution of hospitals have contributed to modern acute care settings. Initially, hospitals began as an outgrowth of religious organizations' desire to provide lodging houses to the homeless. However, since many of the homeless were also physically ill, nursing care became a necessity and in time medical consultation was sought (Burling, Lentz, and Wilson, 1956). As a result, the physicians or medical practitioners were "very much in control because of their unquestioned authority in the hospital's most important 'product' - the patient" (Guest, 1972, p. 286). Since 1900 the physician has been the indispensable entity in hospitals, and has retained an independence from it (Guest, 1972).

A second factor in the evolution of the current hospital has its roots in medical technology. Technology, increased specialization, and an extensive division of labor, has forced the original "lodging house" into an

elaborate and complex organizational structure encompassing interdependent systems of tasks and social interaction (Guest, 1972).

Additionally, the effect of regulation by insurance companies has dramatically affected the functioning of all phases of the hospital. Historically, providers of health care insurance allowed the physicians and the hospitals to set rates of payment for hospital services. However, recent regulation (Diagnostic Related Groups) has limited charges for hospital services. As a result, hospitals must discharge patients much more quickly than before in order to ensure survival (Bowlyow, 1990). Malpractice insurance for physicians has also dramatically increased, forcing hospital costs up (e.g. Carter & Cromwell, 1987; Taravella & Shapiro, 1985), though this trend may now be reversing (Woolsey, 1989).

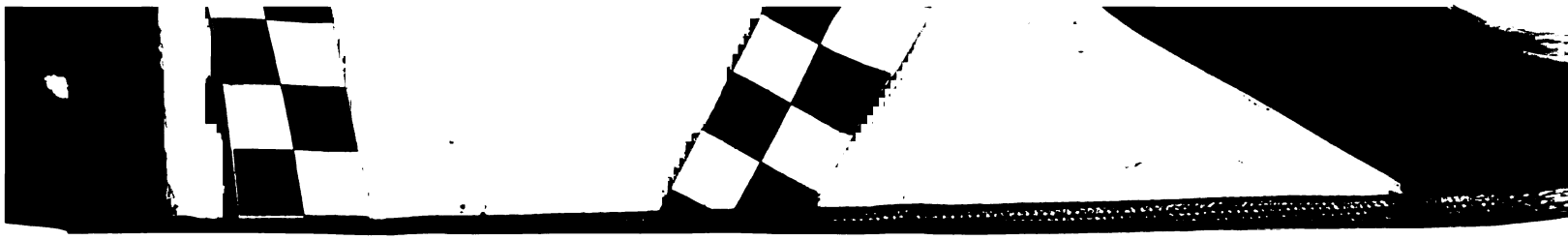
Finally, the rapid expansion of Health Maintenance Organizations (HMOs) has contributed to a shift in goals for the hospital. These organizations have focused on the maintenance of health care, thus reducing the need for hospitalization (Mowry & Kropman, 1987).

Spiralling costs and the rise of HMOs have paved the way for increased competition among hospitals. Indeed, parallels are being drawn between the health care industry and profit oriented business organizations. For example, Kramer (1988) applied Peters and Waterman's (1982) eight principles of excellent organizations to the Magnet Hospital

study. Magnet Hospitals (McClure, Poulin, Sovie & Sandelt, 1982) reported the results of a survey that identified hospitals throughout the United States that had a reputation for being institutions of excellence and "that are able to attract and retain a staff of well-qualified nurses" (p.2).

Several critical concerns have evolved as a result of changes in the hospital and society. First and foremost among these concerns is the nursing shortage. Since 90% of the patient care in the nation's hospitals is delivered by nurses (Kramer, 1988), nurse turnover has become a grave problem for most hospitals. Twenty-two percent of the hospital work force is comprised of nurses with the average hospital employing 85 nurses for every 100 patients (Mowry & Korpman, 1987).

The RN shortage is not merely a "perceived problem". Evidence of the reality of the nurse shortage is provided in the 1986 survey by the American Organization of Nurse Executives, which found that in 1/3 of the nation's hospitals, 13.6% of the RN positions were vacant (Stenske, Biordi, Gillies, & Holm, 1988). Over 90% of the nation's hospitals are recruiting medical/surgical nurses, and more than 50% are recruiting nurses for ICU vacancies. The demand for nurses may outweigh the supply by 1.2 million positions in the next decade (Mowry & Korpman, 1987). It is not surprising that in 1986, the American Hospital Association reported that "high vacany rates in hospital nursing positions were detrimental to hospital care" (Hayne &



Charles, 1988, p. 142).

The nursing shortage has created additional stress for nursing employees. When combined with features of the job itself, such as heavy physical work, work overload, unpleasant tasks (e.g., physical hazards, dying patients), poor working shifts, and low pay, the resulting stress can be monumental (Marshall, 1980). The National Institute for Occupational Safety and Health (NIOSH) found that registered nurses and nursing aides were two of the top six occupations ranked in terms of incidences of mental health disorder. Work-related illness and injury for hospital employees is 58% higher than in other service industries (Handbook of Labor Statistics, 1976).

In view of these factors, the image of a nurse with the motivation to fulfill his/her role rapidly fades into the picture of an employee scrambling to provide only the bare necessities required in what many times can be a life and death situation. Thus, theoretical development that can contribute to and explain the critical problems of nurse commitment, burnout, and retention is deemed worthy of scientific investigation.

This dissertation is concerned with factors affecting nurse intent to remain, organizational commitment, and burnout. An initial assumption is that communicative relationships in organizations are important. For example, Albrecht (1982) found that relational coping strategies correlated negatively with burnout among a sample of nurses.

"Talking and seeking support" from the supervisor were the strongest variables correlating with burnout.

Relationships that are globally perceived as supportive and beneficial should contribute to decreased burnout, increased commitment, as well as a desire to remain at the hospital. Positive relationships are dependent on specific types of communication. The quality of a nurse's relationships with physicians, and specifically the degree of participation in patient care decisions, is argued to be a specific type of communication related to nurse commitment and retention. The second factor proposed to contribute to burnout, retention, and commitment among nurses is supportive coworker communciation, and the third contributing factor is the nurse's communication with the patient. Given the limited amount of empirical research on nurses' communicative relationships as predictors of outcome variables such as burnout, intent to remain, and commitment, this analysis will provide an opportunity for testing a number of exploratory propositions.

The following sections review pertinent research, present conceptualizations of the major variables, and consider likely links between nurses' communicative relationships and burnout, commitment, and retention.

Literature Review

Three relationships are central to nursing and may significantly impact important outcomes for the individual and the organization: (1) a nurse's communicative relationships with physicians; (2) a nurse's communicative relationships with other nurses; and (3) a nurse's communicative relationships with patients. These relationships have the potential to be both stressful and supportive. To the extent that these relationships are perceived as supportive, nurses may be less likely to leave the hospital, should feel enhanced commitment to the hospital, and should experience lower levels of burnout. In order to ground the literature on relevant communicative relationships in the outcome variables of theoretical interest, the first section of this review considers research relevant to burnout, commitment, and intent to remain. The second section will consider research and theory linking nurses' communicative relationships with these outcome variables.

Outcomes Resulting from Communicative Interactions for Nurses

Three outcomes are hypothesized to be related to the dimensions of nurses' communication relationships: burnout, organizational commitment, and intent to remain. Conceptualizations and research germane to these variables

will be discussed below. Specific hypotheses and research questions relating these variables to nurses' communicative relationships will be presented later in this chapter.

Burnout. The concept of employee burnout is important pragmatically, in terms of the psychological and physical health of employees, and financially. It has been estimated that 60% of absence from work is due to stress-related disorders (Kearns, 1986). Negative outcomes from burned out employees have been especially pronounced in the human service professions. For example, police officers who reported high levels of burnout also reported increased family strain, isolation, as well as alcohol and drug abuse (Maslach & Jackson, 1979).

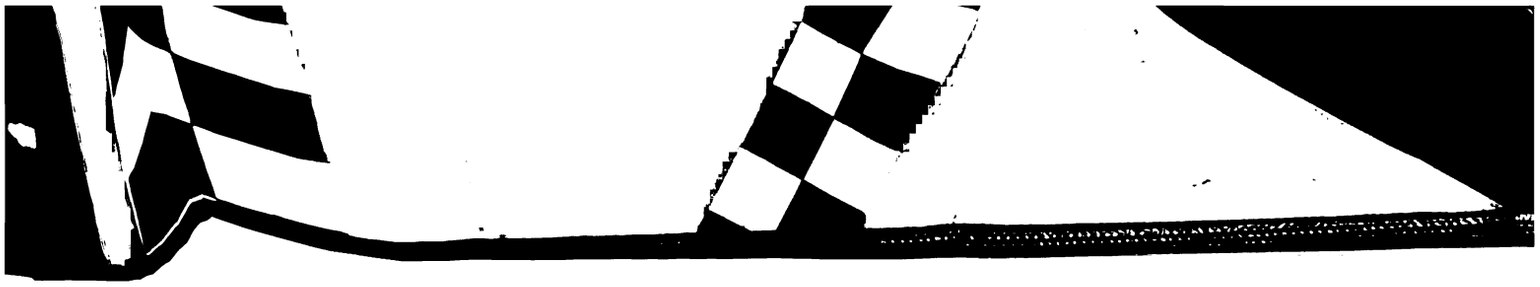
Burnout is a particularly important issue for nurses and has been linked to organizational issues such as lack of autonomy, availability of adequate salaries, and inadequate support (Wandelt, Pierce & Widdowson, 1981). Behavioral manifestations of burnout for nurses include decreased physical patient contact, crying, and spending less time with patients (Lavandero, 1981). Burnout can occur both in highly stressful patient areas such as intensive care, as well as when the workload consists of repetitive tasks that may be boring to the professional (Lavandero, 1981).

Most definitions of burnout consider the construct as an individual level, negative, internal psychological experience (Maslach, 1982b). In a more specific conceptualization, burnout is defined as a multidimensional

construct that incorporates three dimensions: emotional exhaustion, reduced personal accomplishment, and depersonalization (Maslach, 1982a). Although researchers have not agreed to the causal ordering among these dimensions, most support the concept of a dynamic process involving stages of development (Albrecht, 1982; Daley, 1979).

Emotional exhaustion refers to a loss of energy and greater fatigue accompanied by an overall wearing down from the daily contacts of work. The second dimension, depersonalization, refers to nurses' negativity in their responses toward patients. This callous view may become evident in derogating patients, as well as "ignoring their pleas and demands" (Maslach, p. 4). Finally, reduced personal accomplishment, involves a negative image of oneself. This negativity may be a result of guilt or distress about the cold and uncaring manner in which clients have been treated. This sense of failure with others then results in a feeling of reduced personal accomplishment.

Recent research found substantial negative relationships between dimensions of burnout and workplace communication, specifically, social support and participation in decision making (Miller, Ellis, Zook & Lyles, 1990). Other studies have also highlighted the importance of interpersonal relationships in reducing burnout. For example, in a study of blood center employees, Ray (1984) investigated conflict resolution strategies, communication satisfaction and



burnout. The results suggest that two conflict strategies (confrontation and problem solving) requiring direct interaction were more likely to be used to mediate burnout. Additionally, a negative correlation between communication satisfaction and burnout was reported in a study of registered and licensed practical nurses. Albrecht (1982) found that talking with one's supervisor was the only relational strategy that differentiated high and low stress groups.

Organizational Commitment. Although organizational commitment has been a widely studied phenomenon within organizational behavior, knowledge of antecedents and consequences of commitment remains obscure (Hartman & Johnson, 1989). Commitment has been generally viewed as positive, although negative consequences of overly committed employees have been noted (Downs, 1967).

The most widely accepted conceptualization of organizational commitment is offered by Steers (1977) who defines commitment as the strength of an employee's involvement and identification with the organization. In this conceptualization, commitment is characterized by (1) a belief in and acceptance of the organization's goals and values, (2) the willingness to exert effort on behalf of the organization, and (3) a strong desire to maintain membership in the organization (Porter, Steers, Mowday & Boulian, 1974). Recent research attests to the empirical

distinctness of the commitment construct as separate from job satisfaction and job involvement (Brooke, Russell & Price, 1988).

Commitment has been related to age (Lee, 1971), education (Koch & Steers, 1976), opportunities for achievement (Brown, 1969), and role tension (Hrebiniak & Alutto, 1972). Unfortunately, although various personal and job characteristics (task identify, optional interaction & feedback, Steers, 1977) have been found to affect commitment, explanatory mechansims for these relationships are limited.

Salancik (1977) provides one explanation for the commitment process that is specifically communicative in nature. He postulates four factors central to creating commitment; explicitness, irrevocability, volition, and publicness of binding acts. Thus, to the extent that individuals make free, public choices, they should have a strong desire to maintain membership, exert effort, and advocate a strong belief in the organization's values and goals (Porter et al., 1974).

In support of Salancik's link between communicative acts and commitment, research has found that involvement in a network is positively linked to organizational commitment (Eisenberg, Monge & Miller, 1983). Participation in decision making also has been found to positively affect organizational commitment (Antonovsky & Antonovsky, 1974). Apart from these limited findings, however, the assessment

of communicative relationships has been largely neglected in empirical research on commitment (e.g. March & Mannari, 1977; Porter, 1974; Steers, 1977).

Retention. Employee turnover remains an extremely important pragmatic concept for nurses as well as an important construct for theoretical development in organizational literature. On a pragmatic level, the cost of replacing experienced nurses following orientation programs has been estimated at $2500 to $5000 per person. Assuming an average sized hospital with a staff of 450 nurses, a 12% turnover rate will result in $189,000 additional costs (Loveridge, 1988). National recognition of the problem has identified retention of practicing nurses as a key desired outcome (National Commission on Nursing, 1981).

The importance of this concept has not been ignored in academic literature. A recent review found that well over 1,000 turnover studies have been conducted and at least 13 review articles have been published in the last 25 years (McEvoy & Cascio, 1985). The results of much of this research indicate that there are, at best, moderate correlations between job satisfaction, job commitment, intentions to leave and turnover (McEvoy & Cascio, 1985). (An exception is Steers, 1977, who found organizational commitment strongly related to intent to remain).

Thus, significant portions of the variance in turnover remain unexplained in the research literature. As a result,

applications of theoretical models (e.g. Prestholdt, Lane & Mathews, 1987), and variables such as realistic job previews and job enrichment (McEvoy & Cascio, 1985) have been examined in predicting turnover. Since Porter and Steers (1973) called for an increased emphasis on the psychology of the withdrawal process, researchers have not focused to a great extent on variables at the aggregate level (e.g. voluntary terminations and economic conditions, employment levels, and vacancy rates).

For example, Prestholdt, Lane, and Mathews (1987) applied the theory of reasoned action (Ajzen & Fishbein, 1980; Fishbein, 1980) to predicting nurse turnover. The results of questionnaires administered to over 1,800 registered nurses generally supported a reasoned action explanation of turnover. Nurses' differential intention (the difference between nurses' intent to remain and intent to resign) was significantly related to turnover. Differential intention was also related to nurses' feelings of social influence to remain or resign, their attitude toward the act of quitting, and their feelings of moral obligation. Unfortunately, although Prestholdt, et al. (1987) accounted for a significant portion of the variance in turnover, it is still unclear as to what factors contribute to nurses' feelings of social influence or their attitude toward quitting. It is possible that nurses' ability to participate in patient care decisions, their satisfaction with coworker communication and their feelings

of successful communication with the patient may be antecedent variables that contribute to the more general factors considered in the Prestholdt et al. (1987) investigation.

Relationships Among Outcome Variables. Based on the previous discussion, it seems highly unlikely that burnout, organizational commitment and retention are independent constructs. Nurses who have higher levels of burnout should be less committed to the hospital. Nurses who experience emotional exhaustion combined with a sense of reduced personal accomplishment in their jobs would seem highly unlikely to feel commitment to an organization in which the self was at risk. Given this rationale, it would also appear likely that nurses who then experience decreased levels of organizational commitment would be less likely to remain at the hospital.

The empirical research in these areas provides evidence for these linkages. For example, in a sample of caregivers in a psychiatric hospital, emotional exhaustion was directly and negatively linked to occupational commitment (path coefficient = -.26), while depersonalization was indirectly linked to occupational commitment through emotional exhaustion (path coefficient = .47) (Miller et al., 1990). In a reanalysis of data by Spector (1982) and Bluedorn (1982), Williams and Hazer (1986) found a negative link between organizational commitment and intent to leave (-

.56). Similarly, in research on hospital employees, Steers (1977) found that organizational commitment was strongly related to intent to remain (r-.44) and desire to remain (r=.31) at the hospital.

Given these results, the following hypotheses are postulated:

Hypothesis 1: Increased levels of burnout will be associated with decreased levels of organizational commitment.

Hypothesis 2: Increased levels of organizational commitment will be associated with increased levels of intent to remain.

Research Question 1: Will a path model specifying a causal chain leading from burnout to commitment to intent to remain be a good fit to the data?

The second section of this chapter will review research and theory relevant to three important relationships for nurses in the acute care setting: the communicative relationship between nurses and physicians, the communicative relationship between and among nurses, and the communicative relationship between nurses and patients.

"It appears obvious that optimal nurse-physician collaboration offers the potential for improved patient care provision and outcomes in the critical care setting." Michelson, 1988

Nurse/Physician Communication. As noted earlier, physicians have been dominant in hospital settings because of their unquestioned authority regarding the patient. At

the same time, physicians have retained an independence from the hospital. Physician independence is manifest in two ways. First, the physician is not employed for pay by the hospital, but has admitting privileges at the hospital granted by the governing board. Second, since the physician generally has other responsibilities outside of the acute care setting (e.g. ambulatory practice) the majority of the patient's care is provided by nurses and other allied health professionals. Because physicians have the authority, power, and knowledge for the patient's medical care, they perceive themselves to be the primary decision makers for that care. However, because nurses spend more time with the patient, and are responsible for carrying out the physician's orders, they also perceive themselves as knowledgeable about the status of the patient's wholistic condition. Thus, nurses believe they have the knowledge to interface with the physician's decisions about patient care.

To the extent that such interaction does not occur, there is the potential for relational stress. The remainder of this section will consider traditional nurse/physician relationships and dynamics currently leading to changes in these relationships. Then, literature on participation in decision making will be reviewed and applied to the issue of collaboration between nurses and physicians in health care teams.

Physicians and Nurses: Traditional and Changing Roles. Stein (1967) described the communicative relationship

between physicians and nurses as a game requiring exceptional nurse skill and ingenuity. The object of the game is the maintenance of role reciprocity and the game is carried out in such a manner that physicians appear to be completely in charge and nurses appear to be subservient to them. These games are still often played in hospitals and "are deleterious to the establishment of collaboration and effective teamwork based on mutual professional respect" (Numerof, 1983, p. 180).

Nurses perceive they have poor working conditions and a lack of recognition (Hayne & Charles, 1988). Low status in the physician/nurse relationship, the nurse's role ambiguity, and the responsibility without authority for patient care combine to produce a highly stressful job, particularly for staff nurses (Marshall, 1980). The hierarchical organization of the hospital perpetuates this problem; hospitals have been referred to as laboratories for researching job stress (Pettegrew, Thomas, Ford, & Costello, 1982). Phillips (1982) notes that "It remains unfair to nurses...to put the physician at the top and the nurse at the bottom of the hospital as an organization...this hierarchical stratification leads to a poor self-image among nurses, a resentment against the system that demeans them, and hostile feelings directed against the physicians" (p. 145).

Perhaps a portion of these problems can be explained by the fact that most nurses have been socialized to the

traditional female role in which a passive-dependent nurse serves as a caretaker to physicians and other hospital personnel (Numerof, 1983). Attempts are currently underway, however, to professionalize nursing (e.g. Wesorick, 1988).

Professionalism is especially important to ensure the stability of nursing in light of the recent American Medical Association (AMA) plans to replace nurses with technicians. At the February, 1988 meeting of the Board of Trustees of the American Medical Association, approval was given to develop a "non-nurse, bedside technician, to be called a Registered Care Technologist (RCT)" (p.3, Report of the Board of Trustees, from the American Nurses' Association, Inc., 1988). The outcry from the American Nurses' Association and the American Osteopathic Association to the RTC issue has been strong (ANA, 1988; AOA, 1988). Despite these vigorous objections, the RTC proposal remains a serious threat to the nursing profession.

Although it is impossible to determine the motivation behind the AMA's Registered Care Technologist proposal, some speculation is warranted. Medicine, historically, has been a male bastion of power. Nursing, historically, has attracted females, who were caretakers of the patient and subservient to the physicians. Nursing, as an occupation, has recently made strides in professionalism, and gained some access to power within the acute care setting (Tonges, 1989). Nurses have been recruited for high level positions in hospitals equal in power and decision making with other

department heads. In the past, nursing was not represented in top hospital management, or if it was, the representation was not by a nurse (Mowry & Korpman, 1987). As nurses have demanded more power and equal representation in the hospital, and as the occupation has become professionalized, the passive dependent nurse is rapidly becoming more assertive and confident. Since physicians have been in control in the hospital setting, and since physicians have expectations about nursing and nurse behavior, their willingness to accept changes in the profession may be limited. This may be an impetus for the AMA's solution to the nursing shortage. The RCT proposal replaces the nurse with a lesser trained, nonprofessional technician. Such technicians would be more likely to fulfill the needs of many physicians in providing bedside care without questioning physician orders.

Currently, then, the American nurse has maximum stress in his/her job stemming from both traditional stressors and new stressors such as job elimination proposed by physicians.

Communication Between Nurses and Physicians. A major factor that has generally been overlooked in models of nurse turnover and burnout (e.g. Prestholdt et al., 1987) is the communication between the physician and the nurse. While researchers bemoan the inherent conflict in this relationship, few suggestions have been offered for

improvement.

Recent research attests to the importance of the communicative relationship between physicians and nurses. In an evaluation of patient outcomes from 13 tertiary care hospitals, Knaus et al. (1986) found that the single most important difference found between "excellent" hospitals and poorer functioning hospitals was the "interaction and communication between physicians and nurses" (p. 416). Each hospital's patients were stratified by individual risk of death, and actual and predicted death rates were compared. Results indicated that significant differences between hospitals in patient death rates were predicted by the quality of communication of the intensive care unit staff. Other research focusing on the nurse/physician relationship has identified "good communication" as a key factor contributing to teamwork between physicians and nurses (Bates, 1966; Bates & Kern, 1967). Additionally, nurse/physician collaboration has been identified as a major area for improvement (Notkin, 1983). Given these results, it seems reasonable to determine what "excellent" or "good" communication is, as such communication is likely to influence nurse burnout, commitment, and retention. One likely possibility is that the quality of communication between physicians and nurses may be partially predicated on the extent to which the nurse can participate in decisions about patient care. Several theoretical rationales suggest the importance of participation or collaboration in the

nurse/physician relationship. The first is relevant to the self, the second pertains to uncertainty about the nurse/physician relationship, and the third relates to personal control.

A first rationale for the proposition that participation in decision making will predict nurses' levels of burnout, commitment, and retention involves the nurse's perception of self. As noted earlier, nursing is characterized by low status. A national survey indicated that physicians think RNs can be replaced by LPNs (Lee, 1979). In providing definitions of nursing, physicians rarely regard nursing as a profession, and when they do "it is clear that it's a subservient one" (Lee, 1979 p. 21). However, participation of the nurse in decisions about patient care should enhance nurses' self esteem through increases in relevant job related information and knowledge (Parks, 1985). The satisfaction of higher order needs (e.g. belongingness) is often postulated as a process intervening between participation and outcomes such as satisfaction and productivity (Locke & Schweiger, 1979). For example, research on a non-nursing sample found that non-participation (lack of 'say' in decisions that affect one's job) was negatively correlated to self-esteem (Margolis, Kroes & Quinn, 1974).

A second explanation of the effect of participation on nurse burnout, commitment and retention is found in

uncertainty reduction theory (Berger & Calabrese, 1975; Sunnafrank, 1986). Initial formulations of the theory proposed that communication reduces uncertainty about the other in a relationship. Participation in decision making is a specific type of communicative interaction that should function to reduce uncertainty about the physician. Instead of receiving orders from the physician, the opportunity to participate in patient care decisions allows the nurse access to verbal and nonverbal communication cues. This information should help reduce the nurse's uncertainty about the relationship.

Finally, a third rationale would also predict the positive impact of participation in decision making. This is a rationale based on personal control. Previous research indicates that most people want control and a loss of control can lead to undesirable consequences (e.g. Averill, 1973; Seligman, 1975). Fiske and Taylor note that "psychological control is a conceptual cornerstone of much psychological thinking" (1984, p. 136).

The notion of control is not a new one for researchers interested in organizational stress (e.g. Sutton & Kahn, 1987). Sutton & Kahn note that when people have the ability to predict, understand, or control situations they will experience less organizational stress. When nurses have an opportunity to provide input into the decisions that affect their jobs, they should feel an enhanced sense of control over the environment.

The idea of control has been postulated explicitly or implicitly as a rationale for uncertainty reduction (Albrect & Adelman, 1987) and theories of organizational behavior (e.g. job design, Hackman & Oldham, 1976; expectancy theory, Vroom, 1964). However, given the importance of the construct, the lack of empirical research is surprising (Greenberger & Strasser, 1986). A dynamic model of personal control (Greenberger & Strasser, 1986) in organizations suggests that several variables contribute to an individual's perception of being a causal agent; among them, individual differences, saliency, cognitive appraisal, and organizational characteristics. As such, control is a cognitive construct, can be nonveridical, subject to the influence of others, and is not a stable and enduring personality attribute (Greenberger & Strasser, 1986). Thus, the construct of personal control is conceptually distinct from locus of control (Rotter, 1966).

Recent research (Greenberger, Strasser, Cummings & Dunham, 1989) confirms the importance of personal control in an organizational context. In two studies (one on a nursing sample, and one on a sample of clerical workers) personal control <u>desired</u> was significantly greater than control <u>possessed</u>. Additionally, high levels of control possessed predicted high levels of performance (while controlling for locus of control). Time-lag regression results on the sample of clerical workers also indicated that control possessed predicted job satisfaction.

Another investigation of hospital personnel (physicians, dentists, & nurses) examined Sutton and Kahn's (1986) understanding/ prediction/control hypothesis. Tetrick and LaRocco (1987) hypothesized that when employees can understand why events happen, can predict the timing, frequency and duration of events, and can control things or others in the organization, they will experience less stress and strain. The data indicated negative relationships between role stress and control, prediction and understanding. However, understanding, prediction, and control did not moderate relationships between stress and well-being or between job satisfaction and well-being. Control has been assumed to be a a central element in various organizational theories and has been linked to positive outcomes. Yet, the limited empirical research noted above indicates that although control was related to role stress, job performance, and satisfaction, ambiguity still exists regarding this construct.

One area of ambiguity relative to control is the empirical link with participation in decision making. Although the organizational literature is replete with documentation of the positive effects of participation in decision making, little research has considered the role of personal control in the participation process.

The next two sections of this chapter investigate this issue by considering two similar constructs from divergent literatures; participation in decision making from the

organizational literature, and collaboration from the nursing literature.

> **"When they were asked, after two years to describe the critical components of their collaboration...almost everyone answered 'communication' ". Notkin, 1983**

Participation in Decision Making. Since Roethlisberger and Dickson (1939) attributed the results of experiments conducted at the Hawthorne plant to social factors such as participation, the literature on participation has experienced voluminous growth. Indeed, many researchers espouse participation in decision making as an ethical imperative (e.g. Sashkin, 1984), while others support participation as a strategic management option (e.g. Locke, Schweiger, & Latham, 1986).

Conceptualizations of participation in decision making abound; PDM has been defined as power sharing (e.g. French, Israel, & As, 1960), group decision making (Davis, 1967); and as a legally mandated manner in which employees influence organizational decision making (Strauss and Rosenstein, 1970). Locke and Schweiger (1979) conceptualize PDM as joint decision making and note that "it could involve just one supervisor and one subordinate" (p. 274). Inherent in this definition is the process of reaching decisions with the implicit assumption that it is the supervisor who **allows** the employee the opportunity to participate in decisions

that affect his/her job.

In a meta-analysis of the literature linking PDM with job satisfaction and productivity, Miller and Monge (1986) found a strong correlation between a participative climate and satisfaction with work. Lower correlations were found between participation on specific issues and job satisfaction as well as actual participation and job satisfaction. The results of the meta-analysis (Miller & Monge, 1986) provided some support for Locke and Schweiger's (1979) review. Participation has an effect on satisfaction and productivity, although the relationship with satisfaction is stronger than the productivity relationship. However, other research, specifically a meta-analysis (Wagner & Gooding, 1987) found that methodological artifacts explain the positive outcomes for participation and satisfaction.

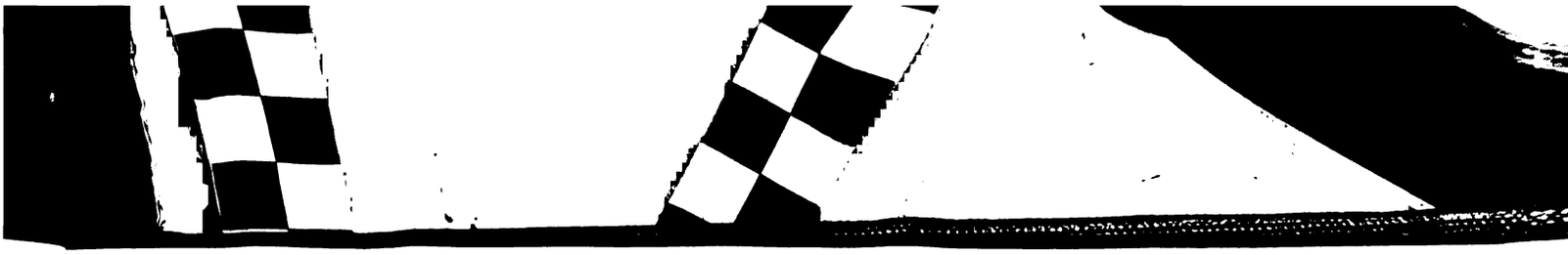
Several investigations have specifically considered the effects of participation in health care organizations. For example, in a Solomon four group experimental design, Jackson (1983) analyzed the effects of PDM on role ambiguity and role conflict. Hospital personnel were randomly assigned to PDM groups (staff meetings) with data collected two months prior to the intervention as well as three and six months after. The findings at six months indicated that role ambiguity and role conflict were significantly reduced and that perceived influence was a mediating variable.

The results of a study on hospital employees

corroborated these findings. Psychiatric hospital employees who were involved in direct patient care (social workers, nurses, psychologists, psychiatrists) were the focus of this analysis. Findings indicated that participation in decision making had a negative impact (path coefficient= -.28) on perception of role stress (Miller et al., 1990). These two studies on hospital employees suggest, then, outcomes accruing from participative decision making are positive. Further, the mediating influence of perceived influence in the Jackson (1983) study suggests that the notion of personal control may be a key issue in the participation process.

Most of the literature considered to this point has conceptualized participation from a managerial perspective. As such, participation becomes a prerogative of the supervisor to allow for the employee's influence. In attempting to construct an increased sense of equality between the nurse and physician, nurses have chosen the word 'collaboration' to describe this participative process. The following section elaborates on the literature investigating nurse/physician collaboration.

Nurse/Physician Collaboration. As a result of a study on nursing and nursing education, the National Joint Practice Commission was established and funded by the W.K. Kellogg Foundation in 1978 (Anderson & Finn, 1983). The Commission



was comprised of eight nurses and eight physicians named by their respective national organizations (ANA and AMA). One major purpose of the Commission was to study and make recommendations about nurse/physician relationships (National Commission on Nursing, 1981). As a result of these discussions, collaborative practice became an important concept defined as "interactions between nurse and physician that enable the knowledge and skills of both professionals to synergistically influence the patient care being provided" (Weiss & Davis, 1984). The theoretical roots in this definition are derived from the work of Blake and Mouton (1970) and Thomas and Kilmann (1978).

In order to pursue the improvement of the nurse/physician relationship, four hospitals were selected for a demonstration project conducted on one unit in each hospital. These units varied from gynecology and high risk pregnancy to oncology. Five structural elements were introduced on each unit to facilitate the improvement of the nurse/physician relationship: (1) primary nursing, (2) integrated patient records, (3) encouragement of nurses' decision making, (4) a joint practice committee, and (5) joint care review (Devereux, 1981). Primary nursing involves nurses who have total responsibility for a small group of patients. Collaborative practice committees and joint care reviews are set up by the hospital to provide for nurse/physician communication on policies, procedures, and clinical matters. Integrated patient records provide a

formal means of physician and nurse documentation.

Case presentation, and interviews were the primary avenues for assessing the impact of nurse/phyciaisn collaboration (e.g. Roueche, 1977; Notkin, 1983; Anderson & Finn, 1983). Unfortunately, it is difficult to draw definitive conclusions about which of the five elements (or combinations of elements) made a significant impact on physician/nurse communication because all elements were introduced at the same time, and there was no rigorous empirical analysis of the data. One exception to this pattern is a correlational study in which nurses' perceptions of the number of discussions with interns, residents and attending physicians were all significantly related to perceptions of collabortion (White, Charns & Strayer, 1983). Overall then, conclusions regarding the outcomes for nurses stemming from 'collaboration' are limited. Although the nursing and medical professions use the term 'collaboration', this conceptualization is a normative one (personal communication, Nurse Executive Committee, 1989). A more realistic description of nurse/physician interaction may be represented by the terminology used in the management literature; 'participation in decision making' because nurses typically participate in decisions about patient care only at the physicians' request. However, it is rare that physicians ask for nurses' input, and the likelihood that this will improve seems minimal. Indeed, physicians who request

nursing input are perceived as 'heroes' (personal communication, Nurse Executive Committee).

Given this scenario, the establishment of collaboration or joint participation in patient care may rest with the nurse. A final factor that should impact participation in decision making for nurses is the assertiveness of the nurse; the next section discusses participation in decision making and assertiveness.

Personality Determinants. Given the past relationship between physicians and nurses, two factors may account for the lack of 'collaborative' encounters. First, physicians may not seek out opinions from nurses regarding patient care, and second, nurses may not offer their opinions regarding patient care. In attempting to analyze why nurses have not offered input, the nurse's assertiveness, or personality, may provide direction.

A wealth of theory and research in psychology suggests that personality is the determinant of behavior. Personality theory is rooted in clinical observation (e.g. Freud, 1963; Jung, 1961), experimental psychology (e.g. Bandura, 1962; Skinner, 1938), and in the psychometric tradition (e.g. Cattell, 1946; Guilford, 1959). A definition widely used in psychology "considers the personality of the individual to inhere in the most outstanding or salient impression which he [sic] creates in others" (Hall & Lindzey, 1970, p. 7). In the context of the

present discussion, one outstanding or salient impression that can impact the nurse/phsyician interaction is the assertiveness of the nurse.

Early research in the participation in decision making literature suggested that personality factors might moderate the effects of PDM (Vroom, 1960). However, relatively little research has followed up on the interaction of these constructs (an exception is Abdel-Halim, 1983). Two reasons could account for the lack of research in this area; (1) continued debate regarding the validity of personality measurement (e.g. Gerhard, 1987; Friedman & Booth-Kewley, 1988) and (2) a preoccupation with managerial effects of PDM (e.g. Locke & Schweiger, 1979).

The importance of interactions between personality and PDM was stated by Vroom in 1960; "Studies which ignore the interaction of participation and personality yield relationships which are nothing more than average effects of participation for all the persons in the group" (p.61). This problem was illustrated in research by Abdel-Halim (1983). In this investigation of superior/subordinate dyads, high participation was associated with enhanced performance and satisfaction only for subordinates with a high need for independence on nonrepetitive tasks. Such interaction effects may be overlooked when pertinent personality attributes are not considered in participation research.

A personality attribute that may affect participation

in decision making for nurses is assertiveness. In fact, recent research in the nursing literature has operationalized nurse/physician collaboration as the nurse's assertiveness in initiating communicative interchanges with the physician (Weiss & Davis, 1985). In a sample of 95 nurses, two factors emerged from an exploratory factor analytic procedure. The first factor included items that "directly assert the nurse's professional expertise and opinions when interacting with physicians about patient care" (Weiss & Davis, p. 303). The second factor is "the nurse's clarification with the physician of mutual expectations regarding the nature of shared responsibilities in patient care" (p.303). These factors must be interpreted cautiously, however. The extreme similarity in wording of the scales coupled with the absence of interscale correlations suggests the possiblity of one factor. However, Weiss and Davis note that "the overriding construct being measured by the nurse CPS (collaborative practice scale) appears to be the nurse's initiation of active interchange with the physician to clearly communicate what nursing can contribute" (p. 303).

Thus the nurse may bear the responsibility for contributing to decisions about patient care. The nurse's own assertiveness should help create a participative interaction with the physician. This opportunity for direct communication and interaction should also "permit an expression of self-worth, and allow the nurse to validate

her [sic] professional status" (Mauksch, 1981 p.36).

Summary. The literature reviewed in this section provides a number of important insights about the mechanisms through which the processes of participation with physicians should influence burnout, commitment, and retention among nurses. First, studies from the nursing literature and general studies on personality and participation indicate that nurse assertiveness is likely to play a key role in empowering a nurse to participate in decision making with physicians. Second, theoretical and empirical work on the mechanisms of the participation process suggest that a nurse's perception of personal control is likely to play a key moderating role between participation and the outcome variables of interest. However, it is possible that participation also has effects on burnout, retention, and commitment apart from its influence on personal control. These issues are summarized in the following hypotheses and research questions:

Hypothesis 3: Nurse assertiveness will be positively related to perceptions of participation in decision making.

Hypothesis 4: Participation in decision making will be positively related to perceived control.

Hypothesis 5: Personal control will be negatively related to burnout.

Hypothesis 6: Personal control will be positively related to organizational commitment.

Hypothesis 7: Personal control will be positively related to intent to remain.

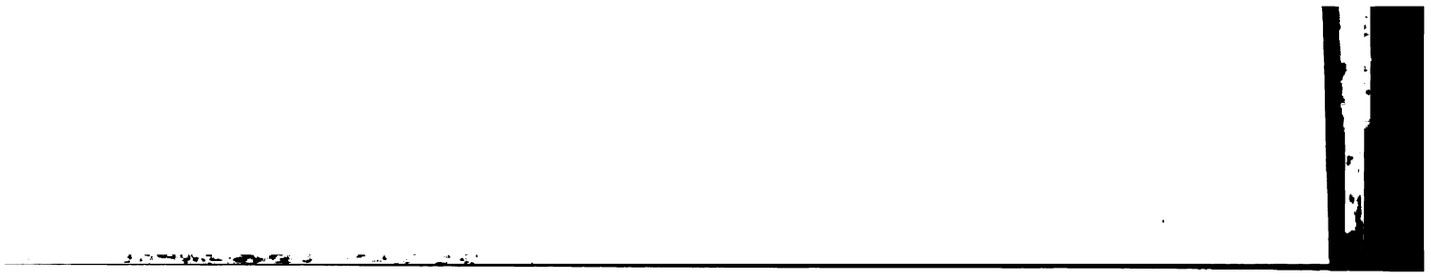
Research Question 2: Will there be a relationship between participation in decision making and dimensions of burnout while holding personal control constant?

Research Question 3: Will there be a relationship between participation in decision making and organizational commitment while holding personal control constant?

Research Question 4: Will there be a relationship between participation in decision making and retention while holding personal control constant?

"Attempting to change the status quo of nurses has led to...inner turmoil within the body of the nursing profession...". Phillips, 1982

Nurse/Nurse Communication. The second major aspect of a nurse's communication within an acute care setting is communication with colleagues. Recent research attests to the importance of coworker communication in outcomes of acute care settings. In an investigation of over 5,000 patients in intensive care units at various tertiary hospitals across the United States, it was found that professional coordination (communication) in the intensive care units significantly influenced effectiveness. (Knaus et al., 1986). In contrast, though, an investigation of psychiatric hospital employees' definitions of job stressors, found that a frequently cited source of stress was interpersonal relationships (Miller, Zook, Lyles & Ellis, 1988). Given these two diverse findings, what types



of communication are central to promoting effectiveness and excellence in coworker communication?

The answer to this question is likely to be complex. In a medical/surgical hospital setting, Adelman (1986) noted the dysfunctional outcomes that occur for nurses who were providers of social support. When social support is given to others, the provider of the support can experience stress due to the communication with the stressed individuals (contagion effect). However, it is highly likely that many workplace relationships contain both elements of stress and support.

In attempting to conceptualize the types of communication that will contribute to decreased burnout, and increased levels of commitment and intent to remain for nurses, three types of supportive communication are postulated; informational support, instrumental support, and emotional support (House & Cottington, 1986). The following section of this dissertation reviews literature on social support.

Social Support. The intuitive appeal of social support perhaps has its origins in human needs for nurturance and existence. The importance of supportive relationships in infancy has been well documented (e.g. Stern, Caldwell, Hersher, Lipton & Richmond, 1973), and it is likely that a need for these relationships continues throughout adulthood (Vaux & Harrison, 1985).

Like the literature on participation in decision making, the social support literature is vast. Social support has been examined in relation to individuals' networks (Vaux & Harrison, 1985; Wellman, 1979), and widowhood (Ferraro, Mutran & Barresi, 1984). Other investigations have considered more specific questions about support itself, such as the timing of support (Jacobson, 1986), amount and function of support (Shinn, Lehmann, & Wong, 1984) and the relationship to stress.

Many research studies addressing social support have used self-report (and hence, perceptual) indicators. Although this is not without methodological criticism (Ilgen, 1990), strong relationships between perceptions of social support and positive psychological and health outcomes have been noted (Albrecht & Adelman, 1987; Cutrona, 1986; Leiberman, 1982). For example, perceived social support has been associated with positive adjustment to new situations (Sarason, Shearin, Pierce, & Sarason, 1987), and homebound elderly caregivers report higher levels of overall well-being when perceptions of social support are high (Ellis, Miller & Given, 1989; George & Gwyther, 1986). In the organizational context, social support has been found to reduce employees' level of burnout (Fisher, 1985; Jackson, Schwab, & Schuler, 1986; LaRocco, House, & French, 1980) through the provision of emotional and informational resources.

Conceptualizing Social Support. Despite the wealth

of empirical research on social support, "confusion remains regarding what social support is, what it is not, how it operates..." (Shumaker & Brownell, 1984, p. 13). Varying conceptualizations of social support emphasize instrumental assistance (Cohen & Wills, 1985) support as a perceptual process (Vaux & Harrison, 1985) or acts that convey empathy (House, 1981). However, a useful definition of social support is offered by Shumaker and Brownell (1984) who conceptualize support as "an exchange of resources between two individuals perceived by the recipient to be intended to enhance the well-being of the recipient" (p. 13).

In attempting to delineate what specific types of resources will be perceived as enhancing the well-being of the recipient, House and Cottington (1986) provide a three dimensional approach to support; informational assistance, instrumental assistance, and emotional support. Though there are clearly multiple ways in which these types of support could enhance the well-being of the receipient, the primary function of social support proposed in the literature is increased perceptions of personal control. Indeed, Albrecht and Adelman (1987) note "...support that functions to enhance control will assist the individual in making useful attributions about the origin or locus of the cause, the stability of the cause-effect pattern, and the degree of general versus specific reasons for occurrences" (p. 29). The link between social support and control has been predominant (Albrecht & Adelman, 1987; Fisher, 1985;

House & Cottington, 1986; Sutton & Kahn, 1987), although explicit tests of the support/control hypothesis are minimal.

Outside of the organizational context there is ample evidence to suggest that positive outcomes accrue from a perceived ability to control one's environment (e.g. Abramson, Seligman, & Teasdale, 1978; Langer, 1975; Seeman & Seeman, 1983; Seligman, 1975). The following discussion elaborates on specific types of support in the workplace and their relationship to personal control, burnout, commitment and intent to remain.

Informational Support. Communicative exchanges that are primarily informational should serve to enhance one's control of the environment by increasing skill levels (Albrecht & Adelman, 1987), by clearer role definitions, and by general information about one's job. For example, training in communication skills or problem solving techniques (e.g. Gottleib & Todd, 1979) is informational. Nurses in acute care settings confront emergencies and must possess adequate clinical information about their patients in order to communicate on a professional level with physicians and other hospital personnel. When needed, job related information such as clinical skills and how to best accomplish particular procedures should be perceived as supportive.

A moderating variable that may interact with

informational support and the outcome variables is role ambiguity. Role ambiguity has been found to be significantly related to employee stress (e.g. Kahn, 1978; LaRocco & Jones, 1978; Van Sell, Brief & Schuler, 1981). A primary reason for the ambiguity/stress relationship lies in the concept of uncertainty. When workers are uncertain and ambiguous about role definition, informational support should serve to increase certainty and personal control.

In an acute care setting, nurses who experience high levels of role ambiguity should benefit from informational support. As tenure within the profession and within the particular hospital increases, role ambiguity should also decrease with diminishing 'need' for informational support. Indeed, it is possible that nurses who are clear about their job and believe themselves to be competent in their clinical skills would perceive themselves as providers rather than recipients of informational support.

Given this, it is expected that informational support will be significantly related to burnout, commitment and intent to remain only for nurses who perceive ambiguity in their role.

Instrumental Support is a second dimension of supportive interaction defined as an exchange of time, resources, and/or labor (Albrecht & Adelman, 1987) between coworkers. Three types of instrumental messages have been found in the workplace; (1) instrumental support in which the provider directly helps the receiver in a stressful

situation; (2) work-related resource support in which offers of material goods and other tangible resources which aid the individual are provided; and (3) personal resource support in which communication about material goods that aid the individual outside of the workplace are provided (Miller et al., 1988). For nurses, instrumental coworker support is most likely to be provided in the form of direct assistance.

A major effect of the nursing shortage is a greater workload for employed nurses and this has contributed to increased stress (Jacobson, 1978; Marshall, 1980). Stress, in turn has been found to lead to undesirable personal and organizational outcomes (e.g. Cooper & Payne, 1988) such as burnout, lack of commitment, and turnover. Thus, it is likely that instrumental assistance could serve to ameliorate these negative outcomes. The precise mechanism through which this occurs has not been investigated, however. It is likely that a nurse's perception of personal control may again play a key role in this process. To the extent that instrumental assistance is perceived to be available, a nurse should feel more control over his/her work. Thus, it will be hypothesized that perceptions of instrumental support will be positively related to personal control and subsequently related to the outcome variables of burnout, commitment, and intent to remain.

Emotional Support. Emotional support is a final type of communication between and among nurses that should impact

burnout, commitment and nurses' intent to remain at the hospital. Emotional support has been described by House (1981) as "empathy, caring, love, and trust" (p. 24). These concepts are central in creating perceptions of support for the recipient. Communicatively, emotional support is conceptualized as occuring through the provision of messages with statements of acceptance and assurance (Albrecht & Adelman, 1987).

In general, since most physicians still hold a "handmaiden" nurse image (Lee, 1979), it is likely that nurses perceive little support from physicians and count on other nurses for the fulfillment of emotional support needs. For example, in research considering nurses employed in a nursing home, social support from other nurses was found to be negatively related to the depersonalization and emotional exhaustion dimensions of burnout (Miller, Zook & Ellis, 1989).

Social support, in general, has been assumed to provide for increased personal control and uncertainty reduction (Albrecht & Adelman, 1987). However, it is unclear why acceptance and assurance (or emotional support) should be related to personal control, particularly in an organizational context. For example, a nurse who talks to a coworker about a family or job problem and feels acceptance or assurance in doing so may feel increased self esteem or a general sense of reward (Thibault & Kelley, 1959). This nurse may not necessarily feel an increased sense of

personal control in the job, however.

Emotional support in the workplace is an indication of friendship and trust. Supportive networks have been found to lead to positive outcomes (Dye & Ray, 1986). Dye and Ray note that "emergent informal supportive networks may have an ameliorating effect on burnout....burnout focuses on workers' feelings. By sharing and ventilating these feelings, checking their perceptions with coworkers, and being embedded in an informal support group, feelings of burnout may be lessened" (p. 13). Thus, positive outcomes may accrue from friendship, and not from a sense of personal control in one's job. In a sample of clerical, nonsupervisory, and management personnel, Ford (1985) found that emotional support significantly predicted job burnout.

In conceptualizing emotional support as friendship or a confidant relationship (Dean & Tausig, 1986), Brown and Harris (1978) found support for the proposition that the presence of a confiding relationship was a significant factor reducing the impact of stressful life events. Similarly Lowenthal and Haven (1968) found an inverse relationship between depression and a confidant for elderly persons. Finally, and perhaps most germane to the present research Fisher (1985) found that emotional support significantly predicted organizational commitment, and intent to leave in a longitudinal study of newly graduated nurses. Thus, emotional support as a specific type of communication was highly important for new nurses'

adjustment and socialization process at work.

Based on the previous discussion, nurses who report emotional support should also report less burnout, enhanced organizational commitment and higher levels of retention. However, these links are posited for different theoretical reasons than the corresponding relationships for informational and instrumental support. That is, personal control is not posited as an explanatory mechanism for the effects of emotional support as it is for informational and instrumental support.

The following hypotheses present specific predictions pertaining to social support and nurses' burnout, commitment, and retention.

Hypothesis 8: Informational support will be positively related to commitment and intent to remain, and negatively associated with burnout for nurses with high levels of role ambiguity. There will be no relationship among these variables for nurses with low levels of role ambiguity.

Hypothesis 9: Instrumental support will be positively associated to commitment, and intent to remain and negatively associated with burnout.

Hypothesis 10: Emotional support will be positively associated with commitment and intent to remain and negatively associated with burnout.

Hypothesis 11: Informational support and instrumental support will be positively associated with personal control. There will be no relationship between personal control and emotional support.

Research Question 5: Will there be a relationship between instrumental support burnout, commitment and retention while holding personal control constant?

Research Question 6: Will there be a relationship between informational support burnout, commitment and retention while holding personal control constant?

Research Question 7: What will the combined impact of emotional, instrumental, and informational support be on burnout, organizational commitment and retention?

> **"If expression of the nurse's whole self is blocked by lack of empathy direct quelching of expression, avoidance, ...then diagnostic and therapeutic endeavors will be hampered and the professional will experience stress." Numerof, 1983**

Nurse/Patient Communication. A third and final factor influencing nurse burnout, commitment, and intent to remain is the communication between the nurse and the patient. Nurse education has focused on this dimension of nursing (Kramer, 1974), for the care of the patient has been and will continue to be the major responsibility for nurses. Indeed, patients are hospitalized because they need nursing care. Many nurses choose their occupation and profession based on a caring for people. Indeed, several researchers note a similar personality style among people who choose careers in caregiving (Maslach, 1982; Pines, 1982). This style is often characterized as 'people oriented' in which the caregiver is motivated by a "dedicatory ethic" (Kadushin, 1974). The type of personality characteristic

that best exemplifies this type of ethic and style is empathy. Empathic communication between nurse and patient has been posited as influencing the patient's course of recovery and amount of pain (Thompson, 1990).

To the degree that a nurse can communicate empathically with patients, he/she should feel some measure of success (Miller, Stiff, & Ellis, 1987). Stiff et al. (1988) note that "...empathy has been broadly implicated in processes which lead to helping and other forms of prosocial behavior" (p. 198). Prosocial communicative behaviors have been the target of recent empirical investigations (e.g. Burleson & Samter, 1983; Stiff, 1984) which have sought to determine communicative manifestations of empathy. Additionally, a meta-analysis of empathy and aggressive/antisocial behavior found a negative association between these constructs for both males and females (Miller & Eisenberg, 1988).

The labelling of one who is a "good empathizer" may originate in internal psychological/physiological processes, but is assessed by the recipient from overt communicative behaviors (Miller & Steinberg, 1975). For a nurse to be labelled as empathic by a patient would produce possibilities for increased communication and self-disclosure from the patient, thus increasing the nurse's knowledge about the patient. Indeed, Hays (1966) found that desirable student nurse responses to patients included factors such as suggesting collaboration, reflecting feelings, and seeking consensusal validation. Since a

primary goal of nursing is a wholistic patient focus, it is extremely important that the nurse be aware of factors in the patient's life that may be producing stress and causing physical symptomatology. Nurses report that a significant number of hospitalized patients manifest physical symptoms caused by greiving, stress, or other psychologically traumatic life events (personal communication, Wesorick, 1989).

Stotland et al. (1978) found that at the end of a semester, highly empathic nursing students were spending more time with patients. Additionally, many nursing educational programs emphasize the importance of empathy (e.g. Sundeen, Stuart, Rankin, & Cohen, 1985) as well as training programs to improve nurse/patient communication (Kalisch, 1971). Thus, it appears that empathic communication between nurses and patients is a key to critical outcomes for both patients and nurses. The next section explores the concept of empathy in more detail.

Empathy. Prosocial behavior has long been a target for investigations and, as noted earlier, empathy has been empirically linked to prosocial behavoir (Batson et al.,1978; Ellis, 1982). The origins of prosocial and empathic behavior have been argued to be in rational processes (Kant, 1788; Lazarus, 1984) and emotion (Hume, 1777; Zajonc, 1984), with the causal direction for cognition and emotion subject to considerable debate (Lazarus; 1984;

Zajonc, 1984). Researchers do agree that "In nearly all cases, however, feeling is not free of thought, nor is thought free of feeling" (Lazarus, 1984, p. 251). In a related but separate literature, other researchers have noted the futile attempts to separate affect and cognition; "Affect and cognition are inseparable...psychological events constitute affective-cognitive unities" (Gibbs & Schnell, 1985, p. 1078). Finally, it has been suggested that emotion and cognition are fused in nature (Folkman, Schaefer, & Lazarus, 1979).

Expansive psychological literature views empathy as a multidimensional construct. The first tradition has focused on conceptualizations of the contagion or affective dimension of empathy (Feshbach, 1975; Hoffman, 1967; McDougal, 1908; Stotland, 1969), and has been referred to as "emotional contagion". These definitions emphasize empathy as a vicarious, affective response to others with concomitant attention on emotion. As such, scholars adhereing to this position implicitly rely on the primacy of affect. These definitions consider emotional contagion then, as a process of emotional parallelism between the observer and the other person's actual or anticipated emotions (Davis, 1980; Stotland, 1969).

A second dimension of empathy focuses on the role-taking ability of the caregiver (Mead, 1934; Dymond, 1949). These conceptualizations emphasize "perspective taking" while minimizing affect, implicitly advocating the primacy of

cognition. For example, Dymond's definition focuses on the ability to accurately predict the behaviors and feelings of another. In this sense, neutrality and detachment of the observer were helpful in accurate prediction. Hogan (1969) similarly stresses a cognitive element in conceptualizing empathy as the act of constructing another's mental state. Traux (1961) follows this vein in the therapist/client relationship by defining empathy as the ability of the therapist to understand the client's experience. The affective component is not stressed in this definition, and, in fact, is considered to be counter productive.

Empathic concern is a third dimension of empathy. Stiff et al. (1988) note that two features defining this dimension of empathy are: (1) a concern and regard for the welfare of others, and (2) a stipulation that the affect is <u>not</u> parallel to that of the target person" (Stiff et al., 1988). It is this latter feature that distinguishes empathic concern from emotional contagion, and one that is central to the idea of "detached concern" (Lief & Fox, 1963). Lief and Fox describe detached concern as a necessary condition to effective care in therapeutic relationships. According to these authors, effective care is provided when nurses have concern for their patients, yet maintain an emotional distance from them.

These three dimensions of empathy highlight the three conceptual traditions; (1) affect (emotional contagion), (2) role-taking ability, (perspective taking), and (2) a general

concern for others (empathic concern). However, given the earlier discussion regarding the inseparability of emotion and cognition, is it possible for an observer to experience concern for another while not experiencing parallel affect? More specifically, is it possible for nurses to maintain an emotional detachment from their patients?

The answer to these questions may lie in the deliberate dissociation of emotion **as a coping mechanism.** Lazarus (1984) notes that "... cognitive coping processes such as isolation and intellectualization (or detachment) which are aimed at regulating feelings, can create a dissociation between thoughts and feelings. Moreover, attack can occur without anger, and avoidance without fear. These latter conditions are also instances in which the usual link between thought and feeling has been loosened or broken. Yet such separations are less often a rule of living and more often a product of coping under special circumstances" (p. 248).

This type of coping may be necessary for survival for employees in the human services. Various ways of coping are addressed by Edwards (1988), and include; (1) psychoanalytic orientations, that include denial and defense mechanisms (e.g. Rychlak, 1981); (2) personality traits (Glass, 1977); (3) a stage process (e.g. Kubler-Ross, 1969); or (4) specific methods (Billings & Moos, 1981). Whether one or all of these approaches are central to the notion of

"detached concern" has yet to be empirically supported.

However, empirical support has been found for the link between detached concern and lowered burnout, with particular emphasis on the caregiver's perceived ability to communicate responsively. Miller, Stiff and Ellis (1988), in a study of hospital employees involved in direct patient care, found that empathic concern had a strong impact (path coefficient =.50) on caregiver reports of communicative responsiveness. Emotional contagion, however, negatively predicted communicative responsiveness (path coefficient= -.33); that is, the experience of parallel emotions hampered the caregiver's ability to communicate responsively.

Communicative responsiveness was also found to be a significant predictor of depersonalization (-.19) and reduced personal accomplishment (-.57), two components of burnout. The emotional exhaustion dimension of burnout significantly impacted occupational commitment (-.26).

To the degree that a nurse feels communicatively responsive with patients, there may be a heightened sense of personal control on the job. Since patient care is central to nursing, and since communicative responsiveness has been found to be negatively related to dimensions of burnout, which in turn predicted commitment, it seems reasonable to posit a positive relationship between communicative responsiveness and personal control at work.

The preceding discussion suggests the importance of detached concern and communication with patients for

employees in health care institutions. It seems reasonable to posit that nurses who have attained the ability for communicative responsiveness with their patients will be more likely to experience less burnout, as well as greater commitment and intent to remain in the hospital. Thus, this section of the dissertation will replicate Miller, Stiff and Ellis' (1988) findings on the relationships between empathic concern, emotional contagion and burnout. It also seems reasonable to extend the Miller, et al. model through an initial consideration of personal control and communicative responsiveness.

Thus, the following hypothesis and research question are posited:

Hypothesis 12: Emotional contagion will cause lowered levels of communicative responsiveness, whereas empathic concern will cause increased levels of communicative responsiveness. Communicative responsiveness will cause reduced levels of depersonalization and lack of personal accomplishment, while emotional exhaustion will cause decreased levels of organizational commitment.

Research Question 8: Will there be a relationship between personal control and communicative responsiveness?

Summary. Three communicative relationships are posited to be of central import in an acute care setting; the communication between the nurse and the physician, the communication among nurses, and the communication between the patient and the nurse. To the extent that a nurse perceives the opportunity to participate with the physician

in decisions about patient care, that he/she perceives support from coworkers, and can communicate effectively with the patient, there should be significant links to organizational outcomes.

The following section delinates methods and procedures used in testing the hypotheses and research questions.

CHAPTER TWO

METHODS

This chapter outlines the methodology and procedures used in this study. First, the hospital setting and the procedures for the focus group interviews are discussed. Second, information about the procedures for questionnaire data is presented. Then, the operationalization of the variables is considered. Finally, the analyses used to examine the relationships among perceptions of nurses' communicative relationships and organizational commitment, burnout, and retention are presented.

Setting and Sample

The specified hypotheses and research questions were tested with data gathered from nurses employed at an acute care medical/surgical hospital in a mid-sized city in the midwest. This hospital is a 529-bed, not for profit acute care facility and referral center, serving a 13 county area. The hospital opened in 1890 with 100 beds and 20 doctors; currently there are more than 3,500 staff members and 400 physicians. The single largest employee group at the hospital is the 1,356 part-time and full-time registered nurses and licensed practical nurses. At the top of the

nursing chain of command is the Vice President for Nursing followed by three Directors of Nursing, each supervising particular areas of the hospital. Each director of nursing supervises nine nurse managers (27 total nurse managers). Nurse Managers have day to day management responsibility for nursing units with Clinical Coordinators reporting to nurse managers. Staff nurses report to their own nurse manager or clinical coordinator.

The hospital consists of 25 patient care units including 74 adult intensive care beds, a 47 bed oncology unit, and medical/surgical units for orthopedic, urologic and gynecologic patients. There is also a 44 bed neonatal intensive care unit, and a 7 bed pediatric intensive care unit, 2 intermediate pediatric beds, and 35 pediatric beds.

Clincial services for the hospital include a center for women and children, emergency and trauma care services, cardiovascular diagnostic and therapeutic services, oncology diagnostic and therapeutic services, and neurological/neurosurgical services. Ancillary services at the hospital include magnetic resonance imaging, lithotripsy, a sleep disorder clinic, nuclear medicine services, diagnostic radiology, a cardiac catheterization lab, CT scanners, a hyperbaric oxygen chamber, and a wide range of critical care support services.

A two step research process was undertaken to examine the communicative relationships between nurses and

physicians, betweeen and among nurses, and between nurses and patients. The first step of this process was focus group interviews with randomly selected nurses from the hospital. The second step was the administration of a questionnaire. The following section elaborates on these processes.

Focus Group Procedures

Focus group interviews were conducted with groups of nurses employed at the hospital. The primary purpose of the focus groups interviews was to gain face to face, verbal information from nurses regarding many of the relationships proposed in a manner that would allow open responses, expansion of relevant issues, and follow-up questions on critical points. A related purpose of the focus groups was to aid in conceptualizing and operationalizing communication relationships between physicians and nurses, communication between nurses, and nurse/patient communication. This would allow for more finely tuned measurement of relevant variables in subsequent phases of the research.

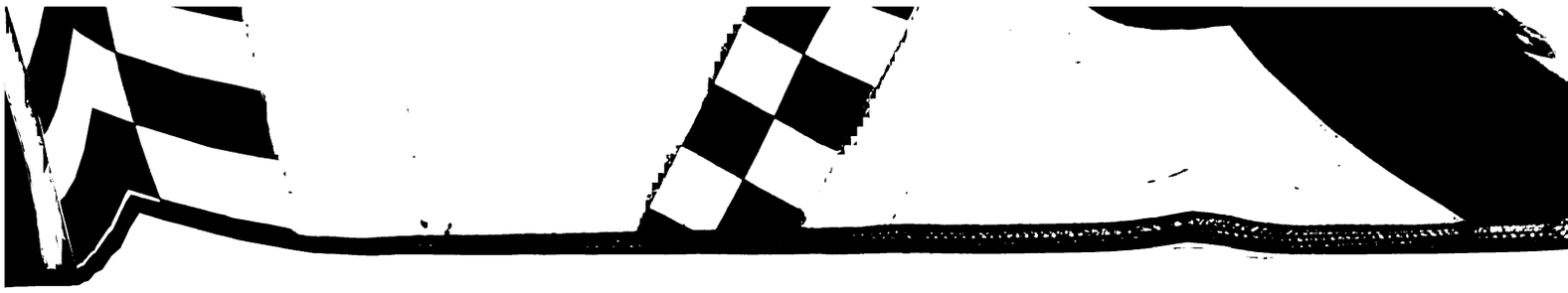
From a list of all nurses employed at the hospital, 100 names were randomly selected for possible inclusion in the focus groups. Letters were sent to nurse managers informing them of who had been selected from their unit and requesting their support of the project (See Appendix A). Finally, letters were sent to the selected nurses asking their participation in the focus group interviews (See Appendix

B)

Existing literature on nurse/physician collaboration, social support, and empathy provided general direction for the questions asked in the focus group interviews. Additionally, preliminary discussion with one of the Directors of Nursing at the hospital provided support for the relevance of the three communicative relationships proposed. Based on these two factors, questions were broadly constructed, were framed with consistent and sufficient background information, and were focused (Krueger, 1988). Open-ended questions were used to "allow the respondent to determine the direction of the response" (Krueger, p. 60). The use of these types of questions are important because answers are not implied with questions serving as "free" stimulus for the respondents. Open-ended questions of this nature "allows the respondent the opportunity to structure an answer in any of several dimensions" (Krueger, p. 60). The following general protocol was used to structure the focus group interviews.

Nurse/Physician Communication:

1. Can you describe for me a typical interaction with a physician?
2. What is the most stressful aspect of these interactions?
3. What kinds of things might the physician say to make the interactions more productive and collegial?
4. Do you feel like you can question a physician's orders



or judgments?

5. What kinds of things could the physician say to be more supportive?

Nurse/Nurse Communication:

1. Can you describe for me a typical interaction with another nurse?
2. What is the most stressful aspect of these interactions?
3. What kinds of things might the nurse say to make the interaction more productive and collegial?
4. Do you feel like you can question a nurse's orders or judgment?
5. What kinds of things could other nurses say to be supportive?

Nurse/Patient Communication:

1. What do you find the most rewarding in your interactions with patients? The most unrewarding?
2. Do you think it is important for the patient to perceive you as empathic?
3. How do you communicate empathy?

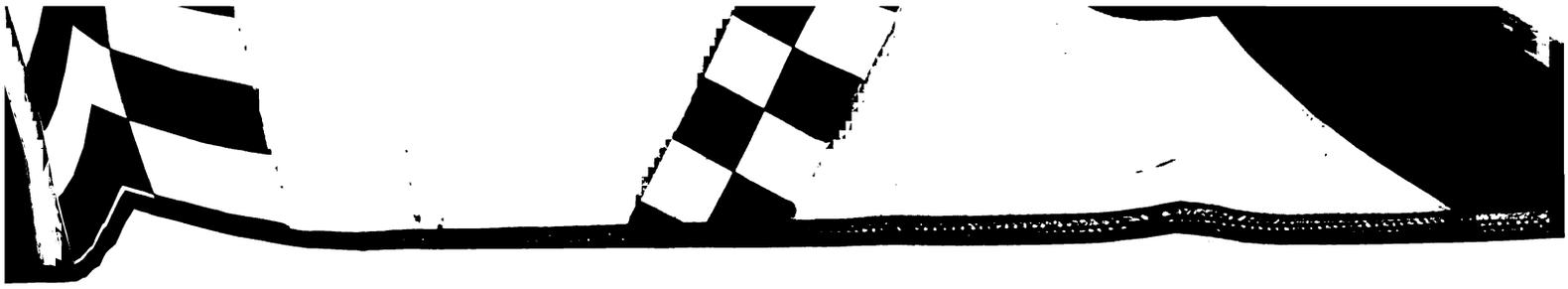
Those present in each focus group included the principal investigator and nurses in the focus group. Nurses were informed by the principal investigator that all responses were completely confidential and informed that the

reason for the audio-tape recording of each interview was as an aid for the development of items to be used in further analyses with other nurses in the hospital. Finally, nurses participating in the focus group interviews were asked not to respond to the second part of the investigation requiring the completing of a questionnaire. Due to the nature of the questions in the interview, these nurses may have responded differently to questionnaire items than those nurses not participating in the interviews.

The investigator listened to each focus group interview and considered themes emerging from each question for each group. These themes will be discussed in the next chapter. Based on the focus group interviews as well as extant theory and research in burnout, organizational commitment, turnover, social support, empathy and nurse/physician relationships, a questionnaire was developed and sent to all nurses within the hospital. The next section expands on procedures for this second phase of the research.

Survey Procedures

Questionnaires were sent to all 1,356 employed nurses in the hospital. A letter was included with the questionnaire and mailed to the hospital, that described the nature of the questions, and assured participants of anonymity and confidentiality (See Appendix C). Nurses were asked to return the completed, sealed questionnaire to their nurse



manager, who then returned the sealed envelopes to the Staff Development office. The principal investigator collected questionnaires from the Staff Development office.

Operationalization of Variables

Since the hypotheses required the assessment of nurses' perceptions of variables, self-report measures were used. These perceptions involved internal psychological reactions and were best analyzed through self-report measures. At the beginning of the questionnaire on nurse/physician communication, nurses were asked to think about interactions with typical physicians and consider the truth of the statement presented. The word 'physician' referred to attending and house staff. The following section describes the scales used in this research.

Burnout. The Maslach Burnout Inventory (Maslach & Jackson, 1981) was used to measure nurse burnout. Three subscales assess nurses' perception of emotional exhaustion, the extent to which they depersonalize others in their work, and the extent to which they feel personal accomplishment from their work. This scale has been extensively validated in a variety of contexts (e.g. Golembiewski & Munzenrider, 1981; Iwanicki & Schab, 1981; Maslach & Jackson, 1981; Miller, et al., 1989). The subscales have been found to be internally consistent (Miller, et al., 1989). Respondents

answered to a five point Likert format ranging from strongly disagree to strongly agree.

Organizational Commitment was measured using the Organizational Commitment Questionnaire (Mowday, Steers, & Porter, 1979). This scale has been used in previous research, and been found to be internally consistent (e.g. Miller, et al., 1988; Miller, et al., 1989). Recent analyses of discriminant validation of organizational commitment, job satisfaction, and job involvement found that these are empirically distinct constructs (Brooke, Russell & Price, 1988). Respondents answered questions using a five point Likert format ranging from strongly agree to strongly disagree.

Nurses' intent to remain at the hospital was assessed with a three item scale used in previous research and found to be internally consistent as well as highly reliable (Miller, Ellis, Zook & Lyles, 1989). A 5 point Likert response format was used to collect responses ranging from strongly disagree to strongly agree.

Participation in decision making with the physician was assessed with a variation of the three item scale developed by Vroom (1960). This scale has been used in previous research and found to be reliable and internally consistent (e.g. Miller et al., 1990). However, the scale was adapted for a hospital context. For example, an item from this scale adapted for this research is "I have influence or say

regading the physician's decision about my patient's care". Thus, the scale measures the employee's perception of his/her ability to participate in decisions about patient care. A five point Likert response format was used ranging from strongly agree to strongly disagree. Nurses indicated their current levels of this variable and then responded to their ideal levels of this variable using the same response format.

Nurse assertiveness was measured with a nine-item scale tested by Weiss and Davis (1985). Test-retest coefficients were high (r=.79). Concurrent and predictive validity testing indicated that the scale appears to be measuring the nurse assertiveness construct. A sample item from this scale is, "I actively participate in defining the nursing aspects of the patient care plan and influencing the medical care plan". Nurses also responded to perceptions of current and ideal levels of assertiveness.

Personal control was measured with an 11 item (Likert format) scale developed by Greenberger (1982). Questions include how much control, influence, and freedom of action is perceived by employees in the organization. Respondents answered on a five point Likert format ranging from very little control to very much control. Respondents first considered current perceptions of control and then responded regarding desired control. Greenberger notes that this scale has demonstrated excellent psychometric properties in

research. Cronbach's alpha for this scale has been found to be .88.

Informational and emotional support from coworkers was assessed with the scale developed by Edwards (1980). This scale has been used in previous research and has been found to be internally consistent (e.g. Lyles & Miller, 1990). A five point Likert scale ranging from strongly disagree to strongly agree was used for responses. Instrumental support was measured with a scale developed by Lyles (1990) and has been found to be internally consistent. Nurses also answered this scale with a five point Likert format ranging from strongly disagree to strongly agree. Respondents indicated their current levels of support as well as their ideal levels of support. The same response scale was used for the current and ideal items.

Role ambiguity was assessed with thirteen items from Rizzo, House, & Lirtzman (1970). Rizzo et. al provide evidence for a distinct factor for role ambiguity. Nurses responded to these items with a five point Likert format ranging from strongly disagree to strongly agree.

A nurse's perception of her/his empathy was assessed with three scales. Emotional contagion is a six item scale (Dillard & Hunter, 1986) that measures the degree to which the nurse becomes affectively involved with the patient. This scale has been used in previous research and has been found to be internally consistent with a reported alpha of

.73 (Miller, Stiff, & Ellis, 1987). Empathic concern is a five item scale (Davis, 1983) that measures an individual's general concern for others. This scale has also been found to be internally consistent with an alpha of .73 (Miller, et al., 1987). Finally, communicative responsiveness is a four item, internally consistent scale (Stiff, 1984) with an alpha of .73 (Miller, et al., 1987). Respondents answered to a five point Likert response format rangingly from strongly disagree to strongly agree.

Analyses

The first step in the analysis process was a search for themes themes in the focus group interview tape recordings. The principal investigator listened to each focus group interview for recurrent comments and similar responses to the questions regarding nurse/physician, nurse/nurse, and nurse/patient communication. Based on these interviews, and based on current theory and research in these areas, a questionnaire was comprised to assess the previously mentioned variables.

An investigation of the nature of the proposed hypotheses and relationships required a two step procedure. The first step was the evaluation of the measurement model. The second step was the testing of the hypotheses with SPSS PC+.

The measurement models were analyzed and confirmed with

the confirmatory factor analysis subroutine of the PACKAGE program for the PC (Hunter, & Lim, 1987). This program allows for the specification of an a priori factor structure. The program provides for a matrix of correlations among the items, correlations among factors, and factor loadings. Three criteria suggested by Hunter (1980) for assessing the unidimensionality of scales were used in confirming the factor structure of all scales. These criteria are: (1) homogenity of item content, (2) internal consistency, and (3) parallelism with outside factors. The SPSS PC+ package allowed for testing the proposed relationships. Correlational and regression analysis and analysis of variance were used to analyze the impact of the independent variables on the dependent variables. Additionally, path analysis was used to replicate the Miller, Stiff, & Ellis (1988) findings on communication and empathy. Path analysis was also used to test the causal relationship among the dependent variables. The critical value was set at .05 for all analyses.

CHAPTER THREE

RESULTS

This chapter presents the results of research investigating nurse/physician communication, the communication between and among nurses, and nurse/patient communication and the links to burnout, organizational commitment, and intent to remain. The chapter is divided into two sections. The first section presents the results of the focus group interviews. The second section presents the results of confirmatory factor analyses, multiple regression, and analysis of variance. Finally, some additional post hoc analyses are considered.

Focus Group Interviews

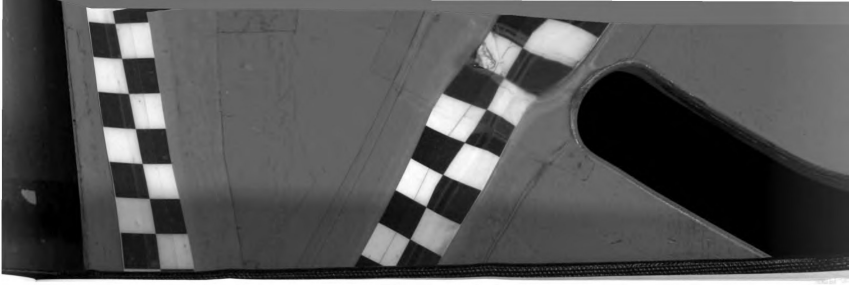
Thirty three nurses responded to the request for an interview, and 30 actually participated in focus group interviews that were held in December of 1989. Six groups met, with the number of nurses in each group ranging from two to seven. The majority of the focus group participants were staff nurses representing the medical surgical floors, surgery, ambulatory, labor and delivery, postpartum, same day (outpatient), pediatric intensive care, as well as one float nurse. Float nurses can work in any area of the hospital in which they are needed. One nurse manager was in a focus group interview as were several clinical coordinators.

Nurses participated in focus group interviews during work time. All interviews with the exception of one were held in a conference room in the main hospital. One interview was held in the ambulatory area of the hospital.

Nurse/Physician Communication. Each focus group interview was similar. The investigator began each interview with the first question. Many times answers to the following questions were implicit or explicit in the responses of many nurses, thus some were not repeated, others were, when appropriate. Overall discussions flowed extremely well. For several groups, the first question served to get the group started with participants quite willing to tell stories and recountings of nurse/physician interactions.

The following section of this chapter presents selected comments from focus group interviews. Comments regarding nurse/physician communication will be addressed first, comments about nurse/nurse communication will be addressed second, and finally comments regarding nurse/patient communication will be presented.

In asking the first question regarding nurse/physician communication, "Can you describe for me a typical interaction with a physician", answers to many of the other questions were implicitly and explicitly answered. The first question generally started discussion in which nurses relayed their stories of communication with physicians.

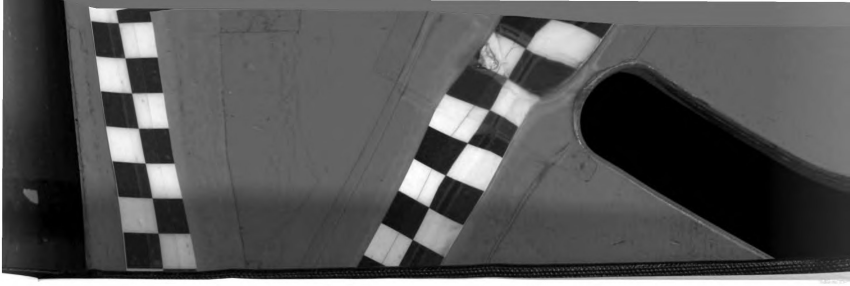


Since many of the stories told by nurses include many of these themes, reporting of individual themes is difficult. Thus, various stories from each focus group will be reported to illustrate the results.

Intertwined throughout these examples are instances of a lack of understanding for the nurses' job and time constraints, 'disciplining' or contradicting a nurse's clinical judgment in front of the patient and others. Implicit in these stories are the physician's lack of respect for the nurse as well as the lack of time to listen to him/her. The illustration in Story #3 exemplifies the opposite of several of the first stories. the nurse was listened to, participated in the patient care decisions, was respected for his/her skills, was given time; in short was a member of the health care 'team'.

Given the number of focus group interviews (6), the themes emerging from each group are extremely similar. Seven themes were evident for nurse/physician communication at the conclusion of all focus group interviews:

1. Participation in patient care decisions
2. Lack of understanding of professional nursing
3. Listening
4. Respect
5. Time
6. Public contradiction of the nurse
7. Physical help with chores associated with patient care



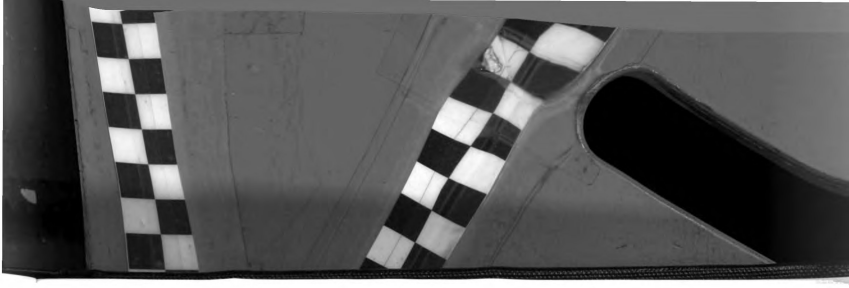
The following stories and comments illustrate these themes.

The first story illustrates a physician's lack of understanding of professional nursing, a lack of respect, and a public contradiction of the nurse, as well as a lack of listening by the physician.

Story #1
"I was in a patient's room and he [physician] demanded to know why the patient hadn't been taken down to X-ray yet, and I was uncertain what time he wrote the order, and I'm thinking 'gee I'm sure this is a recent order', and in front of the patient and in front of the student that I was precepting he decided to berate tell me that I was incomptetent and the patient is laying there and it was so outlandishly ridiculous and I was so shocked that I didn't react and I said 'I will get her down to X-ray as soon as I can' but actually from the time he wrote the order..X-ray calls us, and tells us they're ready for the patient and we didn't even call them and he continued to be abusive and finally I just walked out of the room."

The following comment demonstrates physicians' lack of understanding of nursing, specifically, new nurses. Additionally, implicit in this comment is a lack of respect for nursing.

Comment #1
"I guess if I have one big problem (with physicians) it's their orientation to this institution does not include the type of education that realizes that this is a teaching institution-it's not just physicians it's nurses too. New nurses need to have their tolerance and encouragement while they are learning what's important to call. Really the big problem is that we're not educating the physicians in training. We're a teaching institution and the problems that we have with the house staff are only exacerbated by the time that they become primary physicians-this is where we should get them. I think we are failing educationally with the physicians. Now they say that they are getting all these sensitivity classes in



their training and they're getting death and dying and they're getting some psychology-it does not show."

The second story demonstrates a nurse's concern for physicians' lack of understanding for professional nursing, a lack of respect for the nurse, as well as a disregard for the time pressures nurses feel in managing patients. Additionally, the physician in this story does not listen to the nurse.

Story #2
"I had a very busy night, I was just coming on doing my assessments and I had a patient that I hadn't gotten to see yet, because I had 5 or 6 patients, it was a very busy night on the floor she had an IV and a piggyback was supposed to be hung like at 4:00-it was twenty after four- the physician came on and the patient's temp hadn't been taken and it was supposed to be the 4:00 temp. She threw a tantrum; 'Where is this patient's temp' and 'Why isn't this piggyback hung' and I'd called the pharmacy twice to get the piggyback up, cause it hadn't come up yet, and she was not understanding-anything I said, she blew over and it didn't sound important to her and she ended up going into the patient's room, talking to the patient-I had to go there immediately-drop all the other patients, take the patient's temp, come out, report to her, and she got on the phone to pharmacy and called, yelling..and so that for me was not a good one. We too are very busy, and that's one of the things that I notice most of all about doctors is that they don't understand the nursing job-what we go through also. It's like they're busy but we're busy too and we shouldn't have to always cater around their schedule. It's very demeaning."

The following comment appropriate illustrates nurses' concern for the physicians' lack of physical help with

chores associated with patient care.

> **Comment #2**
> "Quite often doctors will come in and examine the babies in the morning and do their physical checks and they'll undress the baby, take their tee shirt off, take the diaper off, take the blanket off, unwrap it, just leave the baby spread out open while we're doing baths and temps and vitals and circs and all this stuff in the morning and trying to get all of our work done and they just leave the baby open and expect us to come along behind and wrap the baby and do all of the work for them. That is very demeaning."

Comment #3 illustrates the physicians' lack of understanding of professional nursing, a lack of respect, as well as this nurse's disgust with the lack of help with chores associated with patient care.

> **Comment #3**
> "Some are more self sufficient than others. Some expect you, like when they snap to get the tape for me. I mean like carrying the tape is a nursing...I didn't go to college for how many years to carry tape for somebody. And I didn't go to college to mop floors...I feel like they want you to cater to them and they must need that respect that they are 'up there' and you're 'down there'."

The following story is a demonstration of the nurse's concern with a lack of participation in patient care decisions. This story also illustrates public contradiction of this nurse's judgment, as well as a lack of overall respect for the nurse.

Story #3

"I had a patient who had a very hard time going to the bathroom in the bedpan and that was the choice she made cause she had an injured back and had refused all cathartics and any and all types of assistance for 5 days and was becoming distended and nauseated and it was to the point where I said really we need to get on this, and so after spending 20 minutes talking with her and helping her work out a plan that would work best for her, I finally talked her into having a suppository. When we started talking, the covers were up to her chin and by the time I got done talking, her shoulders were really relaxed and she was ready to go. It was her decision and under her control. The doctor came in and asked her when she had a bowel movement and she said '5 days ago' and said 'but' and before she could say anything he turned to me and said...'get her suppositories now and give it to her now', and I said 'well you know Dr. so and so the patient and I were just discussing that and we worked out a plan and he said 'I don't care I told you to get a suppository' right in fron of the patient and you should have seen the covers went right back up to her chin and she was just scared to death."

Story #4 illustrates a 'positive' or collaborative nurse/physician interaction. As such it demonstrates participation in patient care decisions.

Story #4

"A good collaborative experience... I just had a trauma patient who had an out of body experience at the scene of the accident and was really afraid cause he felt that God had taken his soul/his whole person being out of the shell of his body that he lived in and just threw it away and put a whole new person in. And he got really afraid of anything that came around him, he had been an alcoholic, and was feeling the loss of control. What we ended up doing, you know, I said to him 'This is your body and you have to decide what you want and what you don't want' cause he felt like he was being violated, cause the doctors wouldn't explain things to him..and the doctors weren't aware of what was going on...and I asked the doctors if they were getting his words back of what

was going on and they were like 'We didn't think we had to do that so as we were working together they are getting the feedback and having the patient repeat back what he understood from them we could clearly understand where alot of his misunderstandings and his fears came cause how he interpreted some of the things we said was just like he thought he was on the verge of death all the time in his mind, where some of these were just routine things we were doing for him..what we (doctors & nurse) found out what we had to do was to keep constant communication so that we didn't contradict each other because he was really afraid...so we really had to keep good communication so it ended up all of us..he left a couple months ago and we're still in contact with each other about how he's doing.
It was a really enriching and rewarding experience to work with a physician who says 'OK where's he at emotionally, where is his human response today and I'm going to pass onto you where I'm at medically, what can we do to make these two meet and work for this patient."

The following comment also illustrates the nurse's desire for participation in patient care decisions.

Comment #4
"Well, we work alot with anesthesia and well there's some anesthesia that I feel that if there's a problem with the patient that we can both voice what we see going on and reach a mutual understanding and both reaffirm what the other one is thinking, you know draw out the good points in one another."

The following final story illustrates the physician's implicit acknowledgment of nurses' desire to contribute to patient care decisions, and listening to the nurse, as well as an explicit acknowledgment of respect.

Story #4
I had a good interaction with one of our

> surgeons and someone asked him why the nurses he worked with seemed to go above and beyond and he said 'I learned when I was a resident that if I treat them like intelligent human beings with minds of their own with something productive and beneficial to give to a situation, and um don't treat them like the rug that I wipe my feet on...don't lose my temper and scream and yell and throw things, that in return it will benefit me, and uh, he's right."

The following section of this chapter presents selected comments from questions regarding nurse/nurse communication.

Nurse/Nurse Communication. Again, the investigator began each part of this discussion with the first question. Comments were relayed describing productive and unproductive interactions with other nurses with participants having little difficulty in identifying their frustrations and complaints.

The following comments typical discussion in the focus groups involving communication between and among nurses. Nurses participating in the focus group interviews converged in their assessment of potential problems in these types of interactions, and were quite clear about their need to feel free to seek clinical advice. Nurses who were involved in units in which this freedom exists identified their groups as more cohesive and collaborative. Additionally, nurses were concerned with nurses who failed to help with overload, and were also concerned with incompetency in the workplace.

These three themes consistently emerged from the interviews and were as follows:

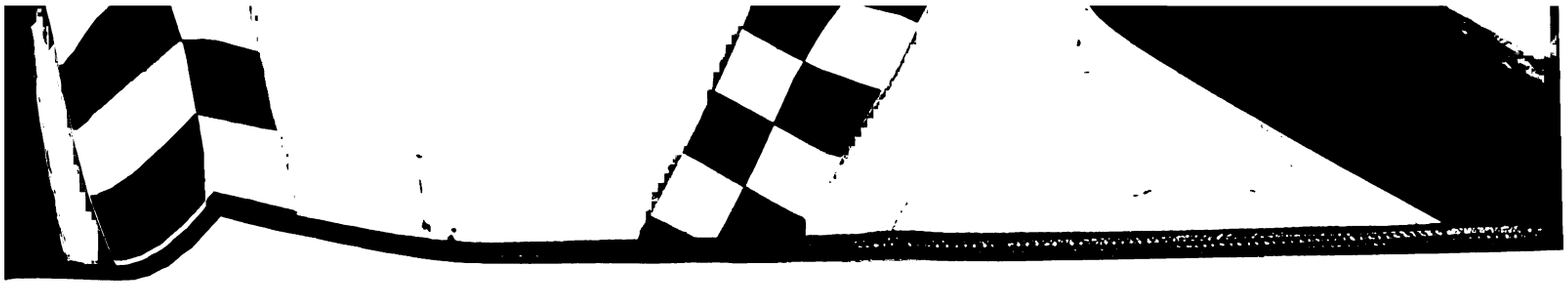
1. Help with work overload
2. Help with clinical advice or informational questions
3. Incompetent workers

The first comment illustrates a nurse's concern with incompetency.

Comment #1
"The problems that I had with nurses on the floor were ones that I felt weren't all that competent or being negligent and then it was hard to work with them...you work hard to keep them (patients) free of bedsores and then somebody comes along and lets that slide or you think you have things up to snuff and then somebody comes and lets it slide and it knocks you back a few.. and there's some people that can get alot more done in 8 hours than another person. Some nurses will take 4 heart patients and another will take 3 easy ones...and you know you start to notice trends and who's willing to work hard and help out and who's here to have an easy 8 hours and get home...you got to pull your tow."

The following comment also demonstrates concern with incompetent workers.

Comment #2
I'm real critical of the care I've seen patients given, real critical of the care I've seen given lots of times..you know we had a pain patient who was a trauma and we put a catheter in her and she was absolutely filthy, no one had bothered to clean her up...and I've had patients tell me things like 'The nurse won't wash my hair, because they couldn't pay



her enough to do that'...these things are so darn basic that I say how can this be happening, this should never happen...I've asked physicians, what kind of care are they getting there. When I hear these things I think are we getting..are we getting too removed from doing basic things because we're being bombarded with all the paperwork and all the documentation...

The following story illustrates nurses' concern with a desire for help with clinical or informational questions, and the need to be able to seek advice from other nurses.

Story #1
"Since alot of the times, since I am new I am asking advice and I appreciate it when nurses who have more experience don't treat my question don't treat my question as a dumb one...but she's real good at that..she'll give me good input and say have you considered this or that and maybe have a suggestion about what to do about it... and that type of thing and no belittleting or anything like that...When I worked at a different hospital, and I was an extern and there was one RN who was consistently being short with me and even when I practically hadn't done anything...
I mean I was just there and she was short with me...I just dreaded working with her.

The fourth comment again demonstrates nurses' concern with the freedom to seek advice. As noted in this comment, nurses feel that this freedom creates cohesiveness and contributes to teamwork.

Comment #3
I really feel like we are a team and work together. Good nurse to nurse communication is in like shift report, like you said, 'I don't feel comfortable about something, will you check it out for me and tell me what you think...I think they respect you more because

you have the guts to say 'I just don't know something or I don't feel comfortable with something, I've looked for the answer somewhere and I've not been able to find it or what do you think'...I think it builds rapport among each other and cohesiveness."

This freedom to seek advice or answers to questions is again evident in the following comment.

Comment #4
"If you have a bit of question in your mind about making a decision, like he's (patient) has this and this and this, but there's something about it why don't you go check him out for me and see what you think. Or 'Do you think this person's going to be able to handle living by himself or be better in some community'. We do that type of collaboration all the time, all the time; someone's better at starting IVs, we don't have anyone that is above asking someone else."

Comment #6 also describes the need for nurses to feel free to ask for help, as well as the need for help with work overload. The idea of teamwork is also explicitly noted in this comment.

Comment #5
"The good [communications] are the ones that are offering good advice, helping where they're the type of person who when I go to them and ask a question they're not going to belittle me they're not going to say 'Well you know that', they're going to fully explain it and say why and give the rationale. I'm still new and asking alot of questions, now on my particular floor we have alot of collaborativeness where we are a team effort, you know we all help each other out."

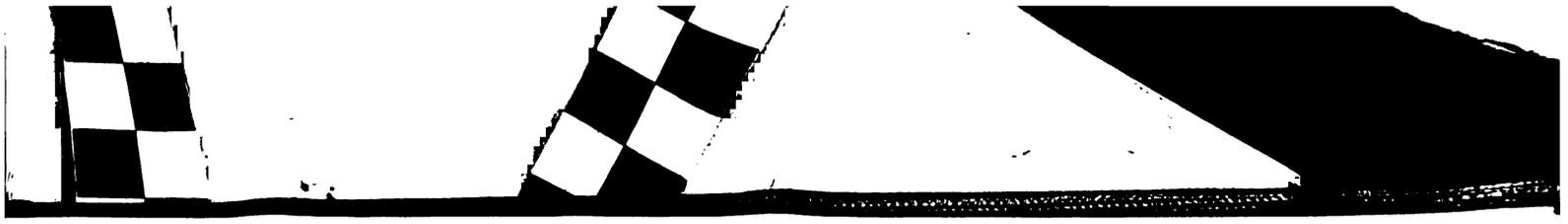
The following comment also illustrates nurses' need for help with informational questions.

Comment #6
"We have so many specialty areas and equiment in OR, we have people who have..I mean I have a certain expertise, so and so has a certain expertise, someone else has a certain expertise and we are constantly going to each other asking for help and advice, this type of thing."

The last comment implicitly also demonstrates the need for help with clinical advice and information. However, this comment also demonstrates noncritical support in how nurses go about answering informational questions.

Comment #7
"If I question something, I don't come right out and say 'You are doing that wrong', or something like that, you know, like 'Is that the way?' or 'Aren't you supposed to do it like that?' Just kinda like that, and kinda brush it over, and then they might say 'Oh yeah' or something like that. But I don't come right out and make an accusation that they are doing it wrong. You have to do it in a roundabout way."

Interestingly, the discussions about nurse/nurse communication were relayed primarily through the use of 'comments'. Only one story was told regarding this type of interaction. By contrast, the vast majority of the dicussion involving nurse/physician communication as relayed through nurses' recall of 'stories' involving themselves and a physician. Comments tended to be shorter, whereas the stories were typically more involved with accompanying nonverbal indicators.

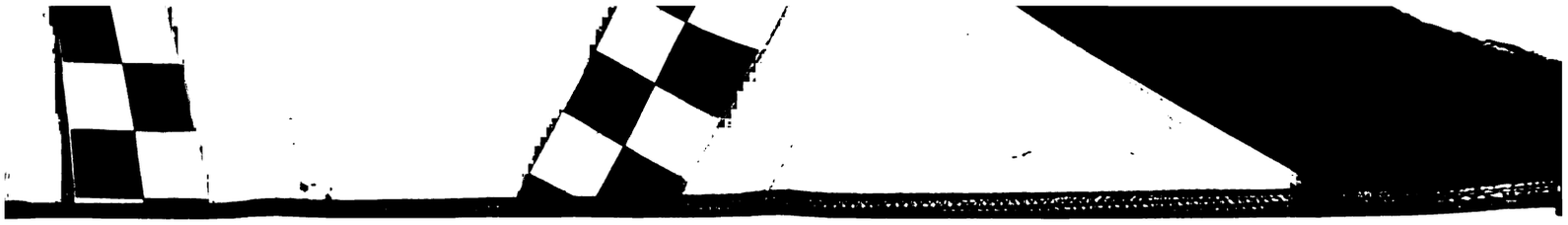


Nurse/Patient Communication. Two themes emerged from the discussion regarding communication with patients; these were (1) time, and concurrently with the concept of time was communicating with the patient through (2) teaching. These themes are evident in the following comments, and will not be identified. The final comments presented were received from nurses when asked about how they communicated empathy.

Comment #1
"Total patient care is very rewarding, if you have enough time to do total patient care. If you are running around at 11:00 and haven't done any charting and none of your patients have gotten a back rub, which is part of total patient care, you know, tucking them in and saying good night, that's part of the reward system of having total patient care. If you haven't been able to do any of that and it's 11:00 and somebody's on your back saying 'Do you need an overtime slip'...that's...when the stress level is really high...and that's not a pleasant situation to work in.

Comment #2
I do alot of teaching with my patients, I have alot of rapport with my patients..."

Comment #3
"A reward for me is when a patient comes back and that you have made an impact, somehow you've helped them with insight or preventative health care. I had a little guy come in who's a year old now and last January, it looked like this child was going to die, he was so ill, very nice young parents, and the support that I gave them ..and now he's a healthy one year old."



Comment #4
"The most rewarding thing for me is mutuality...when you and your patient from the very start of their admission and you take that history and you take that physical and incorporate all that material, and the patient knows what you know and you set goals together, that's mutuality. When the patient is open with symptomatology, when there's a trust there, because you are taking care of them on a regular basis, you are both working toward the same end.. it takes a nurse who is open and trusting and willing to risk and it takes a patient who is open and trusting and willing to risk. We're always working for that ideal it doesn't always happen."

Comment #5
"We do alot of teaching on our floor and the best interactions I have are when patients respond to the teaching, cause some don't even care, they don't care what kind of care they give their baby, but the best kind of interaction I have is when they are receptive to the teaching, they want to know more and how I can help them.

Comment #6
"If you have a group of nurses who are true professionals and have really made sure that the communication lines are open, then that patient will know everything they need to know about how to take care of themselves properly, and what did the lab say and why is that important to know...you can tell when its happened and when it hasn't."

The following final comments presented were received from nurses when asked about how they communicated empathy.

Comment #7
"You listen, you don't interrupt, and if you don't have the time, you tell them I don't have the time to pursue this now, but I should be caught up at 8:00, and I will come back and

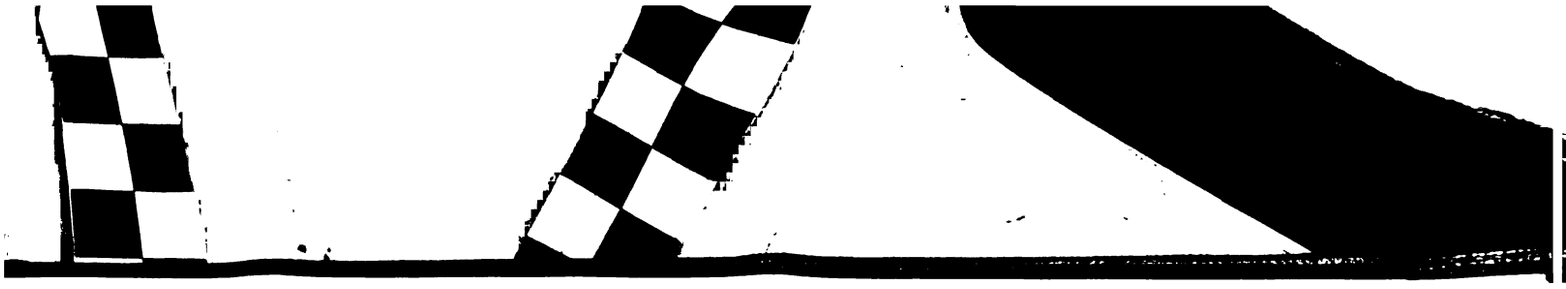
I will sit down and talk to you for 5 minutes. And then you are there...and if you aren't there because you have an emergency, then you tell them you can't come in at 8:00, but I'll be in at 9:00. If they don't understand what the lab report says, or they don't understand what's happening with the doctor,then you share that with them. You're honest, you never lie, and you make time for them. We had this video about the 5 minute difference. If you take 5 minutes with a patient, it will make a difference, if you sit down and give them your attention for 5 minutes, you have their cooperation for the whole shift.

Comment #8
"I go in and say Hello, my name is so and so this is what I'm here for and I'll be with you this long today, and what I'm doing right now is going around and seeing my patients and saying Hello to you, and I'll be coming back around to do your assessments. Is there anything that I can do for you right now so you can be comfortable? And just that right there, she came around she introduced herself, she asked me if I needed anything.....Most everyday I do it that way, and people don't mind if they have to wait a half an hour for you to get in there to see them..You came in, you said hello I care about you, I want to meet your needs, I'm not sitting at the desk, talking to the Doctors.

Comment #9
"Seeing patients come back and developing and trust relationship, I like that part of it."

Comment #10
"I use alot of nonverbals, especially with children, I usually start with something that they have done well, and so I can positively stroke them, then if you need to discuss something that has not been done correctly, then they're more willing to accept that than hitting them right off the bat; smiling, that's really important."

When the investigator asked focus group members about



how they convey empathy, many times, respondents were quick to agree either verbally or nonverbally (through head nods, etc.) with the importance of this construct. Thus, the idea of communicative responsiveness with patients appeared to be one that nurses had developed strategies for-by managing communication with patients in spite of the time constraints.

Much of the information from the focus group interviews was used to direct further research through the administration of a questionnaire. The next section of this chapter provides questionnaire response rate as well as socio demographic results of the sample, means and standard deviations for the major variables, the results of the confirmatory factor analysis for scales used in the questionnaire, and finally the results of the tests of the hypotheses and research questions.

Questionnaire Results. Of the 1,356 questionnaires that were distributed to all nurses at the hospital, 492 were returned for a response rate of 36%. Of these, 490 were complete enough to be used in analyses.

Sociodemographics. Twenty-six percent of the respondents worked in the medical/surgical department at the hospital. Nineteen percent worked in adult critical care, 15% worked in special services, 34% worked in womens and children, and 5% worked in all other departments of the

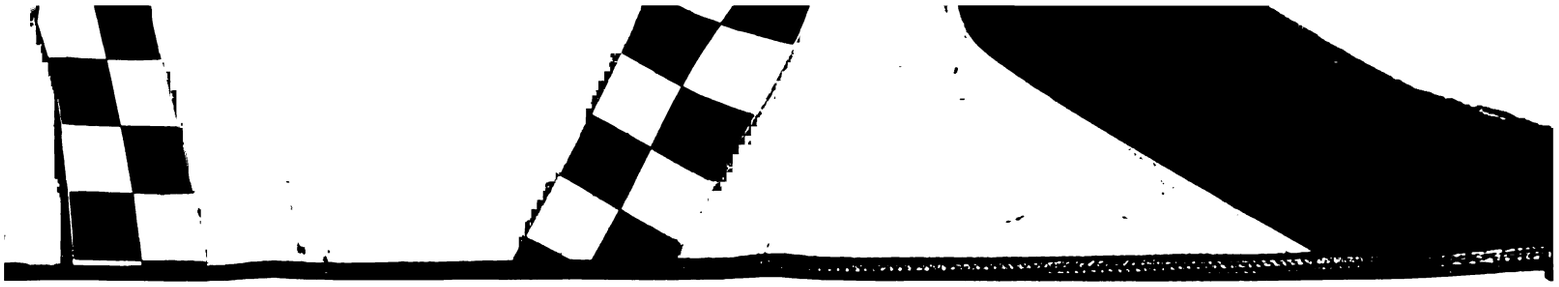
hospital. The mean professional tenure of the sample was 12.7 years, and the mean tenure at the hospital was 10.7 years. The mean age of respondents was 35.4 years. Forty-four percent of the sample identified themselves as the primary supporter of their family. Sixty-five percent of the sample had either a diploma (32%) or a Bachelor's of Science in Nursing (33%) and 51% worked full-time, while 36% worked part-time (24 or more hours per week). Eighty percent of the sample were staff nurses, while 8% were in some form of management, and 7% worked primarily in education (such as in orientation programs for newly hired nurses, etc.).

Descriptive Staitistics. Respondents answered all questions with five point Likert scales with lower numbers being associated with lesser amounts of the variable, and higher numbers being associated with greater amounts of the variables. Descriptive statistics for all variables are presented in Table 31. Overall, nurses report low to neutral feelings of organization commitment with a mean of 2.943. However, the mean for intent to remain at the hospital was 3.465. Nurses report relatively low feelings of personal control in the workplace with a mean of 2.463. However, perceptions of emotional support (3.618), instrumental support (3.766) and informational support (3.224) were neutral to satisfactory. Interestingly, nurses perceive some degree of participation in decision making

with physicians with a mean of 3.354, however, they also report feelings of role ambiguity with a mean of 2.567. The mean for nurse assertiveness was 3.203. Nurses perceive themselves as relatively communicatively responsive to their patients with a mean of 3.732, highly empathic (3.902), with lower levels of emotional contagion (2.659). Lower levels of burnout are also reported with a mean of 2.601 for emotional exhaustion, a mean of 2.292 for depersonalization, and finally a mean of 2.285 for lack of personal accomplishment.

Confirmatory Factor Analysis Confirmatory factor analyses (Hunter & Gerbing, 1982) were performed to determine whether proposed scales for measuring perceptions of nurses were unidimensional. The measurement models were analyzed with the confirmatory factor analysis subroutine of the PACKAGE computer program (Hunter & Lim, 1987). Hunter (1980) has suggested three criteria for assessing the unidimensionality of hypothesized scales: (1) homogenity of item content, (2) internal consistency of items, and (3) parallelism with outside factors. These criteria were used to evaluate the proposed measurement models.

For homogenity of item content, items within each factor were derived from existing scales or modified for this research. Thus, the items in each cluster appear to be homogeneous in content. The following discussion will present the results of the internal consistency tests as



well as the tests for parallelism.

Internal consistency deviations are the differences between the actual inter-item correlations and the correlations predicted from the factor structure. The predicted correlations are the product of the item factor loadings.

Hunter (1980) indicates that a scale should exhibit parallelism. This concept suggests that all items in a factor should have similar item to total correlations with outside factors. The test for parallelism is similar to the test for internal consistency. Deviations are the differences between inter-item correlations and the correlations predicted from the two factors.

Tables 1 and 2 present the items, content, factor loadings and deviation matrix for Organizational Commitment. Six items were dropped from this scale with the final scale comprised of seven items with an alpha of .87. The scale was internally consistent with two deviations greater than expected from sampling error. This scale fared quite well in the parallelism test with items related to outside factors in a similar manner. Deviation matrices of expected minus observed correlations indicated two deviations that were outside sampling error.

Insert Tables 1 and 2 about here

Tables 3 and 4 indicate the items, factor loadings, content and deviation matrix for Intent to Remain. All three items were found to be internally consistent with an alpha of .76. This scale was found to be parallel with outside factors of personal control and organizational commitment. Three deviations greater than expected from sampling error were found for intent to remain and personal control, while three deviations greater than expected from sampling error were also found for intent to remain and organizational commitment.

Insert Tables 3 and 4 about here

Tables 5 and 6 present the items, factor loadings, content and deviation matrix for the Emotional Exhaustion dimension of burnout. Two items were dropped from this scale. The final scale was comprised of seven items with an alpha of .86, and was internally consistent with no deviations outside sampling error.

This scale did not fare well in the parallelism test, however. Twelve deviations were outside sampling error in the parallelism test for emotional exhaustion and depersonalization. A similar problem was found in the test of parallelism for emotional exhaustion and lack of personal

accomplishment. Due to the strength of the internal consistency test, the high alpha, homogenity of item content and factor loadings, the scale was used despite the weaker results on the test for parallelism.

Insert Tables 5 and 6 about here

The Depersonalization dimension of burnout is reported in Tables 7 and 8. One item was dropped from this scale with the final scale comprised of four items and an alpha of .72 (see Table 8). Table indicates that this scale was internally consistent with no deviations outside sampling error. This scale fared somewhat better in the parallelism test with seven deviations outside what was expected from sampling error in the test of depersonalization and lack of personal accomplishment. However, the parallelism test for emotional exhaustion and depersonalization indicated twelve deviations outside sampling error. Due to the strength of the internal consistency test, factor loadings and item content, this scale was used in further analyses.

Insert Tables 7 and 8 about here

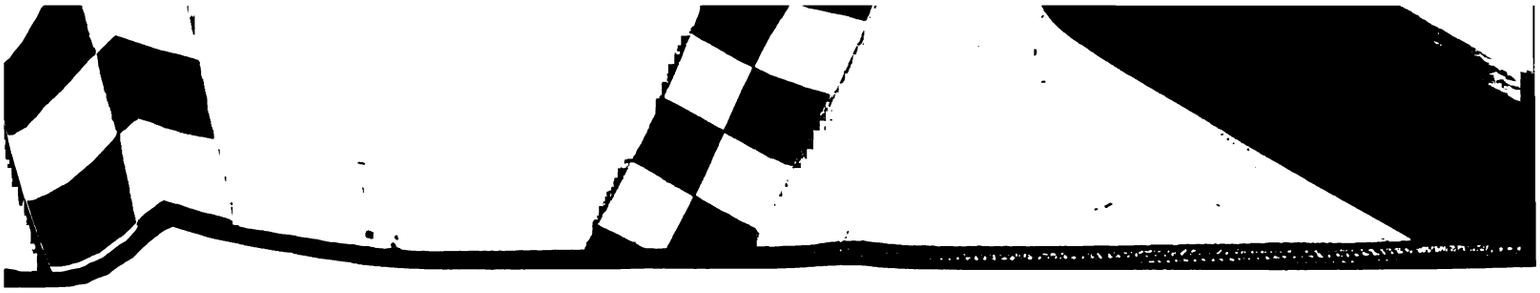
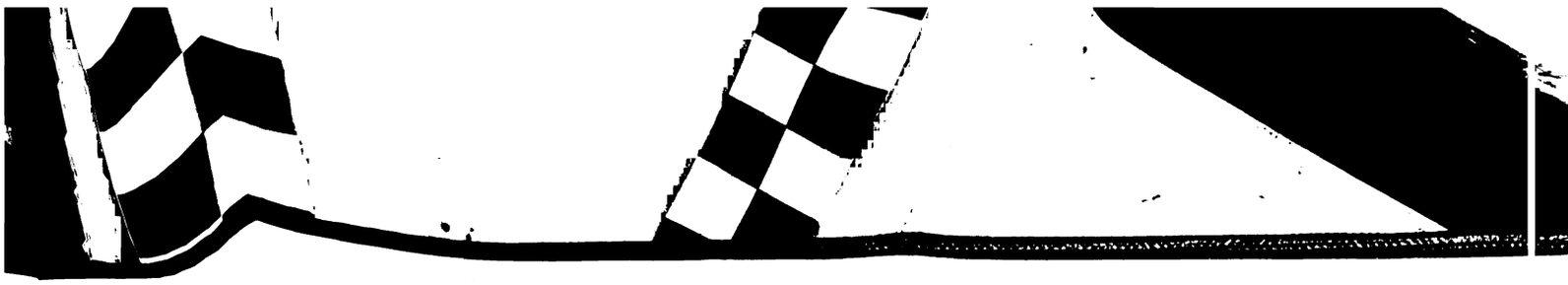


Table 9 presents the item content and factor loadings for the final seven item scale for Lack of Personal Accomplishment. One item was dropped with the resulting scale being internally consistent (see Table 10) with an alpha of .74. A large number of deviations outside sampling error were found for the parallelism test of lack of personal accomplishment and emotional exhaustion. Thus, this scale was not strong in the test for parallelism. However, again, based on the strength of the previous tests, this scale was used in analyses.

Insert Tables 9 and 10 about here

Four items were dropped from the Personal Control scale due to weak factor loadings and low inter-item correlations. The final seven item scale had an alpha of .84 (see Table 11) and had two deviations outside what was expected from sampling error (see Table 12). The personal control scale fared well in the parallelism test. Three deviations outside sampling error were found for the parallelism test between personal control and intent to remain. Five deviations outside sampling error were found in this test with organizational commitment. Thus, the personal control scale was found to be internally consistent and parallel.



Insert Tables 11 and 12 about here

One item was dropped from the Nurse Assertiveness scale. Table 13 indicates that the final seven item scale had an alpha of .86 and Table 14 indicates that this scale was internally consistent. The nurse assertiveness scale also did quite well in the parallelism test. Three deviations outside what was expected from sampling error were found for nurse assertiveness and role ambiguity, while no deviations outside sampling error were found for nurse assertiveness and participation in decision making. Thus, this scale was parallel and internally consistent.

Insert Tables 13 and 14 about here

Seven items were dropped from the Role Ambiguity scale. Tables 15 and 16 present the items, content, factor loadings, and deviation matraix for the resulting six item scale. The alpha was .75 with two deviations outside sampling error found in the test for internal consistency. This scale fared well in the test for parallelism. One deviation outside sampling error was found in the test with

participation in decision making, while the parallelism test with nurse assertiveness yielded two deviations outside sampling error. Thus, the role ambiguity scale was quite strong both in the test for internal consistency and the test for parallelism.

Insert Tables 15 and 16 about here

Tables 17 and 18 present the item content, factor loadings, and deviation matrix for the three item scale for Participation in Decision Making. This scale had an alpha of .79 and was internally consistent. There were no deviations outside sampling error in the parallelism test for participation in decision making and nurse assertiveness. There was one deviation outside sampling error for participation in decision making and role ambiguity. Thus, this scale was both internally consistent and parallel.

Insert Tables 17 and 18 about here

Two items were dropped from the Informational Support scale. The resulting seven item scale had an alpha of .81

(see Table 19) and was internally consistent (see Table 20). This scale did not fare quite as well in the test for parallelism. Eleven deviations outside sampling error were found in the parallelism test for informational support and emotional support. However, only three deviations outside sampling error were found for informational support and instrumental support. Due to the strength of this last parallelism test and the internal consistency test, this scale was ued in further analyses.

Insert Tables 19 and 20 about here

Tables 21 and 22 present the final three item Instrumental Support scale, factor loadings and deviation matrix. One item was dropped resulting in a scale with an alpha of .84 that was internally consistent. Only one deviation outside sampling error was found for the parallelism test of instrumental support and emotional support and three deviations outside sampling error were found for instrumental support and informational support. Thus, the scale was internally consistent as well as parallel.

Insert Tables 21 and 22 about here

Two items were dropped from the Emotional Support scale. Tables 23 and 24 present the items, content, factor loadings and deviation matrix for this scale. The alpha was .63 with no deviations in the test for internal consistency. One deviation outisde sampling error was found in the parallelism test for emotional support and instrumental support. However, a large number of deviations were found in this test with informational support. Based on the strength of the first parallelism test and the strength of the test for internal consistency, this scale was used in further analyses.

Insert Tables 23 and 24 about here

Table 25 presents the factor loadings, content and three items for the Empathic Concern scale. Two items were dropped from this scale due to poor factor loadings and weak inter-item correlations. The final scale had an alpha of .56 and was internally consistent (see Table 26). Seven deviations outside sampling error were found for the parallelism test between empathic concern and emotional

contagion. Four deviations outside sampling error were found in the test with communicative responsiveness. Thus, this scale did not fare as well in the parallelism tests. However, based on the strength of the internal consistency test, the scale was used in further analyses.

Insert Tables 25 and 26 about here

Two items were dropped from the original Emotional Contagion scale. Table 27 presents the five item scale with factor loadings. The alpha for this final scale was .66 and was internally consistent (see Table 28). The parallelism test for emotional contagion and communicative responsiveness yielded ten deviations outside sampling error. Similarly, the parallelism test between emotional contagion and empathic concern yielded seven deviations outside sampling error. Thus, this scale was weaker in the parallelism test, however, due to the strength of the internal consistency test, this scale was used in further analyses.

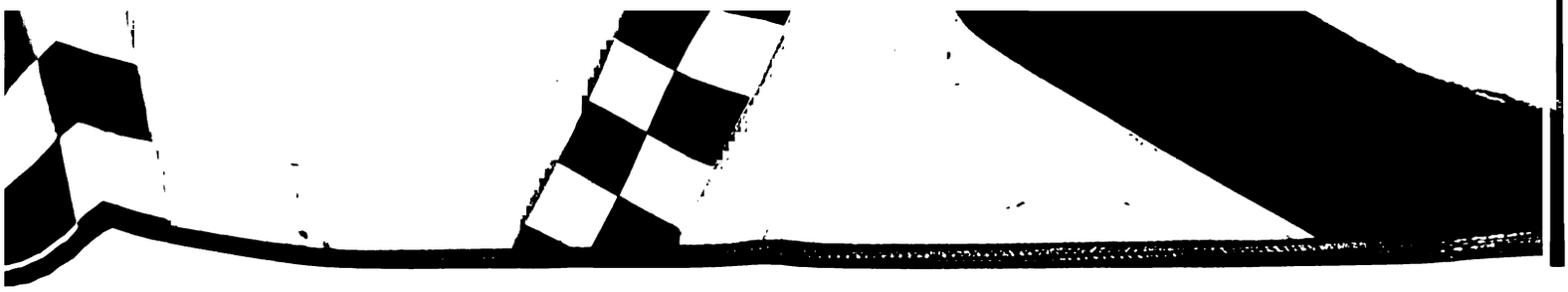
Insert Tables 27 and 28 about here

Table 29 presents the items, content, and factor loadings for the final scale, Communicative Responsiveness. All four items were retained in this scale, with an alpha of .65. Table 30 indicates that there were no deviations outside sampling error in the test for internal consistency. The parallelism test with communicative responsiveness and empathic concern yielded five deviations outside sampling error. Eleven deviation outside sampling error were found for the parallelism test with emotional contagion. Although this scale did not fare as well in parallelism, due to the strength of the internal consistency test and the factor loadings, this scale was used in further analyses.

Insert Tables 29 and 30 about here

The final section of this chapter presents the results of the analyses testing each hypothesis and research question.

Outcome Measures. The first section of this dissertation involved hypothesized relationships between the outcome variables. Hypothesis one stated that increased levels of burnout would be associated with decreased levels of organizational commitment. The correlation between emotional exhaustion and organizational commitment was -.27



(p <.01). The corrected correlation between these variables was -.31. The correlation between depersonalization and organizational commitment was -.16 (p < .01), the corrected correlation was -.20. The correlation between lack of personal accomplishment and organizational commitment was -.15 (p < .01), and the corrected correlation was -.19. Thus, this hypothesis was supported.

Hypothesis two indicated that increased levels of organizational commitment would be related to increased levels of retention. The correlation between organizational commitment and intent to remain was .47 (p <.01), the corrected correlation was .58. These results indicate support for this hypothesis.

Given the links between burnout and organizational commitment and commitment and retention, it seemed reasonable to test the causal nature of these relationships. Research question one considered these causal relationships among the dependent variables. Past research on burnout, commitment, and retention suggested that decreased levels of burnout would be negatively associated with organizational commitment, while organizational commitment would causally precede intent to remain. Path analysis was used to answer this research question with uncorrected correlations used as input for the path analytic subroutine of the LIMSTAT personal computer program. In this model, depersonalization and lack of personal accomplishment were

exogenous to emotional exhaustion, with path coefficients of .44 and .19, respectively. Emotional exhaustion was exogenous to organizational commitment with a path coefficient of -.27. Finally, the path from organizational commitment to retention was .47. All paths were significant at the .05 level, the chi-square value was significant at 77.31, with 5 degrees of freedom. The goodness of fit index was .945, and the adjusted goodness of fit index was .835. The critical N was 144.64, and the average sum of the squared errors in this model was .018. Given these results, it appears that the model is not a good fit to the data. Thus, this research question was not supported (See Figure 1).

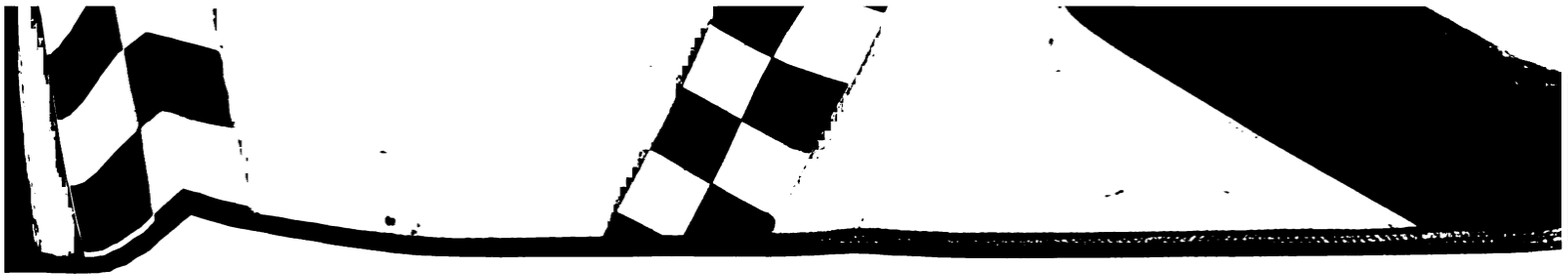
Post hoc analyses on the combined impact of burnout on retention indicate that 30% of the variance in retention was accounted for by the dimensions of burnout. The F value was 62.789 ($p < .000$). Post hoc analyses on the combined impact of burnout on organizational commitment indicated a dramatically different situation; only 9% of the variance in organizational commitment was accounted for by the dimensions of burnout. The F value for this analysis was 15.396 ($p < .000$).

Nurse/Physician Communication. The second section of the dissertation considered nurses' perception of communication with physicians. Specifically, "excellent" communication was conceptualized as participation in

decisions about patient care. A potentially important personality construct, assertiveness, was postulated to play a key role in nurses' perceptions of decision making with the physician. Hypothesis three indicated that nurse assertiveness would be positively related to perceptions of participation in decision making. The correlation between participation in decision making and nurse assertiveness was .52 ($p < .01$), the corrected correlation was .64. Analysis of variance was also used to test differences between assertive and nonassertive nurses and perceptions of participation in decision making with physicians. High assertiveness was considered to be one standard deviation above the mean (3.937) and low assertiveness was considered to be one standard deviation below the mean (2.469). The Bartlett-Box test for homogenity of variance was nonsignificant ($F=.190$; $p=.663$). The results of the ANOVA indicated an F value of 97.7419 which was significant at the $p < .0000$ level (eta squared=.41). Thus, this hypothesis was supported.

Hypothesis four predicted a positive relationship between participation in decision making and personal control. The correlation between these variables was .29, which is significant at the $p < .01$ level. The corrected correlation was .35. Given these results, this hypothesis was supported.

Hypothesis five indicated a negative relationship



between personal control and dimensions of burnout. The correlation between personal control and emotional exhaustion was -.29 ($p < .01$), the corrected correlation was -.34. The correlation between personal control and depersonalization was -.22 ($p < .01$), the corrected correlation was -.28. The correlation between personal control and lack of personal accomplishment was -.26 ($p < .01$), the corrected correlation was -.33. Thus, this hypothesis was supported.

Hypothesis six predicted a positive relationship between personal control and organizational commitment. The correlation between these variables was .24 ($p < .01$), the corrected correlation was .28. Given these results, this hypothesis was supported.

Hypothesis seven also predicted a positive relationship between personal control and retention. The correlation between these variables was .22 ($p < .01$), the corrected correlation was .27. Thus, this hypothsis also received support.

Research question two addressed whether there would be a relationship between participation in decision making and dimensions of burnout while holding personal control constant. The partial correlation between PDM and the depersonalization dimension of burnout was -.09 ($p < .06$), and the standard error was .04. However, the partial correlation between PDM and lack of personal accomplishment

was -.33 ($p < .000$), and the standard error was .04. The partial correlation between PDM and emotional exhaustion was -.14 ($p < .004$), and the standard error was .04. Thus, there was still a moderate relationship between participation in decision making and lack of personal accomplishment with control held constant and a weaker relationship between participation in decision making and emotional exhaustion. There was no evidence of suppressor relationships.

Research question three concerned the association between PDM and organizational commitment while holding personal control constant. The partial correlation between PDM and organizational commitment was .01 ($p < .784$), the standard error was .04. There was no evidence of suppressor relationships.

Research question 4 addressed the relationship between PDM and retention while holding personal control constant. The partial correlation between PDM and retention was .02 ($t=.562$, $p < .562$), and the standard error was .05. Again, there was no evidence of suppressor relationships.

Nurse/Nurse Communication. The third section of this dissertation addressed issues of communication between and among nurses. The following section reports results of analyses testing hypotheses regarding support and the outcome variables.

Hypothesis eight indicated that informational support would be positively related to organizational commitment, retention, and negatively related to burnout for nurses with high levels of role ambiguity. No relationship among these variables was predicted for nurses with low levels of role ambiguity. Multiple regression was used to test this hypothesis. An interaction term (informational support x role ambiguity) was created and used, with informational support and role ambiguity entered separately into the regression equation. Role ambiguity was the only significant predictor in the equation with organizational commitment as the dependent variable (beta=-.21; F=20.64 p < .000). The interaction term and informational support were nonsignificant. Similarly, role ambiguity was a significant predictor of retention (beta=-.27; F=32.93 p < .000). The interaction term and informational support were nonsignificant.

Both role ambiguity (beta=.37; F=68.93 p < .000) and informational support (beta=-.13; F=39.16 p < .000) were significant predictors of emotional exhaustion, while the interaction term was nonsignificant. The only equation in which the interaction term was significant was the equation predicting reduced personal accomplishment. In this equation, informational support (beta=-.21, F=20.93, p < .000) and the interaction term (beta=.11, F=13.03, p < .000) were significant predictors. However, given the fact that

the interaction term only added 1% to the variance in reduced personal accomplishment, the nature of this interaction was not investigated further.

Informational support (beta=-.16, F=12.08, p < .006) and role ambiguity (F=8.53, p < .002) were significant predictors of depersonalization. The interaction term was nonsignificant.

Hypothesis nine predicted a positive relationship between instrumental social support and organizational commitment. The correlation between instrumental social support and organizational commitment was .09 (p > .05) the corrected correlation was .11. A positive correlation was also predicted for instrumental support and retention. The correlation between instrumental social support and retention was .05, (p > .05), the corrected correlation between these variables was .07.

A negative association between instrumental support and burnout was predicted. The correlation between instrumental social support and emotional exhaustion was -.30 (p < .01); the corrected correlation was -.35. The correlation between instrumental social support and depersonalization was -.17 (p < .01), the corrected correlation was -.23. The correlation between instrumental social support and lack of personal accomplishment was -.09 (p > .05), the corrected correlation was -.12. Thus, instrumental support was significantly related to only emotional exhaustion and

depersonalization. Thus this hypothesis received very limited support.

Hypothesis ten predicted a positive relationship between emotional support and organizational commitment as well as between emotional support and retention. The correlation between emotional social support and organizational commitment was .15 ($p < .01$), the corrected correlation was .20 ($p < .01$). The correlation between emotional support and retention was .17 ($p < .01$), the corrected correlation was .23 ($p. < .01$). Thus this portion of the hypothesis was supported. Also predicted in this hypothesis was a negative association between emotional support and dimensions of burnout. The correlation between emotional support and emotional exhaustion was -.24 ($p < .01$), the corrected correlation for these variables was -.33. The correlation between emotional support and depersonalization was -.16 ($p < .01$), the corrected correlation was -.24. Finally, the correlation between emotional support and lack of personal accomplishment was -.25 ($p < .01$); the corrected correlation was -.37.

Hypothesis eleven indicated a positive relationship between personal control and instrumental social support as well as a positive relationship between personal control and informational support. No relationship between personal control and emotional support was hypothesized. The correlation for instrumental support and control was .23 (p

< .01), and the corrected correlation was .35. The correlation for informational support and personal control was .35 ($p < .01$), and the corrected correlation was .42. However, contrary to the hypothesis, the correlation between personal control and emotional support was .31 ($p < .01$); the corrected correlation was .43. Thus, this hypothesis received partial support.

Research question five addressed the relationship between instrumental support and burnout, commitment, and retention while holding personal control constant. Partial correlations were used to test this question. The partial correlation between instrumental support and emotional exhaustion was -.29 ($t=6.10$, $p < .000$); between instrumental support and depersonalization -.17 ($t=-3.47$ $p < .000$); and between instrumental support and lack of personal accomplishment -.03 ($p > .05$). Instrumental support and retention yielded a partial correlation of -.003, ($p > .05$). Finally, the partial correlation between instrumental support and organizational commitment was .03 ($p > .05$).

Research question six addressed the relationship between informational support and burnout, organizational commitment and retention while holding personal control constant. The partial correlation between informational support and emotional exhaustion was -.19 ($t=-4.099$, $p < .000$); between informational support and depersonalization -.12 ($t=-2.43$ p , .01); and between informational support and

lack of personal accomplishment, the partial correlation was -.13 ($t=-2.85$ $p < .005$). The partial correlation between informational support and organizational commitment was .02 ($p > .05$). Finally, the partial correlation between informational support and retention was .007 ($p > .05$).

Research question eight addressed the combined impact of emotional, informational, and instrumental support on organizational commitment, retention, and burnout. These three support variables accounted for 2% of the variance in organizational commitment ($F=3.452$, $p < .02$), with a standard error of .29. Similarly, emotional, informational, and instrumental support accounted for 2% of the variance in retention. The F value was 3.066 ($p < .02$), with a standard error of .86. The support variables accounted for 10% of the variance in emotional exhaustion ($F=16.291$, $p < .000$), with a standard error of .70. Three percent of the variance was accounted for by the support variables for the depersonalization dimension of burnout. The F value was 5.55 ($p < .001$), with a standard error of .70. Finally, the support variables accounted for 7% of the variance in lack of personal accomplishment; the F value was 11.202 ($p < .000$).

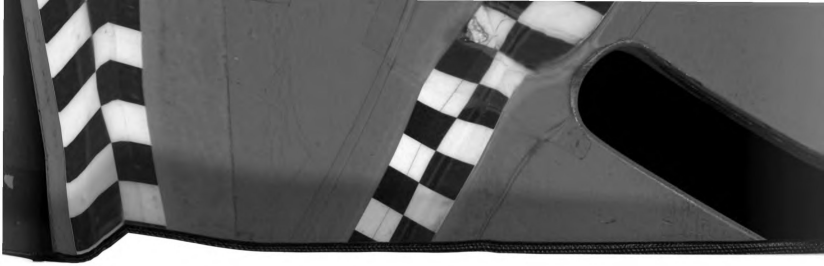
Nurse/Patient Communication. The final portion of this study concerned nurse/patient communication. Specifically, this section sought to replicate the findings of Miller,

Stiff and Ellis (1988) regarding the role of communicative responsiveness and burnout among caregivers.

Hypothesis twelve predicted a causal relationship between emotional contagion, empathic concern and communicative responsiveness, and between burnout and organizational commitment. Path analysis was used to answer this hypothesis with uncorrected correlations used as input for the path analytic subroutine of the LIMSTAT personal computer program. Model estimates and goodness of fit indices were assessed with LISREL for the PC (Joreskog & Sorbom, 1984). Emotional contagion and empathic concern were exogenous to communicative responsiveness. These paths were -.23 and .38, respectively. The path from communicative responsiveness to depersonalization was -.30, and the path from communicative responsiveness and lack of personal accomplishment was -.42. The path coefficient from depersonalization and lack of personal accomplishment was .32, while the path from depersonalization to emotional exhaustion was .44. The path coefficient from lack of personal accomplishment to emotional exhaustion was .19, and finally, the path from emotional exhaustion to organizational commitment was -.27. All path coefficients were significant at $p < .05$. The chi square value for this model was 52.59 with 12 degress of freedom. The goodness of fit index was .971, and the adjusted goodness of fit index was .931. The critical N was 212.63. The average sum of

the squared errors for this model was .005, thus indicating a good fit to the data. (See Figure 2).

Research question number nine indicated the possibility of a relationship between personal control and communicative responsiveness. The correlation between these variables was .15 ($p < .01$), the corrected correlation was .20. Thus this research question was answered affirmatively.



CHAPTER FOUR

DISCUSSION

This chapter discusses the implications of the analyses presented in Chapter Three. First, a general consideration of professional relationships for nurses in acute care settings will be discussed. Second, implications will be drawn based on the analyses of the outcome measures. Third, nurse/physician communication will be discussed, and fourth nurse/nurse communication will be considered. Next, nurse/patient communication is discussed, and finally, the limitations of this study will be presented.

Professional Interactions in Acute Care Settings

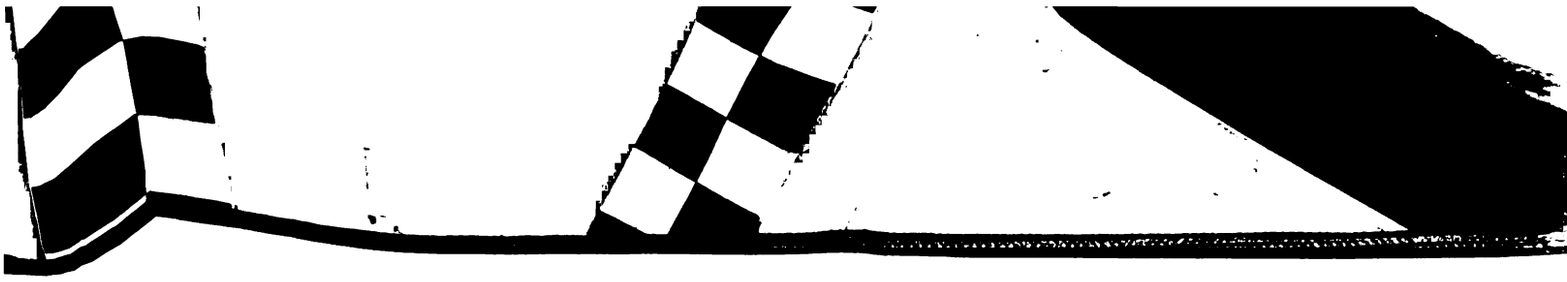
The first section of this dissertation considered the nursing shortage in American acute care facilities and drew attention to the severity of this problem. Two potentially severe repercussions of the shortage were discussed: (1) negative ramifications for patient care, and (2) negative ramifications for nurses in the form of job stress. This study sought to identify positive communication relationships that may serve to impact burnout, organizational commitment and retention for nurses.

One key implication and conclusion that can be drawn from the results of the focus group interviews conducted at

this hospital is that professional interactions are important. Nurses described productive interactions with physicians as those involving the nurse in patient care decisions, ones in which the physician had some understanding of professional nursing, and ones in which there was respect. Similarly, nurses described productive communication among and between nurses as interactions in which there was a freedom to seek clinical advice and information. Nurses identified these types of communication situations as being cohesive and suggestive of a 'team'.

Based on these discussions, then, nurses seem to desire a professional communicative relationship with those they work with. Indeed, nurses often noted in the focus group interviews that a 'professional' relationship with patients and families is also desired. Frequently nurses talked about their desire for more time with patients so that they could engage in teaching, which they considered to be a primary component of their profession. It appears that professional communicative relationships are important to nurses, and may, in fact, be critical to solving the nursing shortage.

Outcome Measures. Three outcome measures were considered to be critical to the nursing problem; burnout, organizational commitment, and retention. The results of these analyses indicate that there are significant (though moderate) relationships between burnout and organizational



commitment. Post hoc analyses indicated however, that the relationship between each dimension of burnout as well as the combined impact of burnout on retention is greater than the effect of burnout on organizational commitment. However, the significant path coefficient from organizational commitment to retention underscores the importance of the commitment phonemenon.

These results suggest three things. The first is that burned out employees will be more likely to leave the hospital. When a nurse is experiencing emotional exhaustion, lack of personal accomplishment, and depersonalization of patients it is highly likely that he/she cannot continue to care for patients. Future research involving nurses and burnout should determine whether nurses who report high levels of burnout, and who leave the hospital also leave their profession. It seems likely that these dimensions may relate more to occupational outcomes rather than organizational ones.

A second implication from the analyses of the outcome measures is that a lack of burnout among nurses does not necessarily increase commitment to the hospital. Though the correlations between organizational commitment and burnout were significant, they were less strong than the correlations between burnout and retention.

Clearly, of the constructs considered in this study, the strongest correlation for organizational commitment is

the relationship with retention. Unfortunately, the antecedents of organizational commitment still remain somewhat obscure. Two explanations for this seem likely. The first is that a nurse's commitment is likely to be to the profession and not the hospital or organization. Many nurses enter their profession based on a caring for people and this dedicatory ethic might be strong enough to supercede a commitment to the organization. Nurses may exhibit a loyalty and commitment to the hospital, if they have some philosophical identification with the institution, such as a religious affiliation. A second explanation for the weak correlations with commitment and burnout is that in several of the focus group interviews nurses expressed disappointment and anger toward the administration of the hospital. Employee medical benefits had been weakened, and rewards for long term nurses had been revoked. Thus, at the time the data were collected, many nurses may have felt little commitment to the hospital, though they may not have been professionally burned out.

The strong correlation between commitment and retention bolsters the finding by Steers (1977) who also found a strong relationship between these constructs. When nurses report being committed to the hospital, they also report wanting to remain at the hospital. There is, however, another explanation for the high correlation between commitment and retention, and this lies in the similarity of

items in scales used for these constructs. The interscale correlation between commitment and retention was .58, suggesting overlap in these concepts. Though the Mowday et al. (1979) commitment scale has been extensively used and has been found to psychometrically valid, further research should consider the conceptual link between commitment and retention. It should be noted, though, that these constructs were externally distinct (i.e. nonparallel) given the differential patterns of relationships exhibited with outside variables.

Nurse/Physician Communication. The initial portion of this dissertation noted that traditional relationships between nurses and physicians have not been the collaborative experience that many nurses desire. Indeed, though collaboration is frequently discussed within nursing, and embodied as a 'professional' communicative relationship, the AMA's Registered Care Technologist proposal is evidence for medicine's lack of enthusiasm for this relationship. Given this traditional state of affairs between nursing and medicine, it may be necessary for nurses to impact medicine in a non traditional manner.

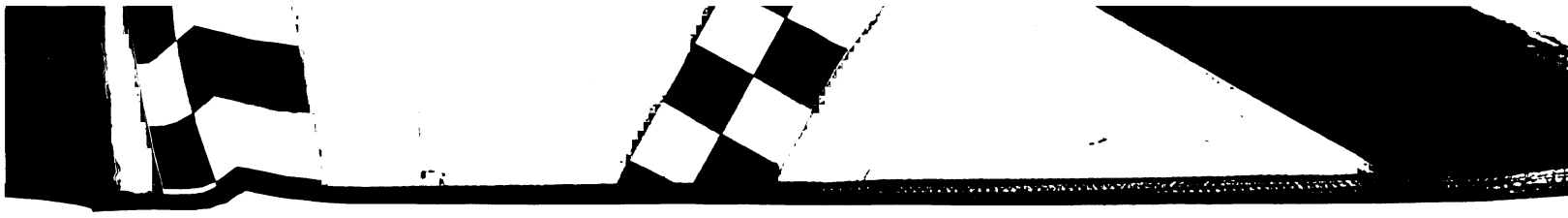
Participation in decision making and nurse assertiveness were postulated as two key constructs that should impact the nature of the professional relationship between nurses and physicians. The strong correlation between assertiveness and participation (corrected r=.64) provides evidence for

the importance of this personality type in interactions with physicians. Furthermore, the significant difference between assertive and nonassertive nurses suggests that nursing schools as well as hospital recruiters should incorporate assertiveness training into their programs. This type of approach may well improve the nurse/physician relationship with greater effectiveness and efficiency than bemoaning the lack of physician initiated communication. Theoretically, the significant difference for assertive and nonassertive nurses in perceptions of participation in patient care decisions provides evidence for the consideration of a contingency model of participation. Additionally, these results support Vroom's (1960) claim that personality factors might moderate the effects of participation. Nurses who are assertive should feel more comfortable in communicating with physicians about patient care issues and should experience positive outcomes such as decreased burnout. Another dimension to the contingency model for nurses, though not tested here, is the nature of the decision involving patient care. Obviously, emergency medical decisions would be more likely not to involve the nurse, however, nurses' decisions regarding knowledge of medications, and the patient's emotional state may strongly affect assertiveness, and hence, perceptions of participation. Future research in this area should continue to replicate the assertiveness/participation hypothesis, and

to broaden the nature of nurse/physician communication by considering differing types of decisions.

The results of this research involving the construct of personal control were somewhat surprising. Though there were significant relationships between the outcome variables and personal control, these relationships were quite weak. For example, the corrected correlation for participation in decision making and personal control was .35. Similarly, although significant correlations were found for personal control and burnout, retention, and organizational commitment, these relationships were also weak. Further evidence of this is found in the partial correlations for research questions two, three and four. Control did not account for the relationship between participation in decision making and lack of personal accomplishment, though it did for the remaining outcome variables. Taken together, these findings suggest that personal control does <u>not</u> seem to play a highly significant part in relevant outcomes for these nurses.

Several explanations may account for these findings. First, it is possible that due to nurses' changing roles with physicians and in hospitals in general, the 'opportunity' to participate in decisions about patient care may necessitate two things that have not typically been a focus for nursing; (1) nurses must know and be able to articulate the contribution nursing has to patient care, and



(2) while creating positive outcomes for employees in terms of job satisfaction and personal control, participation in decision making may create perceptions of responsibility. Increased responsibility may have positive as well as negative outcomes. Positive implications may relate more to an increased sense of personal competency, whereas negative implications may involve increased task demands.

A second explanation is equally likely. It is possible that nurses have little hope of personal control in their jobs. This may stem from preconceived expectations of nursing or may result from working in an acute care situation, or both. It is also possible that the type of person who chooses nursing may not 'need' a great deal of personal control in the job.

Regardless of the explanations for these weak relationships, it appears that the personal control construct has been too frequently invoked as a rationale by researchers. As Greenberger and Strasser (1986) note, personal control has been explicitly and implicitly important in various theories however, has not typically been tested. Researchers may be drastically overestimating the importance of personal control in the workplace. It seems reasonable to expect that people who work in organizations know that total personal control is not possible with any type of job.

In sum, this research suggests weak relationships

between personal control and the outcome variables. Future research in nurse/physician communication should attempt to replicate the results found here, and to further probe how nurse assertiveness impacts perceptions of 'collaboration' for physicians as well as nurses.

Nurse/Nurse Communication. As noted earlier, communication between and among colleagues in an organizational setting can contain elements of stress and support. Three specific types of communication were hypothesized to affect the outcome variables, and to be related to perceptions of personal control. These were informational, instrumental, and emotional support. Though social support has been found to provide positive outcomes outside of the organizational context, the research on social support within organizations has been limited.

Two primary findings characterize these results; (1) a relatively strong relationship between social support and burnout, and (2) the lack of strong relationships between these dimensions of support and personal control.

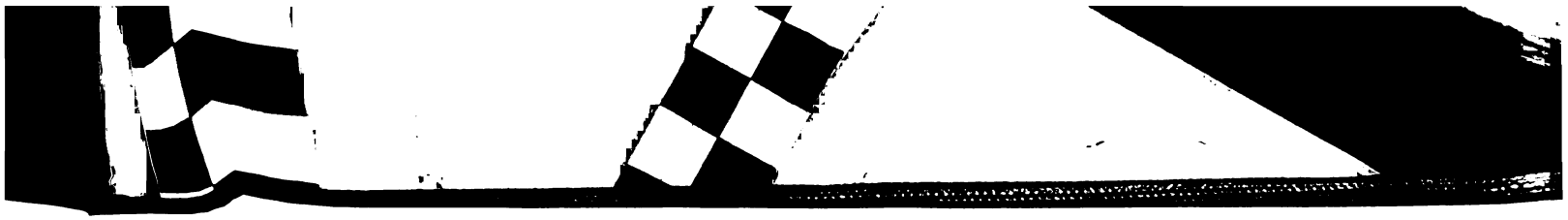
For example, though informational support was a significant predictor of emotional exhaustion, reduced personal accomplishment, and depersonalization, these were weak relationships. Additionally, informational support did not predict retention or commitment, nor did the interaction term of role ambiguity and informational support. The interaction term did, however, predict reduced personal

accomplishment, though this was weak. A similar scenario is evident for instrumental support and the outcome variables, though no relationship was found for instrumental support and reduced personal accomplishment.

Thus, there appear to be targeted effects for instrumental and informational support. Instrumental support or help in the workplace aids in preventing emotional exhaustion as well as preventing depersonalization. Enhanced patient care may be the result of intrumental support. When nurses can feel less emotionally drained combined with lower levels of depersonalization toward their patients, the result should be beneficial. Similarly, though informational support was related only to the burnout variables, the provision of this type of communicative interchange should also yield improved outcomes for nurses in acute care settings.

This research suggests broader effects of emotional support, however, especially with burnout. Though the focus group interviewees consistently discussed excellent communication between nurses as interchanges in which they felt free to seek clinical advice and information, it may be that emotional support is a key to perceptions of cohesion and teamwork in this occupation. Future research should investigate the nature of nurses' perception of support and workgroup cohesion.

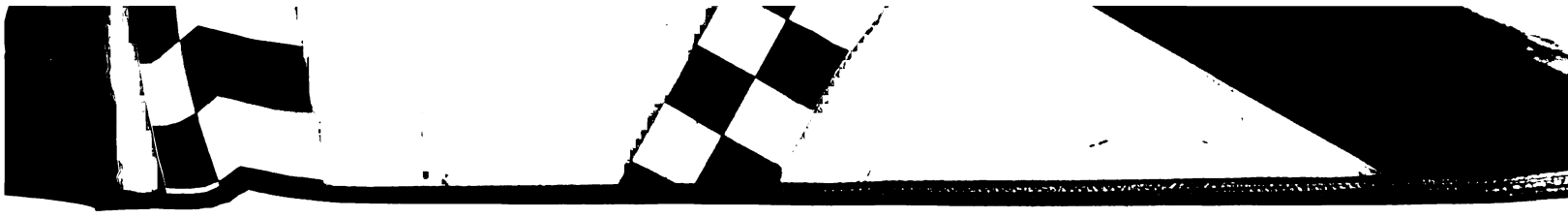
An explanation for the lack of a stronger effect for



social support and the outcome variables may be in the state of the hospital at the time of data collection. As stated previously, several of the focus group participants noted that the hospital administration was 'reneging' on earlier commitments to nursing. Thus, the atmosphere seemed to be one of disappointment and resentment. Within this type of climate, it is likely that when benefits and tenure have been withdrawn, social support may be ineffective. It is possible that social support may be beneficial only in situations where employees feel relatively secure about financial concerns.

A second equally important finding in this study concerns the relationships between these types of social support and personal control. Though the notion of personal control has been a central rationale for the effects of social support (e.g. Albrecht & Adelman, 1987), empirical tests of the support/ control relationship are limited. Based on past theoretical work, the correlations between the three dimensions of social support and personal control are weaker than would be expected. Further evidence of this is found in the partial correlations between instrumental and informational support and the outcome variables. Overall, the results of these analyses indicate that significant partial correlations were found for emotional exhaustion and depersonalization.

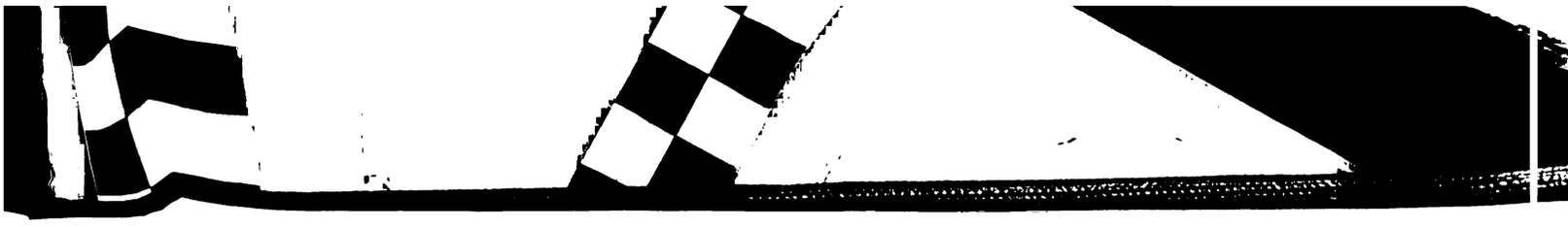
Two reasons may account for these results. First, it is



possible that given the climate for nurses at this organization, social support could not provide for perceptions of personal control due to nurses' anxiety about reductions in benefits. Second, it is possible that the strength of the relationship between social support and personal control has been overestimated by researchers. Interestingly, of the three support variables, the strongest relationship was between informational support and personal control. Whether this is due to the nature of this hospital at this particular point in time, or whether this is a general relationship should be the subject for future research in this area.

Nurse/Patient Communication. The final section of this dissertation was concerned with the communication between nurses and patients. Specifically, this study sought to replicate the findings of Miller, Stiff and Ellis (1988).

As noted earlier, empathy has played a major role in both psychological and communication research, with the former detailing internal empathic responses, while the latter has dealt more specifically with overt communication behaviors. The importance of the empathy construct cannot be overstated, as it has been negatively related to aggressive/antisocial behaviors (e.g. Miller & Eisenberg, 1988), has characterized the caregiving profession (e.g. Pines, Arnson, & Kafry, 1981), and has been tied to theories of moral development (e.g. Kohlberg, 1981).



The results of this study indicate yet another avenue for fruitful research in empathy. More specifically, the hypothesized path model was replicated from the Miller et al. (1988) study. Indeed, the pattern of correlations between these two studies are surprisingly similar. Indeed, as in the caregivers in the hospital sample of the Miller et al. study, the caregivers in the current study displayed low levels of emotional contagion (M=2.659) with higher levels of empathic concern (M=3.90), and higher levels of communicative responsiveness (M=3.732).

This model of communication and empathy highlights the importance of the affective and cognitive models of past research in empathy (e.g. Batson & Coke, 1981; Stiff, 1988). Empathic concern had a relatively strong impact on communicative responsiveness, though this impact was not as strong as in the Miller et al. (1988) study (.50). However, the direction of the link from emotional contagion to communicative responsiveness is the same in this study (-.23) as in the Miller et al. study (-.33). Similarly, the paths among and between the burnout variables are all similar in both models, and finally, emotional exhaustion negatively impacted organizational commitment in this study (-.27) and negatively impacted occupational commitment in the Miller et al. study (-.26).

The results reported here appear to support a model of detached concern among caregivers. Stiff et al. (1988)

found positive causal relationships (.40 and .34) between empathic concern and emotional contagion in path models based on samples of undergraduate students. It seems highly likely that, as noted by Miller et al. (1988) the differences between the Stiff et al. (1988) model and this model lies in the sample being studied. It may not only be important, but crucial, for caregivers to develop a detached concern toward their patients. Emotional involvement appears to hamper communicative effectiveness, however, empathic concern does not. Intuitively, this seems reasonable, yet this important difference has not been traditionally highlighted in the empathy literature. Emotional involvement, or a vicarious experience for caregivers makes effective care difficult because of the emotional investment with patients. It may be that caregivers cannot permit their own emotions to become intertwined with their patients, and this may be a coping mechanism. If indeed, cargivers such as nurses enter their profession because of a caring for people, they may soon realize that to effectively cope with the numbers of patients' lives that they touch they cannot become emotionally invested.

In sum, future research in empathy, communicative responsiveness and caregiving should continue to replicate these findings on other samples of caregivers. Pragmatically, hospitals may want to direct their efforts to

helping new nurses successfully build interpersonal communication skills to inhibit emotional contagion, and strengthen empathic concern. Finally, it would be interesting to replicate the Stiff et al. (1988) findings on non university samples. If adults working in non caregiving professions (e.g. business, etc.) exhibit a similar positive causal relationship between empathic concern and emotional contagion in the university sample, this would lend stronger support to the detached concern model for caregivers.

Limitations. The major limitation to the conclusions drawn in this study lies in the sample of nurses who voluntarily responded to the questionnaire. It is possible that only 'extremists' answered the survey. For example, due to the climate of the hospital, those strongly supporting the hospital may have responded to ensure that their voices were heard. Similarly, those who felt betrayed and resentful toward the administration may have also wanted to make sure that their voices were heard.

A second limitation is the lack of parallelism in the burnout scales and the empathy scales. The large number of deviations in both of these sets of scales is troublesome. It is possible that there is conceptual overlap in these scales, particularly for nurses. Researchers should be aware that this occupational group may display a similar lack of distinctiveness for the burnout and empathy concepts.

Finally, as noted earlier, the climate of this hospital may have contributed directly, and indirectly, to some of the results reported here. Unfortunately, it may be impossible to find an acute care hospital that does not display some of these same characteristics.

Summary. This study sought to explore the nature of communication between nurses and physicians, the communication between and among nurses, as well as between nurses and patients. The importance of the communicative relationship for nurses has been noted consistenly throughout this research. The fact that patient death rates were predicted by the quality of the communication between nurses and physicians (Knaus et al., 1986) attests to the importance of this communication relationship. Based on the results of this study, excellent communication may be the extent to which both professionals bring their own expertise to bear on patient care. However, it also may be up to the nurse to initiate and continue this type of communication.

Emotional support between and among nurses broadly impacted a number of important outcomes such as burnout, retention, and commitment. Acute care settings should begin to pay particular attention to individual units and the type of interaction between and among the nurses. Strong leadership may be needed to develop and maintain a supportive climate for nurses.

Finally, educational institutions for nurses should

begin to consider providing training in helping nurses develop the approriate coping skills, such as detached concern, necessary for successful job adaptation. Maslach (1982) notes that interpersonal skills are considered secondary to other professional skills of caregivers. This may be a costly mistake for the nursing profession.

As Vogt et al. (1983) note, "Nursing turnover-nurse shortage is a threat to our present system of health care delivery. Some type of change is necessary" (p. 4). This dissertation has provided some avenues for making changes.

Table 1: Items and factor loadings for ORGANIZATIONAL COMMITMENT

Item	Content	Loading
Comit 2	I promote this hospital as a great corporation to work for.	.82
Comit 3	I have little loyalty for this hospital.	.74
Comit 6	I could just as well be working for another hospital as long as the type of work was similar.	.66
Comit 8	This hospital really inspires the very best of me in the way of job performance.	.67
Comit 12	For me, this hospital is the best of all hospitals for which to work.	.72
Comit 13	Deciding to work for this hospital was a definite mistake on my part.	.65
Comit 15	I really care about the future of this hospital.	.67

Standard score alpha for factor = .87

Table 2: Deviations of observed from expected correlations (internal consistency) for Organizational Commitment.

Item	2	3	6	8	12	13	15
2	-.00						
3	.04	.00					
6	-.04	.04	.00				
8	.05	-.05	-.04	.00			
12	-.04	-.07*	.04	.07*	.00		
13	-.05	.04	.01	.00	.00	.00	
15	.05	.00	-.01	-.03	-.01	-.01	.00

Average Correlation: .49
Standard Error: .03

* Deviation greater than expected from sampling error ($p < .05$)

Table 3: Items and Factor Loadings for INTENT TO REMAIN

Item	Content	Loading
Remain 5	I would like to remain at this hospital for as long as possible.	.79
Remain 9	There is alot to be gained by remaining with this hospital indefinitely.	.71
Remain 11	I often look for jobs outside this hospital.	.69

Standard Score Alpha for factor = .76

Table 4: Deviations of Observed from Expected correlations (internal consistency) for Intent to Remain

Item	5	9	11
5	.00		
9	.01	.01	
10	.00	-.01	.01

Average Correlation: .52
Standard Error: .03

Table 5: Items and Factor loadings for BURNOUT (Emotional Exhaustion)

Item	Content	Loading
EE 2	I feel fatigued when I get up in the morning and have to face another day.	.72
EE 3	I feel emotionally drained from my work.	.76
EE 4	Working with people all day is really a strain for me.	.51
EE 5	I feel burned out from my work.	.85
EE 6	I feel frustrated by my job.	.74
EE 8	I feel like I'm at the end of my rope.	.61
EE 9	I feel I'm working too hard on my job.	.66

Standard Score Alpha for factor = .86

Table 6: Deviations of Observed from Expected correlations (internal consistency) for Burnout - Emotional Exhaustion

Item	2	3	4	5	6	8	9
2	.00						
3	.04	.00					
4	-.02	-.02	.00				
5	.04	.01	-.01	.00			
6	-.03	.00	-.01	-.01	.00		
8	-.03	-.04	.05	.02	.01	.00	
9	.01	.01	.00	-.04	.04	-.02	.00

Average Correlation: .48
Standard Error: .04

Table 7: Items and Factor Loadings for BURNOUT - Depersonalization

Item	Content	Loading
DP 1	I feel I treat some patients as impersonal "objects".	.54
DP 2	I worry that this job is hardening me emotionally.	.74
DP 4	I feel patients blame me for some of their problems.	.44
DP 5	I've become more callous toward people since I took this job.	.78

Standard Score Alpha for factor = .72

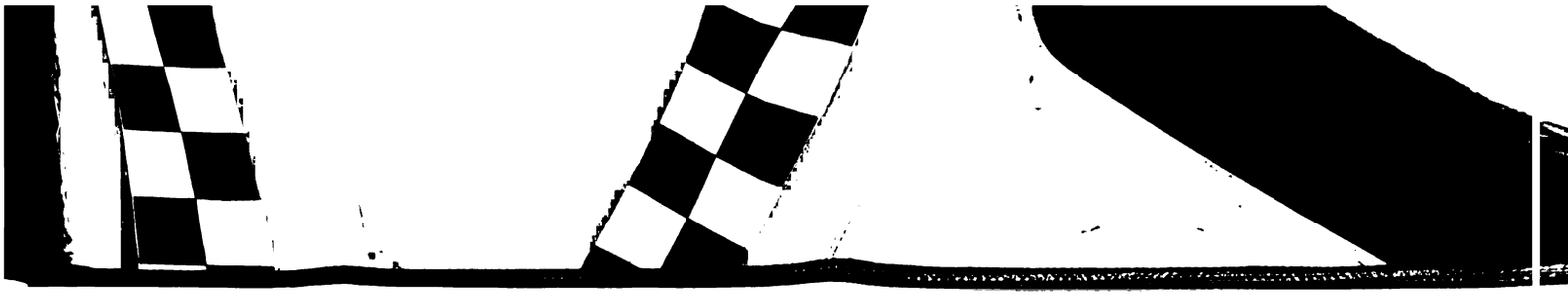


Table 8: Deviations of observed from expected correlations (internal consistency) for Burnout - Depersonalization

Item	1	2	4	5
1	.01			
2	-.02	.00		
4	-.01	.03	.00	
5	.03	.00	-.02	-.01

Average correlation: .39
Standard Error: .04

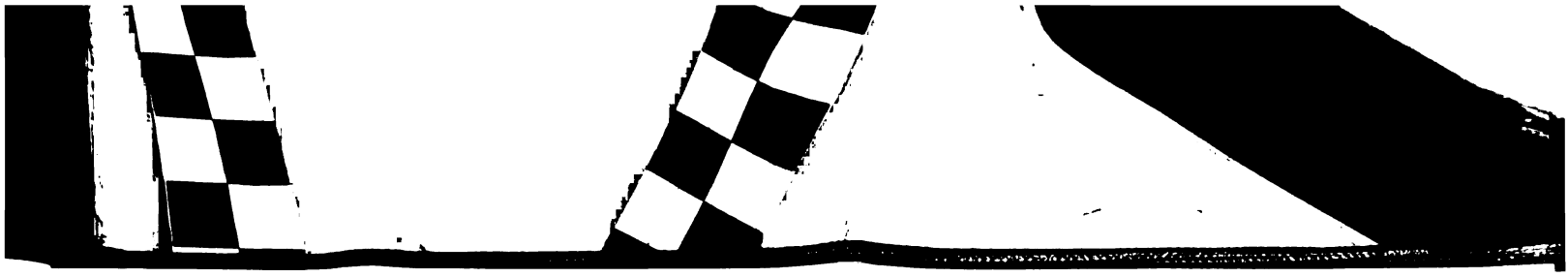


Table 9: Items and Factor Loadings for Burnout - Lack of Personal Accomplishment

Item	Content	Loading
PA 1	I can easily understand how patients feel about things.	.45
PA 2	I deal very effectively with problems of patients.	.66
PA 3	I feel I'm positively influencing other people's lives through my work.	.62
PA 4	I feel very energetic.	.44
PA 5	In my work I deal with emtional problems calmly.	.49
PA 6	I can easily create a relaxed atmosphere with patients.	.58
PA 7	I feel exhilarated after working closely with patients.	.53

Standard Score Alpha for factor = .74

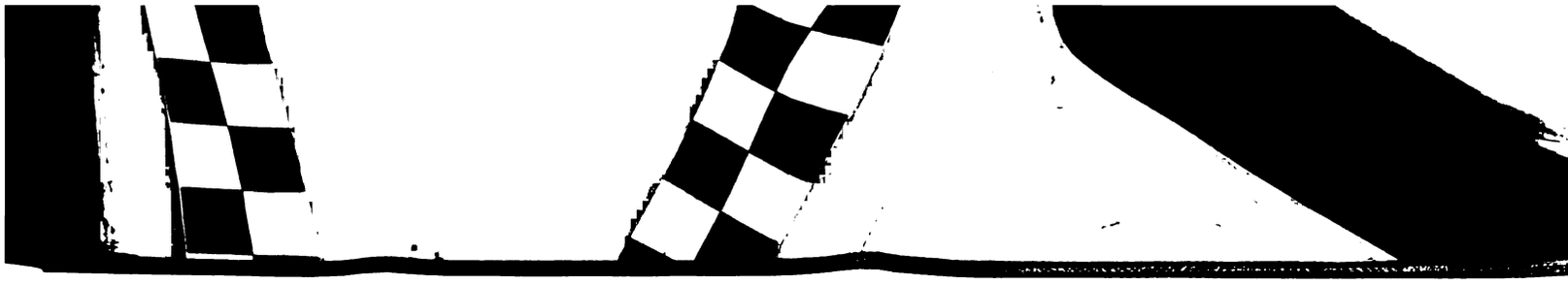


Table 10: Deviations of observed from expected correlations (internal consistency) for Burnout - Lack of Personal Accomplishment

Item	1	2	3	4	5	6	7
1	.00						
2	.03	.00					
3	.02	-.02	.00				
4	-.07	-.02	.02	.00			
5	.04	.01	-.02	.04	.00		
6	-.01	.02	-.04	.00	.01	.00	
7	.00	-.02	.05	.02	-.06	.02	.00

Average correlation: .29
Standard Error: .04

Table 11: Items and Factor Loadings for PERSONAL CONTROL

Item	Content	Loading
PC 5	How much control do you have over the arrangement of your work area?	.52
PC 6	How much control do you have over the decision concerning which individuals in your work unit do their tasks?	.71
PC 7	How much control do you have over the decisions as to when things will be done in your work unit?	.65
PC 8	How much do you control the policies, procedures and performance standards in your work unit?	.65
PC 9	How much control do you have over the training of other members of your work unit?	.60
PC 10	How much control do you have over the arrangement of work equipment in your work unit?	.74
PC 11	In general how much control do you have over work and work related factors?	.72

Standard Score Alpha for factor = .84

Table 12: Deviations of observed from expected correlations (internal consistency) for Personal Control

Item	5	6	7	8	9	10	11
5	.00						
6	.00	.00					
7	.03	.14*	.00				
8	-.02	-.02	-.06	.00			
9	-.06	-.02	-.04	.08*	.00		
10	.07	-.04	-.04	-.02	.03	.00	
11	-.01	-.04	-.03	.05	.02	.01	.00

Average Correlation: .43
Standard Error: .04

*Deviations greater than expected from sampling error

Table 13: Items and Factor Loadings for NURSE ASSERTIVENESS

Item	Content	Loading
NA 1	I inform the physician about changes in the treatment plan to achieve positive patient outcomes.	.65
NA 2	I clarify the scope of my professional experitse when it is greater than the physician thinks it is.	.72
NA 3	I actively participate in defining the nursing aspects of patient care plans and influence the medical care plan.	.69
NA 4	I suggest to physicians patient care approaches that I think would be useful.	.80
NA 5	I discuss with physicians areas of practice that residen more within the realm of nursing than medicine.	.60
NA 6	I tell physicians when, in my judgment their orders seem inappropriate.	.62
NA 8	I inform physicians about areas of practice that are unique to my nursing.	.71

Standard Score Alpha for factor = .86

Table 14: Deviations of observed from expected correlations (internal consistency) for Nurse Assertiveness

Item	1	2	3	4	5	6	8
1	.00						
2	.04	.00					
3	.01	.02	.00				
4	.05	-.04	.01	.00			
5	-.05	-.05	-.01	.04	.00		
6	-.02	-.01	-.03	-.02	.06	.00	
8	-.02	.03	-.01	-.03	.01	.02	.00

Average Correlation: .47
Standard Error: .04

Table 15: Items and Factor Loadings for ROLE AMBIGUITY

Item	Content	Loading
RA 1*	I feel certain about how much authority I have in my job.	.59
RA 3	There is a lack of policies and guideline to help me.	.41
RA 5	I have to "feel my way" in performing my duties.	.44
RA 6*	I know exactly what is expected of me.	.75
RA 7*	I am told how well I doing on my job.	.58
RA 8*	Explanations are clear of what has to be done on my job.	.72

Standard Score Alpha = .75

Table 16: Deviations of observed from expected correlations (internal consistency) for Role Ambiguity

Item	1	3	5	6	7	8
1	.00					
3	-.04	.00				
5	-.09*	.15*	.00			
6	.03	-.03	.01	.00		
7	.04	-.05	-.02	-.01	.00	
8	.05	-.03	-.05	.00	.03	.00

Average Correlation: .33
Standard Error: .04

*Deviations greater than expected from sampling error

Table 17: Items and Factor Loadings for PARTICIPATION IN DECISION MAKING

Item	Content	Loadings
PDM 1	I have influence or say regarding the physician's decisions about my patient's care.	.77
PDM 2	It is easy to get my ideas across to the physician if I have a suggestion.	.69
PDM 3	Physicians take my opinion into account in their decisions.	.76

Standard Score Alpha for factor = .79

Table 18: Deviations of observed from expected correlations (internal consistency) for Participation in Decision Making

Item	1	2	3
1	.00		
2	.00	.01	
3	.01	.00	.00

Average Correlation: .55
Standard Error: .03

Table 19: Items and Factor Loadings for INFORMATIONAL SUPPORT

Item	Content	Loading
Infosup 1	Explain how to get things done efficiently?	.42
Infosup 2	Inform you of potentially negative situations which may adversely affect you?	.65
Infosup 3	Give you helpful information about coworkers and/or supervisors?	.67
Infosup 4	Talk to you if you are confused about work related issues?	.61
Infosup 5	Explain the informal aspects of your position?	.68
Infosup 6	Inform you of potential resources?	.59
Infosup 8	Inform you of policies and decisions that may affect you?	.64

Standard Score Alpha for factor = .81

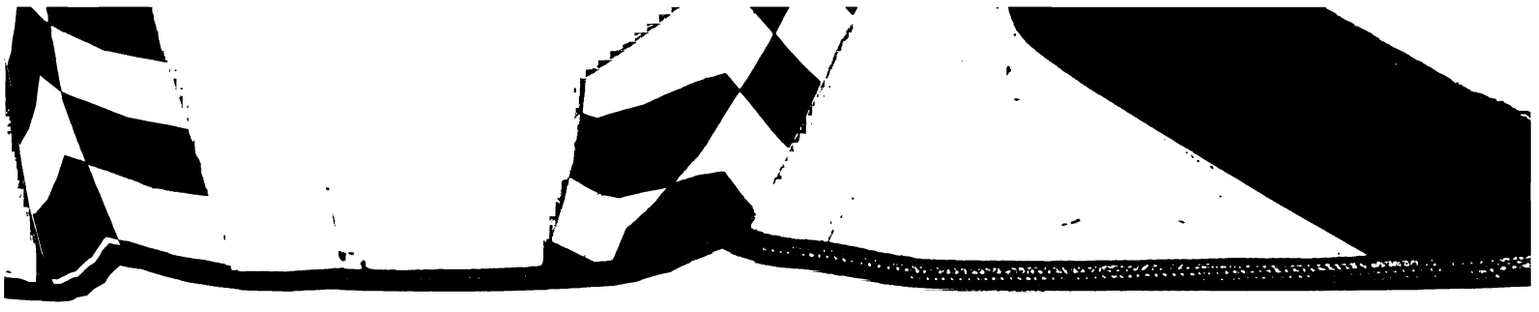


Table 20: Deviations of observed from expected correlations (internal consistency) for Informational Support

Item	1	2	3	4	5	6	8
1	.00						
2	.01	.00					
3	.01	.07	.00				
4	-.02	-.02	-.03	.00			
5	.02	-.02	-.01	.02	.00		
6	.02	-.06	-.04	.02	.03	.00	
8	-.05	.02	.00	.02	-.04	.04	.00

Average Correlation: .38
Standard Error: .04

Table 21: Items and Factor Loadings for INSTRUMENTAL SUPPORT

Item	Content	Loading
Ins 1	Come over and ask if you could use some help if you need assistance?	.77
Ins 2	"Pitch in" to get the job done?	.83
Ins 4	Help you with your job if you get overloaded?	.79

Standard Score Alpha for factor = .84

Table 22: Deviations of observed from expected correlations (internal consistency) for Instrumental Support

Item	1	2	4
1	.01		
2	.01	.00	
4	-.03	.03	.01

Average Correlation: .64
Standard Error: .02

Table 23: Items and Factor Loadings for EMOTIONAL SUPPORT

Item	Content	Loading
Emosup 1	Listen to you?	.67
Emosup 3	Encourage you to seek opportunities for growth?	.49
Emosup 4	Trust you and know you trust them?	.65

Standard Score Alpha for factor = .63

Table 24: Deviations of observed from expected correlations (internal consistency) for Emotional Support

Item	1	3	4
1	.00		
3	.00	.01	
4	.01	.00	.01

Average Correlation: .37
Standard Error: .04

Table 25: Items and Factor Loadings for EMPATHIC CONCERN

Item	Content	Loading
Emp 3	I often have tender concerned feelings for people less fortunate than me.	.63
Emp 4	I would describe myself as a soft hearted person.	.51
Emp 5	When I see someone being taken advantage of, I feel protective of them.	.48

Standard Score Alpha for factor = .56

Table 26: Deviations of observed from expected correlations (internal consistency) for Empathic Concern

Item	3	4	5
3	.00		
4	.01	.01	
5	.01	-.01	.01

Average Correlation: .29
Standard Error: .04

Table 27: Items and Factor Loadings for EMOTIONAL CONTAGION

Item	Content	Loading
Emn 3*	I don't get upset just because a friend is acting upset.	.41
Emn 4	I become nervous if others around me are nervous.	.67
Emn 5	I cannot continue to feeel OK if people around me worry.	.63
Emn 6*	I often find that I can remain cool in spite of the excitement around me.	.38
Emn 7	People around me have a great influence on my moods.	.56

Standard Score Alpha for factor = .66

Table 28: Deviations of observed from expected correlations (internal consistency) for Emotional Contagion

Item	3	4	5	6	7
3	.00				
4	-.07	.00			
5	-.04	.03	.00		
6	.08	.01	-.01	.00	
7	.03	.03	.02	-.08	.00

Average Correlation: .28
Standard Error: .04

Table 29: Items and Factor loadings for COMMUNICATIVE RESPONSIVENESS

Item	Content	Loading
CR 1	Others think of me as a very empathic person.	.46
CR 2	I am the type of person who can say the right thing at the right time.	.35
CR 3	I usually have a knack for saying the right thing to make patients feel better when they are upset.	.68
CR 4	I usually respond appropriately to the feelings and emotions of patients.	.55

Standard Score Alpha for Factor = .65

Table 30: Deviations of observed from expected correlations (internal consistency) for Communicative Responsiveness.

Item	1	2	3	4
1	.00			
2	-.03	.00		
3	-.03	.07	.00	
4	.06	-.03	-.03	.01

Table 31: Descriptive Statistics for Variables

Variable	Mean	Standard Deviation	N
Organizational Commitment	2.943	.305	470
Intent to Remain	3.465	.885	474
Personal Control	2.463	.775	480
Emotional Support	3.618	.540	483
Instrumental Support	3.766	.665	484
Informational Support	3.224	.551	454
Participation in Decision Making	3.354	.604	486
Role Ambiguity	2.567	.613	483
Nurse Assertiveness	3.203	.734	454
Communicative Responsiveness	3.732	.462	483
Emotional Contagion	2.659	.602	480
Empathic Concern	3.902	.538	486
Emtional Exhaustion	2.601	.746	471
Depersonalization	2.292	.710	473
Lack of Personal Accomplishment	2.285	.409	473

Table 32: Uncorrected correlations among the variables

	EC	OC	RT	PC	ES	IS	PDM
EC	1.000						
OC	-.0896	1.000					
RT	-.0634	.4699**	1.000				
PC	-.0955	.2360**	.2184**	1.000			
ES	-.0183	.1467**	.1566**	.3131**	1.000		
IS	.0118	.0925	.0561	.2280**	.5693**	1.000	
PDM	-.1605**	.0922	.0939	.2878**	.2868**	.2103**	1.000
RA	.1077*	-.1997**	-.2607**	-.2566**	-.2961**	-.3055**	-.2370**
IF	-.0489	.1174*	.0979	.3466**	.6845**	.6073**	.2933**
NA	-.1814**	.1066	.0560	.3123**	.2443**	.0745	.5234**
CR	-.2018**	.1311*	.1377*	.1458**	.1829**	.0075	.2611**
EN	.0837	-.0162	.1026	.0267	.0928	.0203	.0893
EE	.2127**	-.2661**	-.4254**	-.2912**	-.2397**	-.2969**	-.2001**
DP	.2336**	-.1581**	-.2606**	-.2150**	-.1600**	-.1771**	-.1359*
PA	.2445**	-.1538**	-.2914**	-.2569**	-.2535**	-.0916	-.3138**

	RA	IF	NA	CR	EN	EE	DP	PA
RA	1.000							
IF	-.3615**	1.000						
NA	-.0731	.2081**	1.000					
CR	.2611**	-.1429**	.2540**	1.000				
EN	-.0723	.0712	.0635	.3576**	1.000			
EE	.3711**	-.2551**	-.1249*	-.1572*	.0030	1.000		
DP	.1600**	-.1691**	-.0710	-.3033**	-.1015	.5296**	1.000	
PA	.1734**	-.2170**	-.3616**	-.5233**	-.2788**	.3905**	.4467**	1.0

KEY: EC=Emotional Contagion
OC=Organizational Commitment
RE=Retention
PC=Personal Control
ES=Emotional Support
IS=Istrumental Support
PDM=Participation In Decision Making
RA=Role Ambiguity
IF=Informational Support
NA=Nurse Assertiveness
CR=Communicative Responsiveness
EN=Empathic Concern
EE=Emotional Exhaustion
DP=Depersonalization
PA=Lack of Personal Accomplishment

**Significant p < .01
* Significant p < .05

Table 33: Corrected correlations among variables

	EC	OC	RT	PC	ES	IS	PDM
EC	1.000						
OC	-.12	1.00					
RT	-.09	.58**	1.00				
PC	-.13	.28**	.27**	1.00			
ES	-.03	.20**	.23**	.43**	1.00		
IS	.02	.11	.07	.27**	.78**	1.00	
PDM	-.22**	.11	.12	.35**	.41**	.26**	1.00
RA	.15	-.25**	-.35**	-.32**	-.43**	-.38**	-.31**
IF	-.07	.14*	.12	.42**	.96**	.74**	.37**
NA	-.24**	.12	.07	.37**	.33**	.09	.64**
CR	-.31**	.17*	.20**	.20**	.29**	.01	.36**
EN	.14	-.02	.16	.04	.16	.03	.13
EE	.28**	-.31**	-.53**	-.34**	-.33**	-.35**	-.24**
DP	.34**	-.20**	.35**	-.28**	-.24**	-.23**	-.18*
PA	.35**	-.19**	-.39**	-.33**	-.37**	-.12	-.41**

	RA	IF	NA	CR	EN	EE	DP	PA
RA	1.00							
IF	-.46**	1.00						
NA	-.09	.25**	1.00					
CR	-.20**	.19*	.34**	1.00				
EN	-.11	.11	.09	.59**	1.00			
EE	.46**	-.31**	-.15*	-.21**	.00	1.00		
DP	.22**	-.22**	-.09	-.44**	-.16	.67**	1.00	
PA	.23**	-.28**	-.45**	-.75**	-.43**	.49**	.61**	1.00

KEY: EC=Emotional Contagion
OC=Organizational Commitment
RT=Retention
PC=Personal Control
ES=Emotional Support
IS=Instrumental Support
PDM=Participation in Decision Making
RA=Role Ambiguity
IF=Informational Support
NA=Nurse Assertiveness
CR=Communicative Responsiveness
EN=Empathic Concern
EE=Emotional Exhaustion
DP=Depersonalization
PA=Lack of Personal Accomplishment

**Significant p <.01
* Significant p <.05

Figure 1. Path Analytic Model for Outcome Variables

DP .44
EE -.27 OC .47 RT
PA .19

KEY: DP = Depersonalization
PA = Lack of Personal Accomplishment
EE = Emotional Exhaustion
OC = Organizational Commitment
RT = Retention

The average sum of the squared errors is .018
chi square=77.31 with 5 df
goodness of fit index=.945
adjusted goodness of fit index=.835
critical N=144.64

Figure 2. Path Analytic Model for Nurse/Patient Communication

KEY:
EMOT = Emotional Contagion
EMP = Empathic Concern
CR = Communicative Responsiveness
DP = Depersonalization
PA = Lack of Personal Accomplishment
EE = Emotional Exhaustion
OC = Organizational Commitment

The average sum of the square errors is .005
chi square=52.59 with 12 df
goodness of fit index=.971
adjusted goodness of fit index=.931
critical N = 212.63

Original Scales

Empathic Concern

1. When I see someone being taken advantage of, I feel kind of protective toward them.
2. When I see someone being treated unfairly, I sometimes don't feel much pity for them.
3. I often have tender, concerned feelings for people less fortunate than me.
4. I would describe myself as a pretty soft-hearted person.
5. I am often touched by the things that I see happen.

Emotional Contagion

1. I often find that I can remain cool in spite of the excitement around me.
2. I tend to remain calm even though those around me worry.
3. I cannot continue to feel OK if people around me are depressed.
4. I don't get upset just because a friend is acting upset.
5. I become nervous if others around me are nervous.
6. The people around me have a great influence on my moods.

Communicative Responsiveness

1. I usually have a knack for saying the right thing to make people feel better when they are upset.
2. I usually respond appropriately to the feelings and emotions of others.
3. Others think of me as a very empathic person.
4. I am the type of person who can say the right thing at the right time.

Participation in Decision Making

1. I have influence or say regarding the physician's decisions about my patient's care.

2. I have influence on the decisions of the physician regarding the things about which I am concerned with the patient.

3. It is easy to get my ideas across to the physician if I have a suggestion.

Nurse Assertiveness

1. I inform the physician about changes in the treatment plan to achieve positive patient outcomes.

2. I clarify the scope of my professional expertise when it is greater than the physician thinks it is.

3. I actively participate in defining the nursing aspects of the patient care plan and influencing the medical care plan.

4. I suggest to physicians patient care approaches that I think would be useful.

5. I discuss with physicians areas of practice that reside more within the realm of medicine than nursing.

6. I tell physicians when, in my judgment, their orders seem inappropriate.

7. I tell physicians of any difficulties I foresee in the patient's ability to deal with treatment options and their consequences.

8. I inform physicians about areas of practice that are unique to my nursing.

Nurse/Nurse Communication

How often do other nurses:

Informational Support

1. Explain how to get things done efficiently?

2. Explain the informal aspects of your position?
3. Will inform you of policies and decisions that may affect you?
4. Inform you about important but unstated aspects of your position?
5. Inform you of potentially negative situations which may adversely affect you?
6. Give you advice if you need it?
7. Give you helpful information about other coworkers and/or supervisors?
8. Inform you of potential resources?
9. Inform you of the unwritten laws of the work environment?
10. Talk to you if you are confused about things?

Emotional Support

Are other nurses...

1. Willing to listen to you?
2. Fair in his/her assessment of you?
3. Has faith in your abilities?
4. Concerned that you reach your goals?
5. Trust you and know you trust them?
6. Encourages you to seek opportunities for growth?

Instrumental Support

Do other nurses..

1. Help you with your job if you get overloaded?
2. Switch work schedules (vacation times) with you if you need special time off?
3. "Pitch in" to get the job done?
4. Come over and ask if you could use some help if you needed assistance?

Burnout

Depersonalization

1. I feel I treat some patients as if they were impersonal "objects".

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

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

4. I really don't care what happens to some patients.

Lack of Personal Accomplishment

1. I deal very effectively with the problems of patients.
2. I feel I'm positively influencing other people's lives through my work.
3. I can create a relaxed atmosphere with patients.
4. I feel exhilarated after working with patients.
5. In my work, I deal with emotional problems calmly.

Emotional Exhaustion

1. I feel used up at the end of the workday.
2. I feel fatigued when I get up in the morning and have to face another day.
3. I feel emotionally drained from my work.
4. Working with people all day is really a strain for me.
5. I feel burned out from my work.
6. I feel frustrated by my job.
7. Working directly with people puts too much stress on me.
8. I feel like I'm at the end of my rope.
9. I feel like I'm working too hard on my job.

Organizational Commitment

1. I am willing to put in a great deal of effort beyond that normally expected to help Butterworth be successful.
2. I talk up this hospital to my friends as a great organization to work for.
3. I feel very little loyalty to this hospital. (Reverse Code)
4. I find that my values and the values of this hospital are very similar.
5. I am proud to tell othes that I am part of this hospital.

6. I could just as well be working for a different hospital as long as the type of work was similar.

7. This hospital really inspires the very best of me in the way of job performance.

8. There is not too much to be gained by sticking with this hospital indefinitely.

9. Often I find it difficult to agree with this hospital's policies on important matters relating to employees.

10. I really care about the fate of this hospital.

11. For me, this hospital is the best of all possible hospitals for which to work.

12. Deciding to work for this hospital was a definite mistake on my part.

Intent to Remain

1. It would take very little change in my present circumstances to cause me to change my occupation.

2. I often look for jobs outside this hospital.

3. I would like to remain at this hospital for as long as possible.

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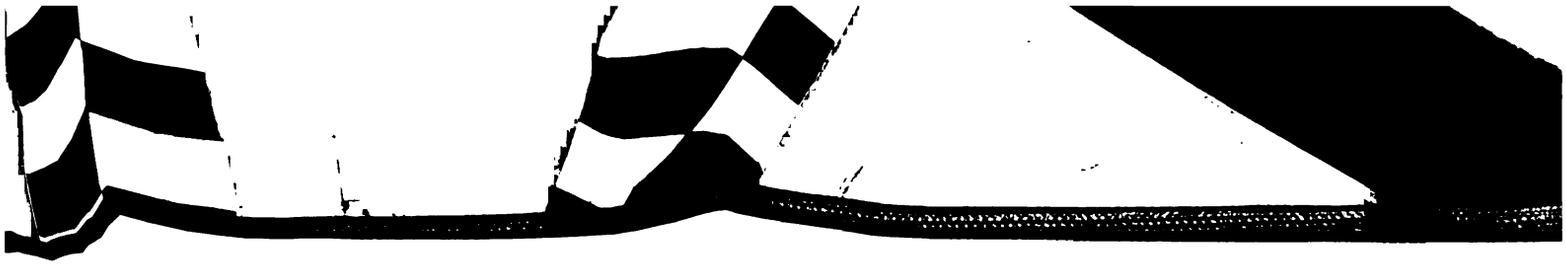

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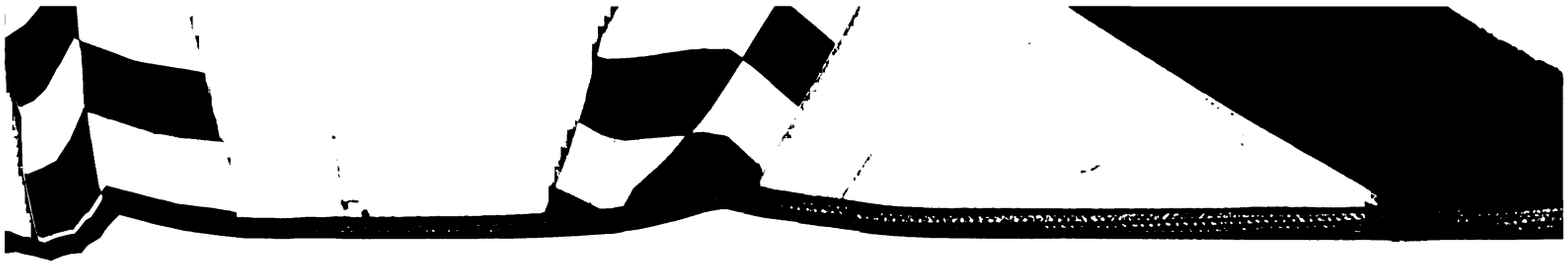

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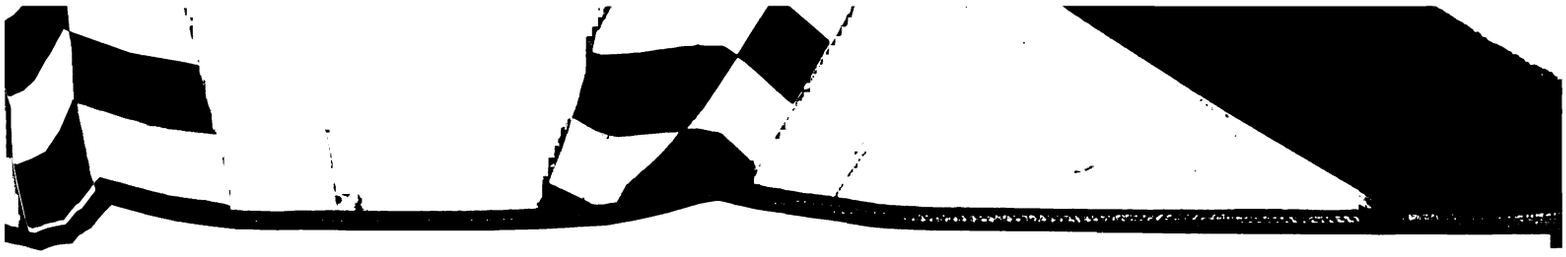

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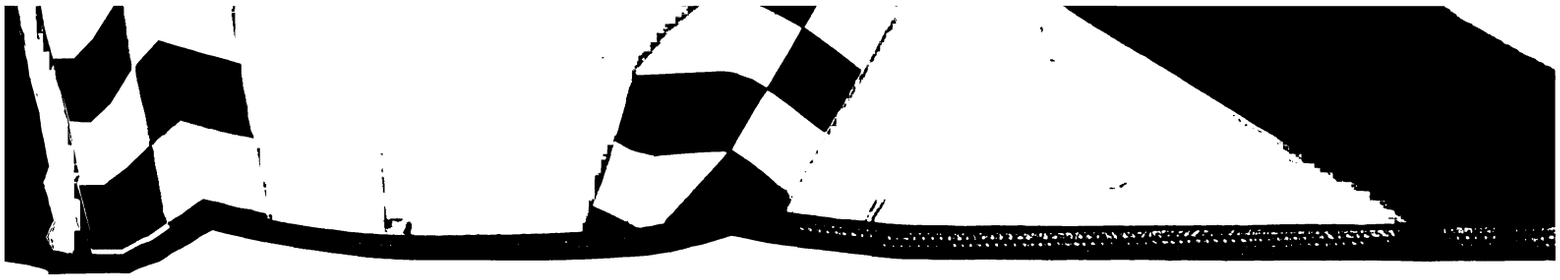

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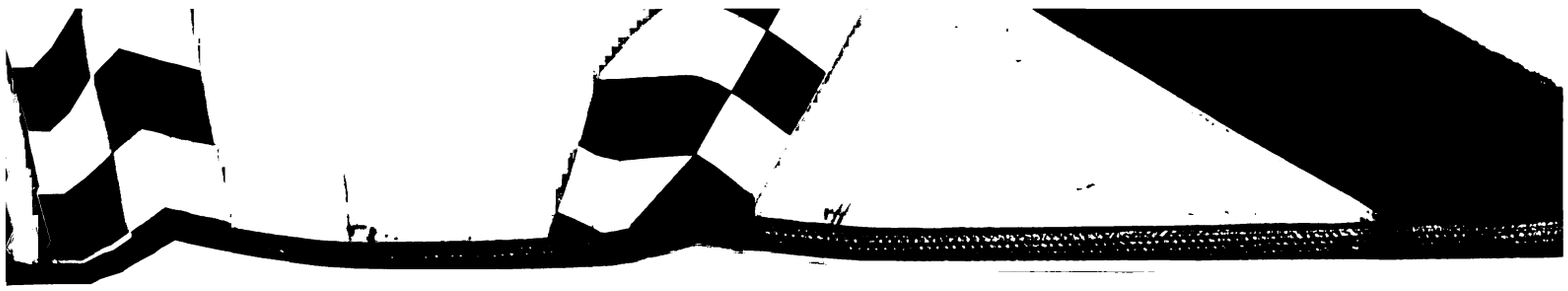

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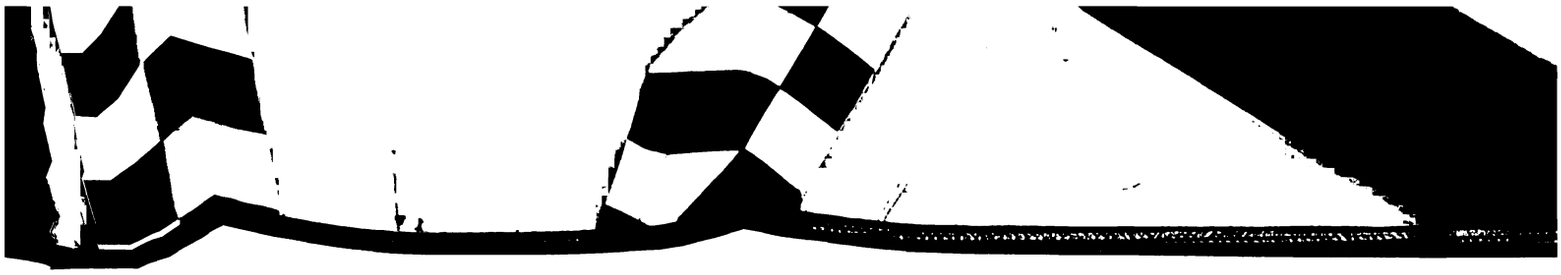

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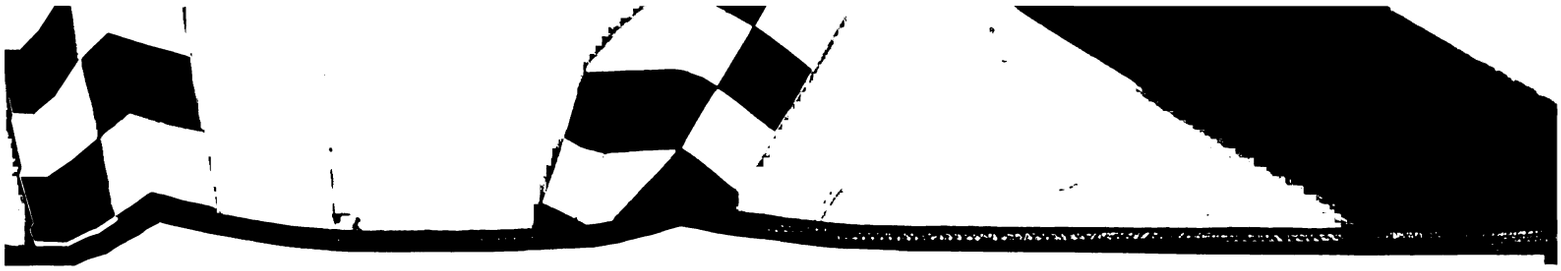

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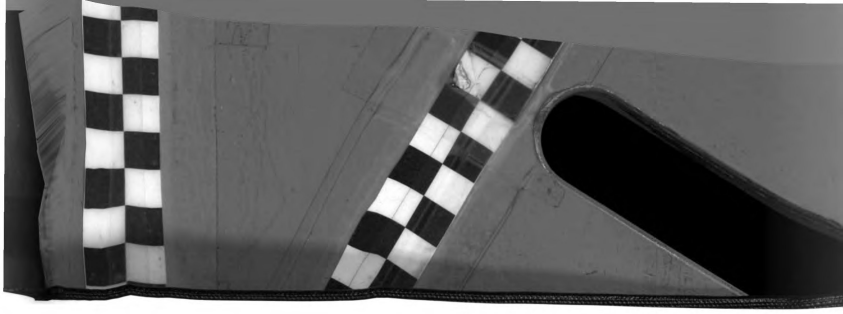

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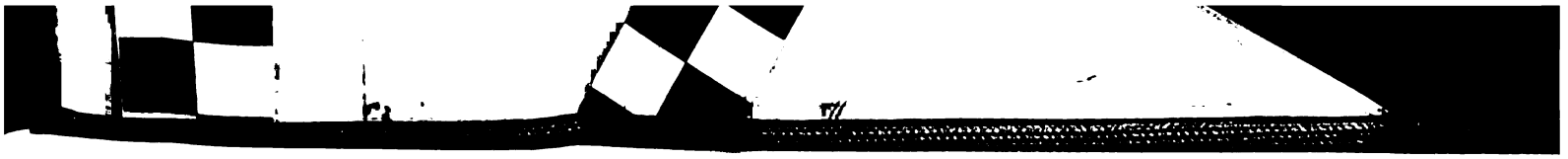


Appendices

MICHIGAN STATE UNIVERSITY

COLLEGE OF COMMUNICATION ARTS AND SCIENCES
DEPARTMENT OF COMMUNICATION

EAST LANSING · MICHIGAN · 48824-1212

APPENDIX A
24 November 1989

Lynne Grinwis
Unit Manager
Butterworth Hospital

Dear Lynne:

Attached is a list of nurses from your unit who were randomly selected from a list of all nurses at Butterworth to participate in the nurse communication focus group interviews. Also attached is a an example of a letter that has been sent to each nurse informing him/her of the nature of the study. These selected nurses have been asked to call Shirley Muir in Staff Development to schedule an interview time.

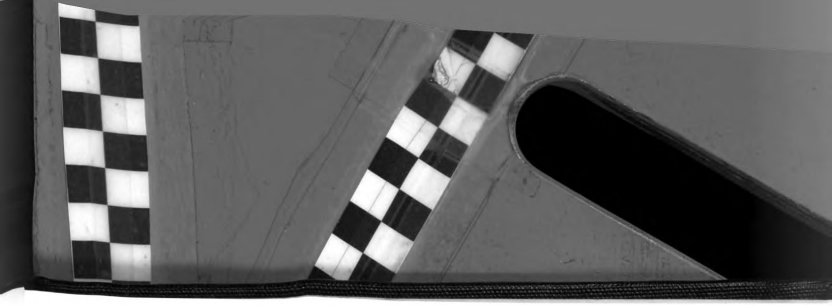
I would appreciate your help in the following manner: please encourage your nurses to call Shirley as soon as possible and to attend the focus group interviews.

I will send you a letter indicating names and times of those nurses who are participating.

Thank you for your help.

Sincerely,

Beth Hartman Ellis



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APPENDIX B

24 November 1989

Dear

Nurse/physician communication, nurse/patient communication, as well as your communication with other nurses has become a highly recognized and critical component of acute health care delivery. I am a Ph.D. candidate in the Departmen of Communication at Michigan State University and am conducting research into these patterns of communication between health care professionals. The Vice-President of Nursing, the Nurse Executive Council and the TRENDS Committee of Butterworth Hospital are supporting this dissertation research.

The first part of this research involves focus group interviews. You have been randomly selected from a list of all nurses at Butterworth to participate in these interviews. Your participation will serve two purposes: (1) transcripts from all focus group interviews will help me to better understand the communication problems of nurses, and (2) your input regarding, for example, communication problems between physicians and nurses, is necessary to help in the development of a scale to measure this (and other) concepts.

Butterworth Hospital is very interested in pursuing research regarding nurse/physician communication as well as other issues related to this research. **Thus, your input could be extremely instrumental and valuable for you at the hospital.**

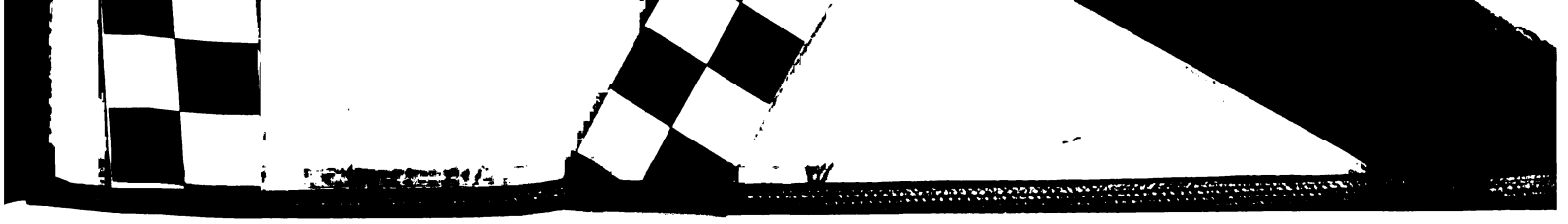
This project will be conducted on work time. Unit Managers will recieve a list of people who have been selected for the focus group interviews, and will support your involvement and participation. The interviews will be completely confidential; I will be the only person listening to the tape recordings (audio only) of the discussions.

To participate in a focus group interview, please call Shirley Muir in the Staff Development Office at 774-1527. Interviews will be held in the 5 South Classroom from December 13 - 17 with morning, evening, and night times available.

Your participation is vital to this research project. Thank you for your help.

Sincerely,

Beth Hartman Ellis
Ph.D. Candidate, MSU



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Appendix C

June 4, 1990

Dear Butterworth Nurse:

The enclosed survey is part of a study being conducted by researchers at Michigan State University. We are interested in nurses' relationships with other nurses, patients, and physicians and how these relationships influence issues such as work stress, retention, and job satisfaction.

We would greatly appreciate your help in filling out this survey. We know your schedule is hectic, but your honest responses to these questions will provide valuable information for the nursing profession and for Butterworth Hospital. Your responses will be anonymous and held in strictest confidence by the Michigan State researchers.

A report of the survey will be available to each respondent, if desired, after the results are completed. Additionally, the principal investigator will be available for presentations to interested groups on more specific analyses and results of the study.

Please return your confidential and anonymous survey in the enclosed envelope to your nurse manager. If you'd like, you can simply push the sealed envelope under the door of your nurse manager's office. All of the surveys will remain in their sealed envelopes until they are in the hands of the researchers.

Again, thanks for your cooperation with this research project. If you have any questions or concerns, please feel free to call Beth Ellis in Grand Rapids at 455-2586 or Katherine Miller in East Lansing at 517-355-1888.

Sincerely,

Beth Hartman Ellis
Ph.D. Candidate

Katherine Miller
Assistant Professor

Encl.