

NURSE JOB SATISFACTION AND PATIENT SATISFACTION  
IN THE EMERGENCY DEPARTMENT

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COLLEGE OF NURSING

BY

JUDITH K. WALSH, RN, MS

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DENTON, TEXAS

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TEXAS WOMAN'S UNIVERSITY  
DENTON, TEXAS

October 30, 1998

Date

To the Associate Vice President for Research and Dean of the Graduate School:  
I am submitting herewith a dissertation written by

Judith K. Walsh, RN, MS

entitled NURSE JOB SATISFACTION AND PATIENT SATISFACTION IN THE  
EMERGENCY DEPARTMENT

I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Nursing.

Margaret L. Beal

Major Professor

We have read this dissertation  
and recommend its acceptance:

Marilyn Kashka

Lellen A. Bush

Accepted:

Leslie M. Thompson

Associate Vice President for  
Research and Dean of the  
Graduate School

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# NURSE JOB SATISFACTION AND PATIENT SATISFACTION IN THE EMERGENCY DEPARTMENT

## ABSTRACT

Judith K. Walsh, RN, MS

Texas Woman's University  
College of Nursing  
December, 1998

The study investigated the relationship between nurses' job satisfaction and patients' satisfaction with nursing care in a private for-profit and a private not-for-profit emergency department (ED) in the Southwestern United States. Nurses' intent to remain with the institution and patients' intent to return or to recommend the ED were additional aspects of the study. An availability sample included 41 emergency nurses and 140 patients. Two established satisfaction instruments (Index of Work Satisfaction and Consumer Emergency Care Satisfaction Scale) in addition to a researcher-developed demographic form were used for data collection.

The theoretical framework was based on Maslow's (1970) Hierarchy of Human Needs Theory and Vroom's (1964) Expectancy Theory. The theoretical propositions derived from the framework were as follows. When nurses' expectations are met and job satisfaction occurs, nurses are more likely to remain with the institution. When patients' expectations are met and satisfaction occurs, patients are more likely to return and to

recommend the institution. When nurses indicate job satisfaction, patients are more likely to be satisfied.

Hypotheses one and two were analyzed using descriptive statistics and hypotheses three and four were analyzed using 2-Way Analysis of Variance. Patients at both hospitals reported high levels of satisfaction with nursing care. No relationship was found between nurses' job satisfaction and patients' satisfaction irrespective of hospital type.

No significant difference was found between patients' satisfaction scores in the two hospitals. Patients who stated their intent to return or to recommend the ED reported higher levels of satisfaction with nursing care than patients who do not intend to return or to recommend. The majority of patients at both hospitals intend to return for future health care and to recommend the ED to family and friends.

All nurse job satisfaction components were below the 50th quartile indicating job dissatisfaction. Yet, the majority of nurses expressed their intent to remain with the institution. No relationship was found between nurses' job satisfaction, hospital type, and intent to remain with the institution. Findings indicated nurses' satisfaction scores were low irrespective of nurses' intent to remain with the institution.

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## CHAPTER 1

### INTRODUCTION

As the 21<sup>st</sup> century approaches, survival of for-profit and not-for-profit health care institutions will depend on the ability to attract and retain patients. In addition to cost, competition between health care institutions will be based on quality of care and performance as measured by patient satisfaction. Patient satisfaction has become a value-added commodity. Low level of patient satisfaction is critical because dissatisfaction may lead to patient loss and decreased revenue. Patients' dissatisfied with one aspect of care may be reluctant to utilize other health care services within an institution. In contrast, satisfied patients are more likely to return for future health care needs and to recommend the health care institution to family and friends (Bell, Krivich, & Boyd, 1997; Bendall & Powers, 1995; Greeneich, 1993).

Drucker (1998) asserted that non-customers are as important as current customers due to their potential as customers. Therefore, management must be in touch with the outside world in order for the organization to grow and survive. Drucker called for a paradigm shift suggesting management ask, "What does the other party want? What are its values . . . its goals? What does it consider results?" (p. 166). Drucker continued by stating that "value to the customer is always something fundamentally different from what is value or quality to the supplier" (p. 169). Drucker maintained this belief is applicable to a business, university, or hospital.

Patients perceive a hospital from a distinct position because they view the institution as a complementary agency rather than a mix of individual departments. Intrinsic to the setting is the patient's subjective evaluation affecting overall feelings of satisfaction with health care received in the institution (Bell et al., 1997). The patient's first exposure to a hospital is frequently the emergency department (ED). Inguanzo and Harju (1985) stated "emergency care is the form of treatment that most consumers associate with a particular hospital" (p.64). Clark, Pokorny and Brown (1996) stressed that no other hospital staff encounters more consumers than the ED staff. One predominant reason for this exposure is due to the rapid increase of individuals utilizing the ED for primary care for non-acute health problems in addition to more serious medical situations.

In a study with 9,000 ED patients in 23 health care institutions, Press, Ganey Associates determined interpersonal issues related to nursing and general staff the most important factors in patient satisfaction. Nursing and staff interpersonal issues were significantly higher than either physician or waiting time factors. This finding is not surprising because the ED nurse is usually the first and last ED representative to interact with the patient (Hall, 1996). Also, the nurse spends more time interacting with the patient than any other ED personnel (Bader, 1988; Hall, 1996).

The link between employee satisfaction and patient satisfaction and its effect on repeat business has become a new concern to health care administrators. Donabedian (1980) suggested that job satisfaction of health care employees influences employee

performance and ultimately, patient satisfaction. Considering the amount of time the ED nurse interacts with the patient, nurses' job satisfaction may significantly affect patient satisfaction. A recent study by Atkins, Marshall, and Javalgi (1996) reinforced this belief. They found a significant relationship between nurses' job satisfaction, patients' satisfaction, and patients' intent to return or to recommend the health care institution. In addition to the influence on patients' satisfaction, nurses' job satisfaction may affect nurses' intent to remain with the institution.

Although numerous studies on nurses' job satisfaction have been conducted, many studies found nurses only moderately satisfied or dissatisfied with their job. Results also indicated a relationship between nurses' job dissatisfaction and intent to seek employment elsewhere. However, no studies were located in the literature that investigated the relationship between nurses' job satisfaction and patients' satisfaction in private for-profit and private not-for-profit health care institutions. There were also no studies located which investigated nurses' behavioral intent to remain with the institution and patients' behavioral intent to return or to recommend the institution in private for-profit and private not-for-profit health care institutions.

### Problem of Study

The problem of study was to investigate the relationship between (a) nurses' job satisfaction and patients' satisfaction with nursing care, (b) nurses' job satisfaction and intent to remain with the institution, (c) patients' satisfaction and patients' intent to return for future health care needs, and (d) patients' satisfaction and patients' intent to

recommend the emergency department to family and friends in a private for-profit and a private not-for-profit health care institution.

### Rationale for the Study

Rationale for the study was based on two premises. First was the need for more systematic studies relating nurses' job satisfaction to patients' satisfaction. Limited research studies but with conflicting results were located in the literature. No studies were located which investigated the relationship between ED nurses' job satisfaction and patients' satisfaction in the two types of hospitals. Some studies tested the influence of nurses' job satisfaction on behavioral intent to remain with the institution and patients' behavioral intent to return or to recommend the health care institution. The second premise was the importance and affect of patient satisfaction on the patient, nurse, and institution.

In a study with 719 medical-surgical discharged patients, Atkins et al. (1996) found a strong relationship between nurses' job satisfaction and patients' satisfaction. A strong positive relationship was also found between nurses' job satisfaction and patients' intent to return or to recommend the institution for future health care needs. Atkins et al. asserted it is vital that marketing strategies monitor nurses' job satisfaction in the attempt to establish a reliable and stable patient base.

In contrast, Campbell (1996) questioned whether nurses' job satisfaction influenced patients' satisfaction in a study with 40 registered nurses and 40 hospitalized medical-surgical patients. Although nurses' job satisfaction scores indicated moderate

satisfaction and patients' satisfaction scores indicated satisfaction with nursing care, no relationship was found between nurses' job satisfaction and patients' satisfaction.

In two studies with 357 nurses, Johnston (1991, 1997) investigated nurses' job satisfaction. In both studies, all variables were below the 50th percentile indicating job dissatisfaction. Dissatisfaction job scores were also reported by Fung-kam (1998) and Tumulty, Jernigan, and Kohut (1994).

The second premise addressed patients' satisfaction with nursing care. Patient satisfaction demands quality health care from providers (Bartlett, 1997). Press, Ganey, and Malone (1992) viewed patient satisfaction as the "most global and versatile index of overall hospital quality . . . and is a cost-effective, non-invasive indicator of outcome" (p. 8). Vuori (1987) asserted "patient satisfaction is an attribute of quality per se . . . without it there can not be good care" (p. 108).

Irwin Press, co-director of Press, Ganey Associates, the nation's largest customer satisfaction measurement firm in the health care industry, reported results of a recent survey of more than one million patients which indicated "interpersonal issues such as attitude, interactive skills and caring behavior dominate the factors most closely associated with the patient's overall satisfaction with a hospital and the likelihood of recommending it to others" ("One Million Patients", 1997, p. 1). Along the same lines, a survey conducted by Lewis and Woodside (1992) of ED patients revealed that although patients expect technical competence, a positive attitude was the most sought-after commodity.



Health care institutions are acknowledging the importance of patient satisfaction in relationship to the institution's long-term success (Batrach & Domerchie, 1995). Swan, Sawyer, Van Matre and McGee (1985) stated that “patients who use the hospital are prime prospects for future visits, provided the patients have been satisfied with the services received” (p. 7). Batrich and Domerchie reported on a community hospital that competes with neighboring hospitals for patients and stated 65% to 75% of their inpatient admissions result from ED patients. The hospital recognized patient satisfaction was paramount in maintaining their success as a health care provider because the ED presents “a unique window to the community and an opportunity to establish, maintain, and improve the entire hospital's reputation as a caring, competent, and customer focused health care provider” (p. 132). Because satisfaction with nursing care has been found crucial to overall patient satisfaction with hospital care and intent to return or to recommend a health care institution, nurses are the key to patients’ satisfaction because nurses are the hospital’s primary ambassadors and front-line emissaries (Abramowitz, Coté, & Berry, 1987). Atkins et al. (1996) also proposed that fundamental to patients’ satisfaction is nurses’ job satisfaction and retention of satisfied nurses.

Because of the importance of the nurse-patient encounter, it was proposed that a critical aspect in the ability to remain competitive by attracting and retaining patients is promotion of patients’ satisfaction with nursing care while undergoing treatment in the ED. It is imperative that health care administrators are cognizant of expectations not only of patients but also of nurses who play a vital role in the ED. The present study was

developed because of lack of findings which investigated the relationship between nurses' job satisfaction and patients' satisfaction with nursing care.

### Theoretical Framework

The theoretical framework of this investigation was based on Maslow's (1970) Hierarchy of Human Needs Theory and Vroom's (1964) Expectancy Theory. The concepts of nurses' job satisfaction and patients' satisfaction with nursing care are both based on fulfillment of needs and expectations. A theoretical model identifying the relationship between expectations, satisfaction, and behavioral intent is depicted in Figure 1.

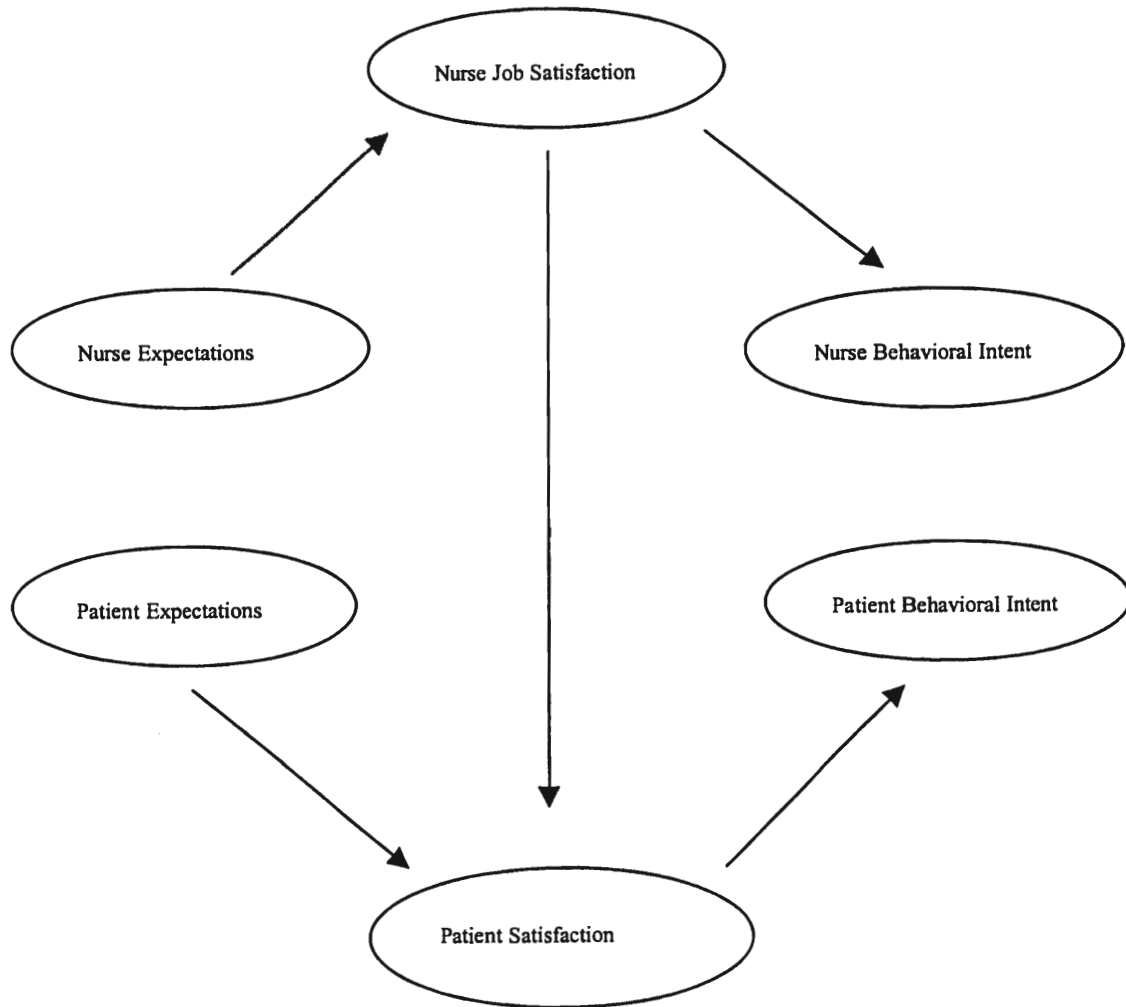


Figure 1. Expectations, Satisfaction, and Behavioral Intent

The theoretical model has three constructs with connecting paths. The constructs expectations, satisfaction, and behavioral intent, and their concept representation are listed in Table 1.

Table 1

Constructs and Concept Representation

Construct	Concept Representation
Nurse Job Expectations/Satisfaction	Autonomy Pay Professional Status Interaction Task Requirements Organizational Policies
Patient Expectations/Satisfaction	Caring Teaching
Nurse Behavioral Intent	Intent to Remain with Institution
Patient Behavioral Intent	Intent to Return or Recommend Institution

An individual is an integrated, organized whole. When motivated, the entire individual responds. When satisfaction is received, the entire individual receives satisfaction (Maslow, 1970). Maslow determined needs are the motivating stimuli in the quest for equilibrium and well-being. Successful achievement of needs becomes the driving force for behavior. Identification of needs and resulting behavior may be external or internal. In the attempt to satisfy needs, behavior may be conscious or unconscious.

Maslow's (1970) Hierarchy of Human Needs Theory identified a hierarchy of needs

in which lower level needs must usually be met before upper level needs. The first level is physiological and includes oxygen, food, and water. When relatively met, the next level safety emerges which includes security and stability. The third level is belonging and love in which the individual seeks affection and meaningful relationships. Self-esteem is the fourth level in which the individual strives for self-respect and respect from others. The final stage is self-actualization in which an individual seeks to reach maximum potential.

Integrating into the profession of nursing can be adapted to Maslow's (1970) Hierarchy of Human Needs Theory if conceptualized as the pursuit of self-actualization. Through identification of needs, an individual attempts to satisfy lower level needs first. In the quest for higher level needs, an individual seeks to satisfy self-esteem and self-actualization needs. Achievement of higher level needs frequently occurs in the workplace. Maslow's theory allows for individual perception of variables relevant to job satisfaction and self-actualization. When needs are achieved, the registered nurse attempts to fulfill the quest for self-actualization. Satisfaction is reached when a person is engaged professionally in what the individual is educated to do.

Maslow's (1970) Hierarchy of Human Needs Theory was appropriate in addressing patient satisfaction because basic needs represent patient expectations while seeking health care. Maslow identified expectations as cognitive and affective.

Vroom's (1964) Expectancy Theory provided further theoretical support for the study. Job expectations determine needs an employee desires in a job. Job satisfaction is

the corresponding fit of needs and expectations to job characteristics. The subjective perception of satisfaction of job expectations measured by specific job characteristics determines the degree of job satisfaction.

A worker's job behaviors imply a direct association between the job and job expectations. An individual's resulting job behaviors are due to choices between work consequences and anticipation that behavior will achieve these expectations. The individual's resulting behavior will attempt to optimize gratification of positive consequences and diminish negative consequences (Vroom, 1964).

Vroom (1964) concluded behavior is motivated by expectations. When one must make a choice among alternative expectations, behavior results not only from preference but by the possibility of achievement among choices. Job satisfaction is directly associated with the attainment of expectations. Achievement of expectations may predict future conduct such as the decision to remain or resign from the organization.

Expectancy Theory based on need fulfillment was appropriate to utilize in measurement of individual perception of variables relevant to nurses' job satisfaction. This allowed for determination and measurement of nurses' job expectations important for job satisfaction.

Vroom's Expectancy Theory was appropriate in addressing patient satisfaction because behavior and motivation "transcends the boundaries of applied fields" (1964, p. 5). Regardless of the situation, beliefs or expectations motivate human behavior and its consequences. Patients enter an ED with preconceived expectations pertaining to their

quality of care. Both during and following treatment, the patient will make a subjective judgment regarding fulfillment of expectations of care. Achievement of expectations results in a positive feeling when the care received was comparable to that expected. This is the equivalent of patient satisfaction.

The theoretical propositions derived from the framework were as follows. When nurses' expectations are met and job satisfaction occurs, nurses are more likely to remain with the institution. When patients' expectations are met and satisfaction occurs, patients are more likely to return to the institution and to recommend the institution. When nurses indicate job satisfaction, patients are more likely to be satisfied.

#### Assumptions

Assumptions for this study were based on the theoretical framework previously discussed and the review of literature on patients' satisfaction and nurses' job satisfaction:

1. Behavior is influenced by needs and expectations (Maslow, 1970).
2. Nurses' job satisfaction and patients' satisfaction with nursing care comprise a complex set of variables.
3. Nurses enter and remain in a health care institution due to preconceived needs or expectations that can be identified, quantified, and measured.
4. Nurses' job satisfaction is directly related to the extent to which the job satisfies needs or expectations.

5. Failure to achieve identified needs and expectations results in a low level of job satisfaction.

6. Job satisfaction influences retention because “the more satisfied a worker, the stronger the force . . . to remain . . . and the less probability of . . . leaving it voluntarily” (Vroom, 1964, p. 175).

7. Emergency department patients enter the health care institution with preconceived needs and expectations.

8. Patient reports of satisfaction with nursing care are directly related to the extent to which preconceived needs and expectations are met.

#### Research Hypotheses

The following research hypotheses were tested in this study:

1. There is a significant positive relationship between patients’ satisfaction with emergency department nursing care and patients’ intent to return for future health care needs irrespective of hospital type.

2. There is a significant positive relationship between patients’ satisfaction with emergency department nursing care and patients’ intent to recommend the emergency department irrespective of hospital type.

3. There is a significant positive relationship between emergency nurses’ job satisfaction and nurses’ intent to remain with the institution irrespective of hospital type.

4. There is a significant positive relationship between emergency department nurses’ job satisfaction and patients’ satisfaction irrespective of hospital type.



### Definition of Terms

For the purpose of this study, the following definitions were used:

Nurse: A graduate or registered nurse from either a Baccalaureate, Diploma, or Associate Degree nursing program employed either part-time or full-time in the emergency department of either a private for-profit or private not-for-profit health care institution.

Job satisfaction: The degree to which job expectations are met in the work situation. Job expectations were measured through ranking of importance the six subscale variables in Part A of the Index of Work Satisfaction (IWS). Job satisfaction was the summed score of the six weighted subscale variable scores. The total score represented both level of importance measured by Part A of the IWS and current level of satisfaction measured by Part B of the IWS (Stamps, 1997a; Stamps & Piemonte, 1986).

Nurse behavioral intent: The intent to remain with the institution which was measured by a behavioral intent question on the nurse demographic form.

Patient: An adult over the age of 18 who presents to the emergency department for treatment.

Patient satisfaction with nursing care: The subjective feeling that emergency department nurses have met nursing care expectations. Patient satisfaction was the summed score on the Consumer Emergency Care Satisfaction Scale (Davis, 1988).

Patient behavioral intent: The intent to return or to recommend the institution which was measured by behavioral intent questions on the patient demographic form.

Hospital type: Represents either a private for-profit or a private not-for-profit hospital.

### Limitations

The limitations of this study were:

1. Findings cannot be generalized beyond the sample because a convenience sample was used for both nurses and patients in the study.
2. Responses may vary because data collection occurred at various times during the day, evening, and night.
3. The possibility of the Hawthorne effect existed for both patients and nurses.

### Delimitations

The delimitations of this study were:

1. Only graduate or registered nurses were utilized in the sample.
2. Both full-time and part-time registered nurses participated in the study.
3. Only conscious patients age 18 or over who were able to provide permission to be in the study, and who could read, write, and understand the English language were asked to participate.
4. Emergency department patients who were in an acute life threatening situation such as a myocardial infarction, who were victims of an alleged sexual assault, or who were under police custody were not asked to participate in the study.

### Summary

Chapter one presented a discussion of the need, rationale, and theoretical

framework for the current research study which investigated the relationship between nurses' job satisfaction and patients' satisfaction in the emergency department (ED) of a private for-profit and a private not-for-profit hospital. The problem of study was to investigate the relationship between nurses' job satisfaction and patients' satisfaction with nursing care. Another dimension was to examine nurses' intent to remain with the institution and patients' intent to return or to recommend the health care institution.

The rationale resulted from the need to study nurses' job satisfaction and patients' satisfaction because of its importance to patients, nurses and the health care institution. The literature was in agreement for the need for patients' satisfaction but inconsistent regarding the relationship between nurses' job satisfaction and patients' satisfaction with nursing care. Thus, there is a need for further systematic inquiry.

The theoretical framework was based on Maslow's (1970) Hierarchy of Human Needs Theory and Vroom's (1964) Expectancy Theory. The theoretical propositions derived from the two theories were as follows. When nurses' expectations are met and job satisfaction occurs, nurses are more likely to remain with the institution. When patients' expectations are met and satisfaction occurs, patients are more likely to return to the institution and to recommend the institution. When nurses indicate job satisfaction, patients are more likely to be satisfied.

Theoretical assumptions were stated. Four directional research hypotheses were determined from the study problem for statistical testing. Terms were defined according

to the theories, literature, and the researcher's specific requirements for the study. Several limitations were acknowledged and delimitations were specified.

## CHAPTER 2

### REVIEW OF LITERATURE

This chapter discusses factors relevant to nurses' job satisfaction and patients' satisfaction. The review of literature contains four sections: (a) job satisfaction, (b) nurses' job satisfaction, (c) patients' satisfaction with care, and (d) the relationship between nurses' job satisfaction and patients' satisfaction with nursing care. Because the general literature on the concept of patient satisfaction is voluminous, only nursing studies are reported.

#### Job Satisfaction

Job satisfaction has been researched for more than 60 years. These studies often differ in theoretical and operational definitions of job satisfaction and measure job satisfaction by either the direct or indirect method.

Using the direct indicator, which is the simplest and easiest technique, the employee is asked to rate their general job satisfaction as either (1) Very dissatisfied (2) Mostly dissatisfied (3) Neither (4) Mostly satisfied or (5) Very satisfied. This method is readily understood, inexpensive to implement, and provides a unitary approach to the concept of job satisfaction (Kalleberg, 1974). Opponents of this method included Herzberg, Mausner, and Synderman (1959) whose research determined that job satisfaction is not unitary and that employees may be satisfied or dissatisfied with different aspects of their job.

The “otherwork indicator” of job satisfaction asked if the employee would rather do some other work than what they are now doing. “Yes” is a dissatisfied response while “No” is a satisfied response. Job satisfaction is thus inferred rather than directly measured. The realization that job satisfaction is not a unitary concept and individuals may be currently satisfied or dissatisfied with aspects of a job led to the “is now scale” which measures variables of job satisfaction plus overall job satisfaction. Job satisfaction was conceptualized as attainment of specific goals or needs (Kalleberg, 1974).

A more sophisticated operationalization of the summation measure resulted in the “should be-is not scale.” This scale is based upon the discrepancy between what the individual wants in a job and fulfillment of these desires. Respondents identify expectations and the current level of satisfaction with expectations (Kalleberg, 1974).

The literature encompassed two main theories of job satisfaction: content and process. Content theory identifies needs, values, or expectations that influence job satisfaction while process theory account for the process by which expectations, needs, and values interact with job characteristics to yield job satisfaction or dissatisfaction (Gruneberg, 1979). Maslow's (1970) Hierarchy of Human Needs Theory and Herzberg's (1959) Two-Factor Theory are content theories while Vroom's (1964) Expectancy Theory is a process theory.

### Content Theory

#### Maslow

According to Maslow (1970), needs are essential for the individual's well-being.

Needs motivate an individual to maintain physiological and psychological homeostasis. Both motivation and behavior based on need fulfillment may be either overt or covert. Maslow developed a hierarchy of needs in which lower level needs must be met before upper level needs. Physiological needs are first level needs and include oxygen, food, and water. When relatively met, the next level, safety, emerges which encompasses security and stability. The third level is belonging and love in which the individual seeks affection and meaningful relationships. Level four, self-esteem, causes the individual to strive for respect from self and others. In the final level, self-actualization, the individual seeks self-fulfillment by reaching maximum potential. A key concept in this level is autonomy. Satisfaction is reached when the individual is doing what one is individually fitted for.

Gruneberg (1979) stated Maslow's theory accounted for findings of job satisfaction and occupational level. An employee in a lower level occupation is likely to be motivated by lower order needs such as pay and security while those in higher level occupations are more interested in fulfilling higher order needs because basic needs have already been satisfied. Locke (1976) disagreed and stated the level of needs is intuitive only and no evidence exists to support the hierarchy.

### Herzberg

Herzberg et al. (1959) equated job satisfaction with job attitude. Using a critical incident format, 203 accountants and engineers were asked to identify precise instances in which they felt exceptionally good or bad about their jobs. This large-scale study of employee attitudes was the first to identify dynamic rather than static features of job

situations. According to Dunnette, Campbell, and Hakel (1967), Herzberg et al. (1959) broke with the static tradition of most previous research on job satisfaction by emphasizing job characteristics that lead to changes in feelings toward the job.

Herzberg et al. (1959) observed that job satisfaction is composed of two separate dimensions: job satisfaction and dissatisfaction. Factors were identified affecting job attitude in a positive direction (satisfiers) and in a negative direction (dissatisfiers). Although the presence of satisfiers increases job satisfaction, the absence of satisfiers does not necessarily result in job dissatisfaction. In contrast, the presence of dissatisfiers results in job dissatisfaction. Providing satisfaction of dissatisfiers does not result in a satisfied employee. Satisfiers (intrinsic, motivator factors) included recognition, advancement, the work itself, and responsibility. Dissatisfiers (extrinsic, hygiene factors) included supervision, interpersonal relations with co-workers, salary, company policies and administrative practices, benefits, and job security.

Gruneberg (1979) questioned Herzberg's use of interviews and critical incident format because individuals may tend to respond with socially acceptable answers rather than true feelings. Concern was also expressed regarding the lack of weighting of motivators and hygienes in overall assessment of job satisfaction.

Dunnette et al. (1967) in review of Herzberg's Two-Factor Theory stated the theory is "a grossly oversimplified portrayal of the mechanism by which job satisfaction or dissatisfaction comes about" (p. 143). Several flaws in the Herzberg's research were noted. The use of interview data and anecdotal accounts are highly subjective and may



lend to potential errors during analysis. On a positive note, it was observed that Herzberg's study was “a truly insightful break with the static concepts of the past . . . results yielded not only a new way of thinking about job satisfaction but also a useful taxonomy of job features for use in subsequent investigations” (p. 148).

Ullrich (1978) believed generalization of Herzberg's theory to nurses' job satisfaction is misleading because Herzberg's theory suggested nursing turnover is high due to extrinsic factors outweighing intrinsic factors. In a study with 40 nurses employed in a small private hospital, Ullrich emphasized that turnover resulted as much from dissatisfaction with intrinsic factors as from dissatisfaction with extrinsic factors. Using an interview format, results indicated responsibility and achievement were greater sources of dissatisfaction than satisfaction ( $p < .05$ ).

### Process Theory

Process theory describes the interaction between variables in relation to job satisfaction. According to process theory, “job satisfaction is determined by the extent of the discrepancy between what the job offers and what the individual expects; what the individual needs; and what the individual values” (Gruneberg, 1979, p. 19).

Job expectations are critically important to job satisfaction because they determine values and needs the individual seeks in the job (Gruneberg, 1979). Process theorist, Vroom (1964), defined job satisfaction as matching expectations or needs to the job.

### Vroom

In 1964, Vroom published Work and Motivation describing Expectancy Theory

based on need fulfillment. In order to explain individual work behaviors, Vroom assumed an interrelationship between work and motivation. Behavior or “actions on the part of individuals could, at least in part, be accounted for in terms of their preferences between outcomes and their expectations concerning the consequences of their actions for the attainment of these outcomes” (p. viii).

Due to ambiguity of the term “work,” Vroom equated “work role” and “job” which he defined “as a set of functions to be performed by a role occupant, the performance of which contributes to the production of goods and services” (1964, p. 6). Motivation was defined as “a process governing choices made by persons . . . among alternative forms of voluntary activity” (p. 6). Vroom assumed behavior exhibited by individuals in the job market and on the job being voluntary and consequently, motivated.

Vroom’s (1964) concept of motivation was built upon the principle of hedonism which assumes behavior maximizes certain types of outcomes (rewards, satisfiers, positive reinforcements) and minimizes other outcomes (punishments, dissatisfiers, negative reinforcements). To help translate hedonistic doctrine into testable psychological theory, Vroom borrowed from the cognitive theory of behavior which assumes individuals have expectations concerning their world. In addition, behavior is considered goal-directed, with individuals attempting to attain positively valent objects or events and avoid negatively valent objects or events. Positive valence refers to affective outcomes an individual seeks to attain. A negatively valent outcome is one the individual prefers to

avoid. Valence strength is associated with the anticipated satisfaction or dissatisfaction of the outcome.

In a given situation, choices are explained by motives at the time the choice is made. When an individual chooses between alternatives that involve uncertain outcomes, behavior is affected not only by preferences among the outcomes but also by the degree to which the individual believes the outcomes are probable. These beliefs are known as expectancies. Expectancy was defined as “a belief concerning the likelihood that a particular act will be followed by a particular outcome” (Vroom, 1964, p. 17). In the performance of a job, individuals vary as to importance of job expectations. Vroom described expectancies in relation to their strength. An expectancy with maximal strength is indicated by subjective certainty that the act will be followed by the outcome while minimal (zero) strength is indicated by subjective certainty that the act will not be followed by the outcome.

At some point in life, almost everyone is a member of the labor force. Yet the question remains as to why an individual will seek employment. According to Vroom (1964), five conditions influence motivation to work: wages, expenditure of mental and/or physical energy, contribution to the production of goods or services, social interaction, and social status. An individual will work when expected outcomes attained from working are more positive than outcomes expected from not working. Once an individual is employed, the next question concerns factors that influence job attitudes.

Vroom (1964) equated job satisfaction with job attitudes. Job satisfaction was

defined as “affective orientations on the part of individuals toward work roles which they are presently occupying” (p. 99). Simply put, job satisfaction is an individual’s feeling toward one’s current job.

Job satisfaction is a complex set of variables rather than a single variable. Measurement of specific variables including overall job satisfaction is both theoretical and intrinsically useful. An individual’s attitude toward the job may predict behavior in relation to the work role as a whole, such as the decision to remain with or leave the organization (Vroom, 1964). Vroom identified a general picture of a satisfying work role and concluded that:

A work role most conducive to job satisfaction appears to be one which provides high pay, substantial promotional opportunities, considerate and participative supervision, an opportunity to interact with one's peer's, varied duties, and a high degree of control over work methods and work pace. (p. 173)

Vroom (1964) discarded the assumption that differences in job satisfaction are the exclusive result of differences in work roles. Vroom stated “some persons are satisfied and others are dissatisfied regardless of the nature of their work role” (p. 173). Rather, job satisfaction results from situational and personality variables. Also, psychological conditions that make a work role desirable to someone about to enter the labor market are identical to conditions that make the role attractive to a current occupant.

### Nurse Job Satisfaction

Atkins et al. (1996) proposed measurement of nurses’ job satisfaction has become

an important function for health care institutions because by meeting needs and expectations of nursing staff relating to their job, staff performance toward patients will be affected. This ultimately affects patients' loyalty toward the institution. Through measurement of nurses' job satisfaction, a critical internal marketing strategy recognizes satisfaction of all members of the organization is relevant to survival of the organization.

Nahm (1940) conducted the first published nursing study of job satisfaction in 1938-1939. Although conducted more than 50 years ago, this study is relevant to contemporary nursing because it identified factors still important to nurses' job satisfaction. According to Nahm, job satisfaction related to quality nursing care based not only on the nurse's ability but also on interest in the work and satisfaction derived from it. Measured components of job satisfaction included work interest, general adjustment of an individual, income, relationship with superior officers, family and social relationships, work hours, and opportunities to advance and attain ambitions.

A researcher-developed instrument of 376 questions, the Hoppock Job Satisfaction Scale, and the Remmers' Attitude Toward an Occupation Scale were utilized in Nahm's (1940) study with 100 private duty, 100 institutional, and 75 public health nurses. Only descriptive statistics were used to analyze the data. A satisfactory attitude toward nursing as an occupation was reported by 98% of nurses, while 78% reported liking their job. Although only 1% disliked their job, 21% were indifferent. Public health nurses reported a higher level of job satisfaction than did either private duty or institutional nurses. Nahm attributed this high level of satisfaction to the type of nursing care provided by public

health nurses. No difference was noted in job satisfaction between institutional and private duty nurses. Although specific numbers were not cited, results indicated salary influenced job satisfaction. Those with annual incomes over \$1000 reported a higher level of job satisfaction. Nahm concluded “60% of nurses have a high degree of satisfaction, 20% are dissatisfied and another 20%, while not definitely dissatisfied, have failed to attain what might be considered an optimum occupational adjustment” (p. 1392).

Loher, Noe, Moeller, and Fitzgerald (1985) performed a meta-analysis using 28 studies to determine the relationship between job characteristics and job satisfaction. Results indicated a relationship of .39 between job characteristics and overall job satisfaction. Individual job characteristic coefficients ranged from .32 for task identity to .46 for autonomy. Using a 95% confidence interval, no one task characteristic had a stronger relationship with job satisfaction than any other. Loher et al. alleged that “the job characteristic-job satisfaction relationship is moderated by other variables” (p. 284) such as job complexity.

Results of Blegen’s (1993) meta-analysis using 48 studies with 15,048 nurses indicated no single factor was a major explanatory variable of nurses’ job satisfaction. Of the 13 variables used in data analysis, stress (-.609) and commitment (.527) correlated highest with job satisfaction. Autonomy (.419) ranked fourth, routinization sixth (-.412), and communication with peers seventh (.358). Small but significant ( $p < .01$ ) relationships were seen with age (.133), education (.07), and professionalism (.06). Years of service were not found to influence satisfaction. Interestingly, pay was not included as

a variable for analysis. Blegen reasoned that although stress was the primary factor influencing job satisfaction, factors such as lack of autonomy increased stress.

A 1998 study on nursing job satisfaction examined the fit between expectations and satisfaction with expectations by focusing on the relationship between autonomy and job satisfaction. In a study with 190 randomly selected registered nurses from an acute and chronic care hospital, Stamps and Piedmonte's (1986) Index of Work Satisfaction (IWS) measured nurses' job satisfaction and Edwards' Personal Preference Schedule (EPPS) measured autonomy. Results of the IWS revealed dissatisfaction with the variables autonomy, professional status, and pay which were identified as the most desired variables. No relationship was identified between need and satisfaction for autonomy ( $r = .11$ ,  $r^2 = .01$ ,  $p > .1$ ). Overall job satisfaction scores indicated nurses were more dissatisfied than satisfied with their job (Fung-kam, 1998).

Autonomy ( $r = .24$ ,  $r^2 = .06$ ,  $p < .01$  for Hospital A and  $r = .28$ ,  $r^2 = .08$ ,  $p < .01$  for Hospital B) was the strongest predictor of multi-facet job satisfaction in two university-affiliated hospitals involving 853 registered nurses. Neither pay, shift nor type of nursing education had an effect on job satisfaction (Weisman, Alexander, & Chase, 1980).

Job satisfaction of 38 acute care nurses in two small hospitals was examined by Henneman-Low (1994) in a descriptive design using Stamps and Piedmonte's (1986) Index of Work Satisfaction (IWS). Results indicated pay (3.615) was the most desired component of job satisfaction, followed by autonomy (3.489), professional status (3.374),

interaction (2.960), task requirements (2.790), and organizational policies (2.491). After adjusting for actual satisfaction, nurses were most satisfied with autonomy (15.338) and interaction (12.324). The overall satisfaction score was 11.990 indicating moderate job satisfaction. Cronbach's alpha for the IWS was .62.

Tumulty et al. (1994) found low levels of job satisfaction with 159 registered nurses in two acute care hospitals. Subscale scores on Stamps and Piedmonte's (1986) IWS ranged from a low of 2.528 for pay to a high of 4.951 for professional status. Interaction ranked second with a mean of 4.665 and autonomy third with a mean of 4.517. Overall job satisfaction was 3.841 indicating job dissatisfaction.

A non-experimental comparative survey design study was implemented by Williams (1990) to compare nurses' job satisfaction between 17 critical care and 20 medical-surgical nurses. Job satisfaction was measured using Stamps and Piedmonte's (1986) IWS. Results indicated pay (3.6) was the most desired component, followed by autonomy (3.5), professional status (3.3), interaction (3.0), organizational policies (2.6), and task requirements (2.5). Although pay was identified by both groups as the most desired component of job satisfaction, it ranked last in level of satisfaction. Professional status ranked first in level of satisfaction, followed by autonomy, interaction, task requirements, and organizational policies. Overall satisfaction score was 12.3 or a summation score of 176.9 out of 308 which is just above the 50% level required for job satisfaction. No significant differences were found between level of satisfaction and area worked or demographic variables.



Gillies, Franklin, and Child (1990) utilized the Index of Work Satisfaction (IWS) (Stamps & Piedmonte, 1986) and the Organizational Climate Description Questionnaire (Litwin & Stringer, 1968) in a descriptive survey pilot study to obtain preliminary information regarding relationships between organizational climate and nursing job satisfaction. Using convenience sampling, the total sample included 34 registered nurses from four patient units in an urban teaching hospital. The majority of the sample were female (93%), between 30 and 39 years of age (49%), and had between 1 and 4 years of nursing experience (38%).

In Gillies' et al. (1990) study, Cronbach's alpha for subscale scores on the Organizational Climate Description Questionnaire ranged from .06 (responsibility) to .82 (warmth). Because only subscale scores are used with this instrument, reliability for the entire instrument was not reported. Cronbach's alpha for the IWS was .91. Subscale scores were not reported. A significant negative relationship was observed between age and perception of responsibility ( $r = .37$ ,  $r^2 = .14$ ,  $p = .01$ ). Nurses in the 20 to 29 and 30 to 39 age groups were more likely to describe the organizational climate as high in responsibility than were those over age 40. Job satisfaction was significantly related to a climate of responsibility ( $r = .28$ ,  $r^2 = .08$ ,  $p = .05$ ), a climate of warmth ( $r = .41$ ,  $r^2 = .17$ ,  $p = .007$ ), a climate of support ( $r = .60$ ,  $r^2 = .36$ ,  $p = .0001$ ), and a climate of identity ( $r = .65$ ,  $r^2 = .42$ ,  $p = 0$ ). Gilles et al. contended that satisfied nurses describe their organizational climate as high in responsibility, warmth, support, and identity. Gillies et

al. acknowledged that the results cannot be generalized because of the small non-random sample ( $N = 34$ ) and the setting (civil service teaching hospital).

Johnston (1991) reported on an exploratory descriptive study that investigated job satisfaction as perceived by registered nurses in a 430-bed private not-for-profit Southwestern hospital. Stamps and Piedmonte's (1986) Index of Work Satisfaction (IWS) was selected as the research instrument. In order to guarantee anonymity of subjects, no demographic data was collected and the IWS questionnaire was sent to the nurses' homes with a return envelope enclosed. Although all 385 registered nurses in the institution were invited to participate in the study, only 126 useable questionnaires were returned. Data analysis identified pay, closely followed by professional status, and autonomy as the three variables ranked as most desired and therefore, most likely to impact job satisfaction positively. Using component weighting coefficients, pay, professional status, and autonomy clustered together with small intervals between the rankings (3.585, 3.583, and 3.450 respectively). Johnston suggested that satisfaction with one component would augment or lead to satisfaction with the other two variables. The second cluster ranked interaction (2.886), task requirements (2.716), and organizational policies (2.380). Johnston further surmised that the second cluster indicated less solidarity of beliefs about these variables.

Johnston (1991) also observed that professional status ranked highest (adjusted score 19.17) in the amount of achieved satisfaction, autonomy ranked second (adjusted score 14.48), pay ranked fourth (adjusted score 8.75), and organizational policies ranked

last (adjusted score 6.60). All variables were reported to be in the first quartile which indicated dissatisfaction. The overall mean job satisfaction score was 11.51 which fell at the 29th percentile. Results indicated a low level of overall satisfaction because values below the 50th percentile indicated a low level of job satisfaction. Johnston noted that the low level of job satisfaction was not unexpected as the institution had experienced several administrative changes and was again preparing to implement several significant changes. The institution had been severely affected by the nursing shortage and economic restrictions. Johnston contended that the results could not be generalized because the sample was self-selected and may not be representative of the pertinent RN population. One recognized factor to explain the low satisfaction scores was the possible self-selection of primarily dissatisfied nurses. The lack of control over the time and place of data collection and significance of lack of demographic data was acknowledged.

The IWS was also utilized by Johnston (1997) in a study of job satisfaction with 231 registered nurses in a Southwestern not-for-profit hospital. Respondents declared that pay (3.577) was the most desired variable followed by autonomy (3.477), professional status (3.206), interaction (2.979), task requirements (2.840), and organizational policies (2.522). Results indicated that nurses were most satisfied with professional status (5.54) followed by autonomy (4.73) and interaction (4.54) but dissatisfied with organizational policies (3.40), task requirements (3.32), and lastly, pay (3.11). When adjusting scores for expectation and satisfaction, nurses rated professional status (17.761), autonomy (16.444), interaction (13.523), pay (11.124), task requirements (9.428), and

organizational policies (8.576). All variables were below the 50th percentile indicating dissatisfaction. The overall satisfaction score was 12.81 indicating a low level of job satisfaction in this group of nurses.

Larson, Lee, Brown, and Shorr (1984) developed a New Employee Assessment Tool based on Vroom's (1964) Expectancy Theory. The purpose of the tool was to measure registered nurses' expectations, importance of expectations, and satisfaction with these expectations after six months of employment. Larson et al. stated that it is the combination of the employee's expectations and importance placed on these expectations that best influences job satisfaction. Six months was determined to be the critical time period for determining the fit between the employee and the institution. A study was conducted in a 336-bed, university-affiliated, acute care hospital to determine the influence of job expectations on job satisfaction following six months of employment. The majority (76.7%) of the 60 nurses in the sample were experienced nurses. Results supported Vroom's theory because 55.9% ( $p = .001$ ) of the variance of job satisfaction scores was explained by expectations and the importance placed on these expectations. Larson et al. suggested that in order to obtain valid and reliable job satisfaction data, measurement must include both expectations and their importance in the attempt to minimize nurses' turnover and promote quality care.

A researcher-developed 25-item job satisfaction instrument based on some of Herzberg's extrinsic and intrinsic factors and entitled the Job Expectation/Perception Survey was developed by Oechsle and Landry (1987) to measure the congruity between

job expectations and satisfaction with those expectations in a sample with 426 nurses employed between longer than 2 months but less than 18 months in a 750-bed Midwest teaching hospital. Of the 426 original questionnaires, 198 (46%) were usable. Results indicated that extrinsic factors (interpersonal factors) of spirit among staff ranked first in expectations and congruency with a median value of 5.655, followed by cooperation of coworkers (5.528), and acceptance by coworkers (5.223). No differences regarding expectations and congruency were found between age or prior work experience of respondents.

Munro (1983) reported results of an ex post facto study that utilized data collected in an ongoing national longitudinal study by the National Center for Education Statistics. The purposes of the study were to identify factors that account for the variation in job satisfaction and to compare these factors with factors identified by Herzberg. The original study utilized a stratified, two-stage probability sampling of more than 21,000 high school seniors from the class of 1972. Munro's study included all participating high school graduates who were registered nurses employed in a nursing job and who responded to the fourth follow-up data collection in 1979 and 1980 (Diploma  $n = 50$ ; ADN  $n = 159$ ; BSN  $n = 120$ ).

A 150-item instrument developed by the National Center for Education Statistics, was used in Munro's (1983) study. Job satisfaction was measured by 13 items on a 4-point Likert researcher-developed scale based on Herzberg's theory. Herzberg's variables of recognition, company policy and administration, interpersonal relationships,

and personal life were not included in the instrument. No rationale for the omission was given. No difference was observed between the three groups in their assessment of job satisfaction. Utilizing multiple regression and the maximum  $R^2$  improvement technique on the entire sample identified 58.4% of the variance accounted for. A nine variable model was retained because the first eight variables entering the equation contributed significantly at  $< .05$  level and the ninth variable contributed at  $< .06$  level. Responsibility was the most important predictor ( $p < .0004$ ) and accounted for 33% of the variance. Working conditions ( $p < .0001$ ) was the second strongest predictor and contributed an additional 10% to the variance. Internal consistency resulted in a coefficient alpha of .86 (Munro, 1983).

Munro (1983) tested the validity of Herzberg's theory of job satisfaction and dissatisfaction using principle axis factor analysis with an oblique rotation on six motivators, six hygienes, and one overall satisfaction item. Because no difference was identified between the subgroups and the entire group, only the entire group analysis results were reported. Results revealed that all six motivators and the job satisfaction item loaded on Factor I. Munro determined that Herzberg's motivators were related to job satisfaction. Four hygiene factors (work conditions, status, supervision, and security) also loaded on Factor I. Munro further stated that what serves as a hygiene for one group, may serve as a motivator for another. It was proposed that because 96% of the sample were females, this study supported pervious studies that have shown females' place more importance on hygiene factors than do males.

Job satisfaction was studied by Everly and Falcione (1976) using a researcher-developed instrument based on Herzberg (1966) and Rosenfield and Zdep's (1971) previously developed satisfaction items. The sample included 144 randomly selected female RNs at four hospitals. Factor analysis identified four factors that loaded at .5 or greater and accounted for 58.5% of the variance. The first factor, relationship orientation, accounted for 23.7% of the variance indicating that interpersonal relationship with fellow staff was the most important factor for job satisfaction. The second factor, internal work rewards, accounted for 15.7% of the variance and external work rewards accounted for 11.9% of the variance. The final factor, administrative policies, accounted for 7.5% of the variance. Everly and Falcione perceived that nurses' job satisfaction is more complex than the intrinsic/extrinsic dichotomy because interpersonal relationships accounted for such a large percent of the variance, and this relationship had been overlooked in prior research.

Many nursing job satisfaction studies examined the relationship between job satisfaction and behavioral intent. Irvine and Evans (1995) utilized meta-analysis to test a proposed theoretical model which investigated the relationship between job satisfaction, behavior intent, and turnover. As expected, results showed a strong positive relationship between behavioral intent and turnover, a strong negative relationship between job satisfaction and behavioral intent, and a small negative relationship between job satisfaction and turnover.

In a study to determine the effect of autonomy on job satisfaction and turnover by

Pierce, Hazel, and Mion (1996), standard multiple regression analysis found only perceived autonomy ( $F = 6.55$ ,  $df = 4, 54$ ,  $p = .0004$ ) a significant independent predictor of job satisfaction following implementation of a nursing practice model. Pierce et al. ascertained that by increasing perceived autonomy, the nursing turnover rate decreased from 3.9% to 2.6%.

Hinshaw and Atwood's (1985) anticipated turnover model was revised to examine the influence of the nursing practice environment on patient quality of care and staff nurse retention in two public and two private acute care hospitals. Data was obtained from 358 nurses and 525 patient charts. The resultant four-stage theoretical model tested by Leveck and Jones (1996) indicated that nursing job satisfaction predicted staff retention and quality of care. Two factors explained staff retention, experience on the unit (tenure) ( $R^2 = .20$ ,  $p < .05$ ) and job satisfaction ( $R^2 = .74$ ,  $p < .05$ ). Two factors predicted quality care. Working on a medical-surgical unit negatively affected quality of care ( $R^2 = -.54$ ,  $p < .05$ ) and job stress ( $R^2 = -.21$ ,  $p < .05$ ). Speciality units such as intensive care reported lower levels of job stress and, therefore, higher levels of quality care. Leveck and Jones identified the importance of a stable, experienced staff nurse which influenced job satisfaction, retention, quality of care, and ultimately, patient satisfaction.

Price and Mueller (1981) tested their turnover model with 1,091 registered nurses in seven Midwestern general hospitals. Multiple regression analysis indicated that job satisfaction was the greatest predictor ( $.25$ ,  $p < .001$ ) of intent to remain with the



institution. Nurses with the highest salary (.11,  $p < .001$ ) had a greater intent to remain with the institution independent of their level of job satisfaction.

In a study with 327 registered nurses employed in acute hospital settings in Texas, Beckworth (1996) declared that current organizational restructuring and job design results in decreased job satisfaction and increased turnover. In an explanatory non-experimental design, structural equation modeling predicted the effect of job satisfaction on turnover. Job satisfaction was measured using Brayfield and Rothe's Index of Job Satisfaction. Turnover intention was measured by the Intention to Turn Over Scale from the Michigan Organization Assessment Questionnaire. Results found a significant relationship between job satisfaction and intent to remain with the institution while job dissatisfaction led to increased turnover. The path coefficient was  $-.30$  between job satisfaction and turnover. Intent to turnover was further divided into the statements that reflected the intent to look for a new job in the next year and frequently thinking about quitting. The path coefficient between turnover and looking for a new job in the next year was  $.78$  and  $.89$  for frequently thinking about quitting and turnover.

Job satisfaction and intent to change position was investigated with RNs by Zaring (1990). Job satisfaction was measured by Hinshaw and Atwood's Job Satisfaction Scale. Researcher-developed questions measured nurses' intent to change position. Sample size included 685 registered nurses in both hospital and non-hospital settings. Results indicated although 75.5% (517) of nurses were satisfied with their current job, 64.1% (439) were not intending to change position. Individual subscale scores indicated that

nurses were most satisfied with enjoyment of work (42.4% satisfied), followed by quality of work (36.1% satisfied), and interaction with peers (29.1% satisfied). Nurses were most dissatisfied with pay (4% satisfied), followed by administration (7.7% satisfied), and task requirements (9.3% satisfied).

In Zaring's (1990) study, all subscale scores were positively correlated with satisfaction with current position at the  $p < .0005$  level. Individual subscale relationships were high between satisfaction with current position and enjoyment ( $r = .6188$ ,  $r^2 = .38$ ), moderate with administration ( $r = .4067$ ,  $r^2 = .17$ ), quality of care ( $r = .4012$ ,  $r^2 = .16$ ), and low for pay ( $r = .2498$ ,  $r^2 = .06$ ) and task requirements ( $r = .2448$ ,  $r^2 = .06$ ). There were significant inverse relationships between satisfaction on subscale scores and intent to change position. Discriminant function analysis indicated that enjoyment of work (Lambda, 0.60153, E-Ratio 187.50, Eta square 0.3755) and quality of patient care (Lambda 0.83535, E-Ratio 115.30, Eta square 0.1507) contributed most to job satisfaction. The greatest contributor to intent to stay in the current position was enjoyment of work (Lambda 0.78823, E-Ratio, 158.50, Eta square 0.1960) followed by interaction (Lambda 0.86680, E-Ratio 90.66; Eta square 0.1224). Zaring concluded that although a significant number of nurses were satisfied, almost 30% were still intending to change positions. Zaring additionally stated that low satisfaction scores on the subscales of pay, administration, and task requirements may be significant indicators of dissatisfaction and intent to change position.

Cavanagh and Coffin (1992) also found a strong relationship between job

satisfaction and intent to remain with the hospital in their study with 221 west coast nurses. Path analysis indicated a .338 relationship at the .05 level between job satisfaction and intent to stay. The greatest factor influencing job satisfaction was participation (autonomy) ( $r = .024, p < .05$ ). Interestingly, pay was not significantly related to job satisfaction but was related to intent to stay ( $r = .086, p < .05$ ).

### Patient Satisfaction

Woodside, Frey and Daly (1989) asserted that “service quality is the consumer’s comparison between service expectations and service performance” (p. 6) and that “customer satisfaction/dissatisfaction with major acts in the service encounter is a function of the service quality judgment of the act” (p. 6). The attainment of quality service is a crucial issue for competitive organizations. One primary reason for the escalating popularity of service quality is that superb service results in capturing that competitive strategy needed to increase productivity, word-of-mouth advertising, and customer loyalty. Quality service becomes the foundation for competition. Although marketing textbooks stress the four P’s of marketing (product, place, promotion, and price), it is the fifth P - performance, that separates one organization from another (Zeithaml, Parasuraman, & Berry, 1990).

Although health care reform has been the topic of much discussion in recent years, the probability of comprehensive reform remains questionable. Meanwhile, health care systems attempt to increase their share of the patient market by broadening their network by purchasing facilities such as outpatient clinics and nursing homes. Marketing

strategies have thus become an important part of a health care institution's endeavor to both maintain and increase utilization of their facilities. In the effort to maximize on the patient-centered direction through measurement of patient satisfaction, the effectiveness of meeting the patient's needs and expectations will help increase the patient's loyalty to the health care institution (Atkins et al., 1996). Brown, Nelson, Bronkesh and Wood (1993) stated that "patient satisfaction is not an option" (p. 5) because patients are buyers of health services and the majority do have a choice of health care provider.

Donabedian (1980) asserted that patients both individually and collectively are the best interpreters and ultimate authority as to the quality of their health care which is based on values and expectations. Achievement of these expectations can best be measured as patient satisfaction. Donabedian stressed that "satisfaction also influences access, since the satisfied client is thought to be more likely to seek care again" (p. 25).

Measuring patient satisfaction results in several outcomes. As previously noted, if satisfied, the patient is more likely to utilize the organization for future health care needs. On the other hand, if dissatisfied, the patient may seek care elsewhere which results in lost revenue. Also, areas of strength and weaknesses are identified which impacts risk management can lead to quality improvement (Dansky & Brannon, 1996). Furthermore, a potentially litigious situation may be neutralized if a patient feels they have been treated with care and sensitivity (Hudson, 1992).

With the increasing number of patients utilizing the emergency department (ED) for either primary care or life-threatening situations, quality nursing care as measured by

patient satisfaction is a universal goal for emergency department staff (Davis & Bush, 1995). Hunt and Glucksman (1991) found in a 7 year analysis of 122 patient initiated ED complaints, that the most common complaint (37.7%) related to staff attitude problems such as rudeness, lack of sympathy, or arrogance.

One indication of accountability by health care professionals is through measurement of patient satisfaction. Surveying patients sends the message to employees that the effectiveness of their performance is being evaluated (Cohen, Delaney, & Boston, 1994). Swan et al. (1985) found that results of their study supported their theoretical model's prediction that patients' expectations of hospital care directly influenced their satisfaction. Satisfaction with care was positively related to patients' intentions to return to the institution if further care was necessary. Swan et al. surmised that satisfaction and intention were key factors in choice of a hospital.

In a study by Cleary, Keroy, Karapanos, and McMullen (1989) with 598 discharged patients from a Northeastern hospital, a researcher-developed questionnaire measured factors related to patient satisfaction. Results indicated that satisfaction with nursing care ( $r = .76$  for medical patients,  $.52$  for surgical patients,  $.51$  for obstetric patients;  $p < .01$ ) was more important than satisfaction with physicians as an indicator of overall satisfaction. Cleary et al. ascertained this phenomenon was probably a result of nurses having more direct contact with hospitalized patients than physicians.

Using random selection, 9,106 patients from 23 EDs in 13 states participated in a patient satisfaction survey and factors associated with likelihood to recommend the

facility to others. Regression analysis indicated that neither age ( $T = 0.57$ ,  $Beta = 0.01$ ,  $\text{sig } T = .57$ ), sex ( $T = 0.04$ ,  $Beta = 0.00006$ ,  $\text{sig } T = .96$ ), nor annual ED census ( $T = 0.58$ ,  $Beta = 0.01$ ,  $\text{sig } T = .56$ ) influenced the likelihood of recommending the facility. Interpersonal issues related to nursing/staff factors ( $T = 22.98$ ,  $Beta = 0.53$ ,  $\text{sig } T = .00$ ) were the most important predictors of satisfaction and likelihood of recommending the facility (Hall, 1996).

In a telephone survey with 493 privately insured ED patients, Mack, File, Horwitz, and Prince (1995) surveyed satisfaction with emergency care and intent to return or to recommend. Using a researcher-developed instrument, results indicated that patients were least satisfied with staff interaction. Staff interaction correlated highly with intent to return ( $r = .68$ ,  $p < .01$ ) or to recommend ( $r = .66$ ,  $p < .001$ ). No relationship was found between satisfaction and urgency of care level.

Davis' 1988 Consumer Emergency Care Satisfaction Scale (CECSS) was utilized by Clark et al. (1996) to measure patient satisfaction with ED nursing care in a 62-bed acute care rural community hospital. The hospital reported a 43% increase in ED visits between 1987 to 1992. Over a 2 week period, 52 usable questionnaires were obtained from ED patients. Results indicated that patients reported a high level of overall satisfaction ( $M = 91.385$  out of possible 100) plus high satisfaction with the four subscale variables (psychological safety  $M = 49.558$  out of possible 55, discharge teaching  $M = 13.115$  out of possible 15, information giving  $M = 14.231$  out of possible 15, technical competency  $M = 14.481$  out of possible 15). Neither gender nor education level

failed to be statistically significant ( $p \leq .05$ ) in relationship to patient satisfaction or any subscale. Only race significantly ( $p < .005$ ) influenced the subscale discharge teaching in that African Americans ( $n = 36$ ,  $M = 12.389$ ,  $SD = 4.377$ ) were less satisfied than whites ( $n = 14$ ,  $M = 14.7143$ ,  $SD = 1.069$ ).

In a post-test-only design which comprised a comparison between a control and three experimental groups involving a total sample size of 240 patients, Andrea (1996) examined the relationship between ED patient satisfaction and intent to return based on the provision of written information and reassurance to decrease anxiety. Patient satisfaction was measured using Davis's 1995 revised version of the CECSS while intent to return was measured with Raper's (1994) Intent to Return Scale. In this study, Cronbach's alpha for the satisfaction scale was .96 and .89 for the intent to return scale. Results indicated that 90% of patients reported high levels of satisfaction with their nursing care while 83% of patients indicated their intent to return. Andrea concluded that "patient satisfaction with nursing care significantly contributed to the patient's intent to return to the ED" (p. 81).

Huggins, Gandy, and Kohut (1993) conducted telephone surveys with 288 patients following dismissal from the emergency department (ED) to determine the relationship between triage acuity level and expectation of nursing behaviors indicative of caring. Nurses' caring behaviors were measured by a modified version of Crinion and Harrison's (1988) Caring Behaviors Assessment instrument. Results indicated that regardless of triage acuity level, technical competence was the behavior most desired by all patients.

Non-urgent patients had greater expectations of nursing care and identified caring as related to technical competence behaviors more important for their overall ED satisfaction than did the urgent patient group. Huggins et al. noted the importance and implication of this finding due to the greater number of non-urgent ED patient visits than urgent patient visits . . . “these patients are the most medically stable, usually require the least intensive care from the emergency department staff, and they have the highest expectations for their nursing care” (p. 363).

Bader (1988) utilized Hinshaw and Atwood’s (1981) Patient Satisfaction Instrument to examine the relationship between patient expectations, satisfaction with nursing care, and intent to return or to recommend for future care in a 250-bed non-profit hospital. The sample included 50 patients from a medical-surgical unit. The satisfaction scale encompassed three subscales: technical/professional, patient education, and trust. Stepwise multiple regression failed to reveal any demographic variables predictive of satisfaction. Results indicated that of the three subscales, patient education resulted in low mean scores and were the least satisfying. Alpha reliability subscale results were .823 for technical/professional, .800 for patient education, and .826 for trust. Stepwise multiple regression ( $p \leq .025$ ) indicated 15 predictor variables associated with patient satisfaction. Of the 15 variables, 12 were related to the affective measures of nursing from the trust and education subscale which included sensitivity, friendliness, and listening skills of the nurse. The final three predictor variables were instrumental nursing measures from the professional/technical subscale. Each scale item was examined to



determine its perceived importance as an indicator of satisfaction. Three items relating to trust and two relating to education indicated areas of dissatisfaction. Bader observed that the three dissatisfied items relating to trust were the same ones that predict satisfaction. Results relating to satisfaction and intent to return or to recommend were not discussed.

Abramowitz et al. (1987) utilized causal modeling to support the relationship between patient expectations and satisfaction with hospital care. The study utilized a researcher-developed instrument to measure expectations and satisfaction with 10 areas of hospital service, including all hospital staff and physicians. Their study with 841 patients resulted in a 91.3% response rate of patients discharged from a 900-bed Northeast teaching hospital during the first quarter of 1986. Patient expectations were highly correlated with the quality of care actually received ( $r = .71$ ,  $r^2 = .50$ ,  $p < .0001$ ) whereas patient expectations regarding quality of care with equipment and facilities were lower ( $r = .56$ ,  $r^2 = .31$ ,  $p < .0001$ ) which suggested that hospital accommodations are independent of service quality factors. No relationship was observed between physicians and overall satisfaction which is most likely due to patients not relating their physician with the hospital but to patient loyalty to their physician. Results indicated that only nursing services were directly related to overall patient satisfaction. Expectations with hospital care weighed highly also in overall satisfaction. Twenty-four percent of the variance was explained by two variables, satisfaction with nursing care and expectations for hospital care, which also were predictors of intent to recommend the hospital. Satisfaction with nursing care, patient expectations, and overall satisfaction explained

34% of the variance for intent to recommend the hospital. These results support the role of expectations and satisfaction with nursing care as not only being crucial but the primary factors in patients' intent to recommend a hospital. Abramowitz et al. alleged “the nursing staff is the key to patient satisfaction” (p. 128).

A survey of 152 Eastern Canadian ED patients reported that whereas technical competence is expected, a positive attitude by the nurse was the most sought-after commodity. Although 87.4% to 97.1% rated their nursing care as either very satisfactory or satisfactory, results indicated that the nursing staff concentrated more on technical competency than psychosocial care. Interestingly, 12.6% of patients reported their dissatisfaction with the nurse's attitude directed toward those accompanying the patient to the ED. Patient's open-ended comments included suggestions to promote satisfaction such as the need for more nurses during peak hours, attitude improvement, increased follow-through with care, and more readily providing information (Lewis & Woodside, 1992).

In a descriptive, correlational study by Raper (1996) with 200 ED patients at a Southeastern urban university-affiliated trauma center, psychological care and information giving significantly predicted patient satisfaction with nursing care ( $R^2 = .72$ ,  $p = .0000$ ). The original 1988, 20-item version of the Davis Consumer Emergency Care Satisfaction Scale (CECSS) was utilized for data collection. A significant relationship was detected between patient satisfaction with ED nursing care and patients' intent to return ( $r = .5705$ ,  $r^2 = .33$ ,  $p < .001$ ). Regression analysis predicted that patient

satisfaction with nursing care increased substantially intent to return ( $R^2 = .29$ ) for future care. Interestingly, no relationship was identified between patient acuity level, age, length of ED stay, and satisfaction with nursing care. Raper noted that findings support results of prior studies that concluded the most important indicator of patient satisfaction and intent to return for future care is the interpersonal relationship that exists between the nurse and the patient. Raper subsequently alleged that patient satisfaction is believed to be “the ultimate validator of quality of care” (p. 48) and may be the key to hospital survival.

A 1991 retrospective patient satisfaction telephone survey by Bursch, Breezy and Shaw (1993) included all patients who visited a health maintenance organization ED during a 2 week period. Telephone contact occurred within 1 week of discharge from the ED or the hospital. The final sample included 258 patients from the 433 contacted of which 70% were Caucasian, 51% male, and the mean age 53 years. Multiple regression analysis identified that 5 of the 14 measured variables predicted patient satisfaction with ED care. In order of importance, these included waiting time prior to treatment, caring attitude of nurses, organized staff, caring physicians, and information sharing by the nursing staff. Bursch et al. concluded that perceived waiting time was not as important as prompt and caring service. According to Bursch et al., factors relating to prompt and caring service are readily amenable to change in the ED and may thus, improve patient satisfaction.

Thompson, Yarnold, Adams, and Spacone (1996) found that patients have

difficulty accurately estimating their wait time. Total wait time from triage to dismissal was accurately estimated by 36.6% of 714 respondents while 24.5% overestimated their wait time.

No relationship was found between emergency department waiting time and overall satisfaction ( $R^2 = .0199$ ,  $p = .0464$ ) by Krishel and Baraff (1993). A moderate association ( $.32$ ,  $p < .0001$ ) was found by Thompson and Arnold (1995) in a 1 year study of the relationship between patient satisfaction and perception of ED wait times in 1,574 patients contacted at home by phone within 2 to 4 weeks after ED treatment. Thompson and Arnold determined that longer than expected ED waiting time increased patient dissatisfaction. Thompson, Yarnold, Williams, and Adams, (1996) found no relationship between total wait time (triage to dismissal), patient satisfaction ( $p = .55$ ) and likelihood of recommending the institution ( $p = .74$ ) in a study with 1,631 telephone respondents. Further research is needed to determine the effect of wait time on satisfaction.

The Davis Consumer Emergency Care Satisfaction Scale (CECSS) was utilized to measure patient satisfaction with ED nursing care in a descriptive correlational study by Atnip and Geroche (1992). Data was collected from a Level One and a Level Two metropolitan ED. Using convenience sampling, a total sample of 196 patients was obtained. Results indicated that 97% were satisfied with their nursing care. Two patients were neutral about their care while three patients rated their nursing care as unsatisfactory. Satisfaction scores on each of the four subscales were also rated high. Satisfaction scores were 93% or higher on the subscales psychological safety, information

giving, and technical competence while 84% were satisfied with the fourth subscale, discharge teaching. A significant inverse relationship was found between age and satisfaction with the subscales psychological safety ( $r = -.22$ ,  $r^2 = .05$ ,  $p < .05$ ) and technical competence ( $r = -.19$ ,  $r^2 = .04$ ,  $p < .05$ ) in that the older the client, the higher the satisfaction rating. Further testing with ANOVA failed to show a significant difference between satisfaction and age. Marital status also influenced satisfaction. Married patients reported a higher level of satisfaction with the subscale psychological safety ( $r = .15$ ,  $r^2 = .02$ ,  $p < .05$ ). Atnip and Geroche reported relationships between patients' intent to return for future health care needs and satisfaction with the subscales psychological safety ( $r = .29$ ,  $r^2 = .08$ ,  $p < .05$ ), information giving ( $r = .18$ ,  $r^2 = .03$ ,  $p < .05$ ), technical competence ( $r = .25$ ,  $r^2 = .06$ ,  $p < .05$ ), and overall satisfaction ( $r = .26$ ,  $r^2 = .07$ ,  $p < .05$ ). Internal reliability for the CECSS was assessed using Cronbach's alpha for each subscale and the entire instrument. Overall alpha was .85 while subscale scores ranged from .77 for psychological safety to .84 for discharge teaching.

The relationship between patient satisfaction and behavioral intent to return was measured over a two-month period by Woodside et al. (1989) in a study of recently discharged patients from one of two for-profit hospitals owned by the same corporation. Twenty statements measured satisfaction with variables such as nursing care, meals, technical services, overall satisfaction, and behavioral intention. The sample included 172 usable surveys from hospital 1 and 220 from hospital 2. Results indicated that in both hospitals overall satisfaction with nursing care was strongly associated with overall

satisfaction (hospital 1,  $r = .47$ ,  $r^2 = .22$ ; hospital 2,  $r = .50$ ,  $r^2 = .25$ ;  $p < .001$ ) and with behavioral intent to return (hospital 1,  $r = .34$ ,  $r^2 = .12$ ; hospital 2,  $r = .45$ ,  $r^2 = .20$ ;  $p < .001$ ). In both hospitals, the highest and strongest relationships were between overall satisfaction and intent to return ( $r = .85$ ,  $r^2 = .72$  for both hospitals). Woodside et al. ascertained that “beyond a shadow of a doubt . . . hard-nosed, quantitative, systematic measures of customer perceptions of service quality and satisfaction are the single best indicators of the organization’s future health or lack thereof” (p.16).

#### Patient Satisfaction/Nurse Job Satisfaction

Patient loyalty has become critical as a predictor of survival of the health care organization. In addition to meeting needs and expectations, another crucial element of patient loyalty is the link between employee job satisfaction and patient satisfaction. Health care marketers must address the impact of employee job satisfaction on a patient’s loyalty as measured by their intent to return or to recommend the organization for future health care needs. Although not a new perspective to retail service areas, the relationship between employee satisfaction and consumer satisfaction is relatively new to the health care industry. The repeat purchase behavior such as intent to either return or to recommend a health care institution for future health care needs can be considered the definitive satisfaction outcome (Atkins et al., 1996).

Donabedian (1980) stressed that inherent in achievement of patient satisfaction is the satisfaction of the institution’s health care practitioners. For an organization to survive and grow, the interests of its practitioners should be recognized. Donabedian concluded

that “a sense of general satisfaction may be conducive to the best performance of the practitioner” (p. 26). Due to the competitiveness of the current health care market, health care managers should examine strategies utilized by non-health care organizations for successful marketing plans in order to promote patient satisfaction. Enterprises such as banks and hotels are notorious for their appreciation of the effect of employee job satisfaction on customer satisfaction. The ability to serve customers properly is an area of competition not easily paralleled (Atkins et al., 1996)

Patient satisfaction with nursing care has been reported to have the highest relationship with overall patient satisfaction because it is the nurse with whom the patient spends more time than any other health care associate. Atkins et al. (1996) explored the relationship between patient expectations and satisfaction with nursing care using Zeithaml, Parasuraman, and Berry’s 1990 Service Quality Model. The Service Quality Model defined five areas in which a service provider may negatively affect consumer’s perception of service. Based on the assumption that an environmental deficit such as nursing job dissatisfaction may influence a patient’s behavior, this study examined the relationship between nursing job satisfaction and patient satisfaction and intent to return or to recommend the health care institution for future health care needs.

Atkins et al. (1996) study included six medical-surgical nursing units and 719 patients discharged during a 6 week time period. Patient satisfaction was measured by the Hospital Judgment Questionnaire/Patient Satisfaction tool while nursing job satisfaction was measured using a modification of an in-house Department of Nurse Recruitment and

Retention nurse retention tool. Interitem relationships for the nursing tool ranged between .30 and .70 for 89% of the items while the overall Cronbach's coefficient alpha for the nursing tool was 0.924. Nursing response rate was 55% ( $N = 157$ ) and patient response rate was 60% ( $N = 431$ ). Data analysis revealed a strong association between patient satisfaction, information sharing by nurses ( $r = .71$ ,  $r^2 = .50$ ,  $p < .005$ ) and nurses' concern and caring attitude ( $r = .69$ ,  $r^2 = .48$ ,  $p < .005$ ) as the most significant indicators of patient satisfaction. A strong positive relationship was identified between nurses' job satisfaction and patients' intent to either return ( $r = .989$ ,  $r^2 = .98$ ,  $p < .005$ ) or recommend ( $r = .628$ ,  $r^2 = .39$ ,  $p < .005$ ) the health care institution for future health care needs. Atkins et al. stated that because dissatisfied nurses may be unable to mask feelings of discontent during their encounters with the patient, it is vital that marketing strategies include monitoring nursing job satisfaction in the attempt to establish a reliable and stable patient base.

To date, there is minimal research to support the belief that nurses' job satisfaction influences patient satisfaction. Campbell (1996) tested this assumption in an ex post facto descriptive/correlational study with 40 registered nurses and 40 hospitalized medical and surgical patients. Nurses' job satisfaction was measured by Part B of Stamps and Piedmonte's 1986 version of the Index of Work Satisfaction (IWS). Patient satisfaction was measured by the Patient Satisfaction Instrument designed by Risser in 1975 and revised by Hinshaw and Atwood in 1982.

For nurses, two clusters of satisfaction factors resulted. In the first cluster was



professional status (5.89) followed by interaction (5.36). In the second cluster in descending order was autonomy (3.72), pay (3.70), organizational policies (3.68), and task requirements (3.61). The total satisfaction score was 4.41 which indicated moderate job satisfaction in this group of nurses. For patients, technical-professional factors (3.87) were identified as most important for satisfaction. Next, was education (information giving) factors (3.79) and lastly, trust factors (3.78). Patient satisfaction scores indicated that patients were satisfied with nursing care. In order to determine if a relationship existed between nurses' job satisfaction and patients' satisfaction, subscale scores were correlated using Pearson product-moment correlation. A positive relationship (.35) was found between interaction on the nurses' IWS and technical-professional factors on the Patient Satisfaction Instrument. A negative relationship was detected between autonomy on the nurses' IWS and all three subscales (-.29 for education, -.38 for trust, and -.45 for technical-professional) on the Patient Satisfaction Instrument. A non-significant  $\chi^2$  (1,  $N = 80$ ) = .051,  $p > .05$  test of independence found no relationship between nurses' job satisfaction and patients' satisfaction (Campbell, 1996).

### Summary

Three areas of research were presented in the review of literature. Studies involving nurses' job satisfaction, patients' satisfaction with nursing care, and the influence of nurses' job satisfaction on patients' satisfaction were summarized.

### Nurse Job Satisfaction

Although the purposes and methodology of studies differed, there was agreement

on the necessity of investigating factors relevant to nurses' job satisfaction. Several studies investigated the relationship of nurses' job satisfaction on retention. There was some agreement in the literature of factors which influence nurses' job satisfaction.

In a meta-analysis investigating the relationship between job characteristics and job satisfaction, Loher et al. (1985) found that no one job characteristic had a stronger relationship with job satisfaction than any other. Similar results were found by Blegen's (1993) meta-analysis in that no single factor was found to be a major explanatory variable of nurses' job satisfaction. Of the 13 variables used in data analysis, autonomy ranked fourth in relationship to job satisfaction. Interestingly, pay was not included as a variable for analysis.

Examining the relationship between job expectations and satisfaction with those expectations has been proposed as a necessary component in the measurement of job satisfaction (Stamps, 1997a). Larson et al. (1984) developed a tool to measure expectations, importance of expectations, and satisfaction with expectations based on Vroom's (1964) Expectancy Theory. Results supported Vroom's theory because over one-half the variance of job satisfaction scores were explained by expectations and the importance placed on expectations. Larson et al. asserted that in order to obtain valid and reliable job satisfaction data, measurement of expectations and their importance must be included.

The most current research which examined this association was reported by Fung-kam (1998). Index of Work Satisfaction (IWS) scores revealed dissatisfaction with

autonomy, professional status, and pay although these components were identified as the most desired variables. Overall job satisfaction scores indicated nurses were more dissatisfied than satisfied (Fung-kam, 1998). Weisman et al. (1980) found autonomy to be the number one predictor of multi-facet job satisfaction.

Henneman-Low (1994), who also utilized the IWS, found that pay was the most desired component of job satisfaction followed by autonomy, professional status, and interaction. Nurses were most satisfied with the components autonomy and interaction. Results indicated a moderate level of overall job satisfaction.

Oechsle and Landry (1987) measured the congruity between job expectations and satisfaction. Results indicated that the extrinsic factor (interpersonal relationship) of spirit among staff was first in expectations and congruency, followed by interpersonal relationship factors of cooperation of coworkers and acceptance by coworkers. An earlier study by Everly and Falcione (1976) determined that interpersonal relationship with fellow staff as being most important to job satisfaction.

The relationship between pay and nurses' job satisfaction was reported in the first published nursing study of job satisfaction conducted in 1938-1939 by Nahm. Results of Williams' (1990) study using the Index of Work Satisfaction (IWS) indicated that pay was the most desired variable. Although pay was identified as the most desired component, it ranked last in level of satisfaction and was rated as dissatisfied. Satisfied components included professional status which ranked third in regard to importance and first in level of satisfaction. Autonomy ranked second in level of importance and actual

satisfaction. Interaction ranked fourth in level of importance and third in satisfaction.

Overall job satisfaction was reported as moderate.

A low level of overall job satisfaction was reported by Tumulty et al. (1994).

Nurses were satisfied with the professional status of nursing, followed by interaction and autonomy. However, nurses were dissatisfied with task requirements, organizational policies, and pay.

Two studies by Johnston found low levels of component and overall job satisfaction in nurses. In the 1991 study, pay, closely followed by professional status and autonomy, were identified as the three most desired components of job satisfaction. Results indicated that nurses were dissatisfied with all components. Johnston's 1997 study also found pay as the most desired component followed by autonomy, professional status, and interaction. As with the prior 1991 study, all components and the overall satisfaction score were at the dissatisfied level.

Several studies investigated the relationship between job satisfaction and behavioral intent. Price and Mueller (1981) found job satisfaction to be the greatest predictor of intent to remain. Also, nurses with the highest salary had a greater intent to remain independent of their level of job satisfaction. Beckworth (1996) demonstrated that a significant relationship existed between job satisfaction and intent to remain with the institution while job dissatisfaction led to increased turnover.

Irvine and Evans (1995) utilized meta-analysis to test their proposed theoretical model to explain the relationship between job satisfaction, behavior intent, and turnover.

Results showed a strong positive relationship between behavioral intent and turnover, a strong negative relationship between job satisfaction and behavioral intent, and a small negative relationship between job satisfaction and turnover. Effect of autonomy on job satisfaction and turnover by Pierce et al. (1996) found only perceived autonomy significant as an independent predictor of job satisfaction and that by increasing perceived autonomy, the nursing turnover rate decreased. Cavanagh and Coffin's (1992) results identified a strong relationship between job satisfaction and intent to remain. The greatest factor influencing job satisfaction was participation (autonomy). Interestingly, pay was not significantly related to job satisfaction but to intent to remain.

Zaring's (1990) study revealed that although three-fourths of nurses were satisfied with their current job, only two-thirds were not intending to change position. Nurses were most satisfied with enjoyment of work, followed by quality of work, and interaction with peers. Nurses were most dissatisfied with pay, administration, and task requirements. All subscale scores were positively correlated with satisfaction with the current position. Individual subscale relationships were high between satisfaction with current position and enjoyment, moderate with administration, quality of care, and low for pay and task requirements. There were significant inverse relationships between satisfaction on subscale scores and intent to change position. The enjoyment of work and quality of patient care contributed most to job satisfaction whereas the greatest contributor to intent to stay was enjoyment of work, followed by interaction.

The relationship between quality of care and nurse retention was examined by

Leveck and Jones (1996). Results indicated that job satisfaction predicted staff retention and quality of care. Two factors explained staff retention, experience on unit (tenure) and job satisfaction. Two factors predicted quality care in that working on a medical-surgical unit negatively affected quality of care as did job stress. Speciality units such as ICU reported lower levels of job stress and therefore, higher levels of quality care. This study identified the importance of a stable, experienced staff nurse which influenced job satisfaction, retention, quality of care, and ultimately, patient satisfaction.

#### Patient Satisfaction

There is no question that in order to survive in the next century, health care organizations must remain competitive. One competitive approach is through realization of quality service as measured by patient satisfaction of employee performance. Because many patients have a choice of health care provider, the attainment of patient satisfaction is not optional (Brown et al., 1993). Health care organizations must promote patient loyalty as the satisfied patient is more likely to return or to recommend an institution for future health care needs (Donabedian, 1980; Zeithaml et al., 1990).

There is some agreement that patient's judge their satisfaction on achievement of their expectations (Donabedian, 1980). Results of Swan's et al. (1985) study supported their theoretical model's prediction that patients' expectations of hospital care directly influenced satisfaction. Satisfaction with care was positively related to patients' intent to return. Swan et al. asserted that satisfaction and intention were key factors in choice of a hospital.

A 1987 study by Abramowitz et al. also supported the relationship between patient expectations and satisfaction with hospital care. Patient expectations were highly correlated with quality of care actually received whereas patient expectations regarding quality of care with equipment and facilities were low. No relationship was observed between physicians and overall satisfaction. Results indicated that expectations and nursing services were directly related to overall patient satisfaction. Intent to recommend the institution was predicted by the variables expectations, satisfaction with nursing care, and overall satisfaction. Results supported the role of expectations and satisfaction with nursing care as being crucial factors in patients' intent to recommend a hospital.

Further support for the relationship between patient expectations, satisfaction with nursing care, intent to return, or to recommend an institution was provided by Bader (1988). Of the variables found to be associated with patient satisfaction, the majority related to affective measures of nursing from the trust and education subscale which included sensitivity, friendliness, and listening skills of the nurse. Woodside et al. (1989) investigated the relationship of patient satisfaction to behavior intent to return. Satisfaction with nursing care was strongly associated with overall satisfaction and behavioral intent to return.

Cleary et al. (1989) found that patient satisfaction with nursing care was more important than satisfaction with physicians as an indicator of overall satisfaction. Cleary et al. proposed this phenomenon was probably due to nurses having more direct contact with patients than physicians. With the growing number of patients utilizing the

emergency department (ED) for both acute and non-acute conditions, attainment of patient satisfaction with nursing care becomes paramount (Davis & Bush, 1995). The most common complaint from ED patients were related to staff attitudes according to Hunt and Glucksman (1991).

Mack et al. (1995) surveyed satisfaction with emergency care and patient's intent to return or to recommend the institution for future health care needs. Results indicated that patients were least satisfied with staff interaction. Staff interaction correlated highly with intent to return or to recommend. Andrea (1996) examined the influence of ED patient satisfaction with nursing care and the effect on intent to return. The majority of patients reported high levels of satisfaction with nursing care. Results indicated that patient satisfaction with nursing care significantly contributed to intent to return.

Clark et al. (1996) also reported high level of overall patient satisfaction with ED nursing care plus high satisfaction with the subscale variables psychological safety, discharge teaching, information giving, and technical competency. Similar results were obtained by Atnip and Geroche (1992) in relationship of overall patient satisfaction with nursing care and with the subscales psychological safety, information giving, technical competence, and discharge teaching. The highest relationships were between intent to return and satisfaction with subscales psychological safety, information giving, and technical competence, plus overall satisfaction.

According to Lewis and Woodside (1992) ED patients reported that although technical competence was expected, a positive attitude by the nurse was the most



sought-after commodity. Whereas the majority of patients rated nursing care as either very satisfactory or satisfactory, results indicated nursing staff concentrated more on technical competency than psychosocial care. Raper (1996) found that psychological care and information giving significantly predicted patient satisfaction with emergency department (ED) nursing care. A significant relationship was also detected between ED nursing care and intent to return. Bursch et al. (1993) determined perceived waiting time in the ED was not as important as prompt and caring service.

#### Patient Satisfaction/Nurse Job Satisfaction

Donabedian (1980) stressed that inherent in achievement of patient satisfaction is satisfaction of the institution's practitioners. Health care organizations are beginning to appreciate the effect of employee job satisfaction on patients' satisfaction and patients' intent to return or to recommend the institution for future health care needs (Atkins et al., 1996). To date, there is a dearth of research to support this assumption.

Atkins et al. (1996) found patient satisfaction with nursing care the most significant indicator of patient satisfaction, intent to return, and intent to recommend the institution. A strong positive relationship was also found between nurses' job satisfaction and patients' satisfaction with nursing care. The importance of the nurse-patient relationship was reinforced because both information sharing by nurses and the nurses' concern and caring attitude were the most significant indicators of patients' satisfaction.

Campbell's (1966) study indicated a moderate level of job satisfaction for nurses with a negative relationship detected between nurses' autonomy and patient satisfaction.

Nurses were most satisfied with the variables professional status and interaction. Patients identified technical-professional factors as most important. No relationship was found between nurses' job satisfaction and patients' satisfaction.

## CHAPTER 3

### PROCEDURE FOR COLLECTION AND TREATMENT OF DATA

This study was a comparative survey which examined the relationship between job satisfaction of emergency department registered nurses and patient satisfaction and the resultant behavioral intent for each group. No treatment was implemented during the study.

There are two critical features of a comparative survey design:

1. “Since random assignment is not possible, the groups must be comparable on the major extraneous variables, ideally differing only in the independent variable” (Brink & Wood, 1989, p. 90).

2. A theoretical framework must be used in order for the researcher to predict the effect of the independent variable on the dependent variable (Brink & Wood, 1998).

A comparative survey design is theory based and research results are used to strengthen the theory. Because of the lack of independent variable manipulation, comparative survey research cannot be used to directly test theory (Brink & Wood, 1998).

Control over data is achieved through sample selection methods, by the conditions under which variables are measured, and by data analysis through statistical techniques. The sample is selected to discriminate between and among groups on the basis of the presence, absence, or amount of the independent variable. The effect of extraneous

variables on the dependent variable is estimated by the measurement of all relevant extraneous variables. Convenience sampling is an appropriate method of sampling variation for a comparative design survey. Interviews and questionnaires are acceptable methods of data collection. An instrument which is quantitative and yields interval or ratio data is preferred. Validity of results is highly dependent on the reliability and validity of the research instrument. Instrument content validity is the minimal level of acceptability. Instrument reliability must be established in the population under study (Brink & Wood, 1998).

A comparative survey design was appropriate for this study because the study was theory based and the independent variables were not manipulated. According to Brink and Wood (1998), the purpose of a survey design is to specify the relationship of two or more variables without any experimental manipulation of the independent variables. Because there is no control of independent variables, a survey design does not have sufficient internal validity to support a cause-and-effect relationship. The strength of a survey design lies in its external validity. Variables are examined and conclusions are drawn about the target population from the sample data.

### Setting

This study was conducted in two health care institutions in the Southwestern United States. One institution is private not-for-profit (Hospital A, NFP) and the other private for-profit (Hospital B, FP). Both institutions are within a 115 mile radius of each

other. Permission to conduct the study was obtained in writing from each institution (Appendix A).

Hospital A is located in a metropolitan area of the Southwestern United States with a population over 100,000 people. The hospital is not-for-profit (NFP) and licensed for 404 in-patient beds. The emergency department (ED) is currently seeking classification as a Level Two trauma facility with the American College of Surgeons and the state's Department of Health. The ED has 21 private rooms which includes seven cardiac monitored beds. The ED averages 140 patients per day. For 1996, the ED census was 51,449 patients. In 1997, 50,822 patients were seen in the ED (H. Murphy, personal communication, July 14, 1998). The decrease in the number of patients resulted from the opening in November 1996 of a free-standing minor care clinic one block from the hospital. The clinic is open 7 days a week for 10 hours a day. During November and December 1996, 932 patients were seen in the clinic while the 1997 census was 13,519 patients. Between January and mid-July 1998, 8,890 patients were seen in the clinic (D. Chumak, personal communication, July 15, 1998).

Approximately 10% of ED patients are admitted as an in-patient to Hospital A (NFP). Excluding Labor and Delivery, 54% of admissions result from the ED. Eight-four percent of critical care (CCU and ICU) admissions are from the ED (G. Gumbert, personal communication, March 30, 1998).

Nursing staff included 41 nurses of which 36 are registered nurses, 3 are graduate nurses awaiting NCLEX results, and 2 are licensed vocational nurses. Although the ED

has a 0% vacancy rate with a waiting list of nurses wanting to transfer to the department, a 21% turnover rate exists (G. Gumbert, personal communication, March 30, 1998).

The ED is staffed by seven full-time board-certified emergency physicians who are independent contractors employed by an emergency physician service. The same emergency physician service staffs the ED with a nurse practitioner or physician-assistant daily for 12 hours per day (W. Daney, personal communication, June 29, 1998).

Hospital B is located in a metropolitan area of the Southwestern United States with a population over 200,000 people. The hospital is for-profit (FP) and licensed for 307 in-patient beds. Employees are eligible to buy stock on a quarterly basis based on the amount of money the employee has removed from their pay check. Employees can also invest in a 401K with the hospital matching 25 cents per dollar.

At the current time, the ED does not hold a trauma certification but is preparing to seek a Level II designation. The ED has 15 major care beds, 9 minor care beds, 6 observation beds, 5 float beds used by either out-patient surgery or ED minor care. Eight beds are cardiac-monitored beds. Two are designated cardiac beds but all rooms can receive cardiac patients. In addition, seven rolling cardiac monitors are available. The ED census was 41,297 patients in 1996 and 43,886 in 1997. As of September 1998, the 1998 census averaged 3,915 visits per month which equates to 129 patients per day. Thirteen percent of ED patients are admitted with approximately 35% of hospital admissions resulting from the ED.

The ED is staffed by eight full-time and six part-time physicians who are

independent contractors employed by an emergency physician service. Thirteen are board-certified and one is board eligible. The same emergency physician service employs two physician assistants, one of whom staffs the ED 12 hours per day.

Thirty-three ED registered nurses were on staff either full or part-time during the study time period. The ED does not employ licensed vocational nurses. The RN vacancy rate is 8%. The RN turnover rate averages 3.83% per month (A. Atnip, personal communication, September 9, 1998).

#### Population and Sample

The target population included all nurses employed in an emergency department and all emergency department patients in the United States. For this study, the available population included nurses and patients in the two identified health care institutions in the Southwestern United States.

According to Brink and Wood (1998), a convenience sample is appropriate as the method of sample identification in a comparative survey design. Two groups of participants were included in the study, nurses and patients. Nurse and patient participants were approached and invited personally by the researcher to participate in the study.

All emergency department registered nurses and graduate nurses awaiting NCLEX results were asked to participate. Because only Hospital A (NFP) employed licensed vocational nurses in the ED, this group of nurses was excluded from the study. In order to obtain subjects with a wide variety of characteristics (heterogeneous), the entire available population of registered nurses were invited to participate. To increase generalizability of

results, no limit was placed on participant's age, gender, marital status, income, shift worked, and number of hours worked per week (Burns & Grove, 1993).

Convenience sampling was used to select ED patients for the study. Conscious patients age 18 or over who were able to provide permission to be in the study, and who could read, write, and understand the English language were asked to participate. Emergency department patients in an acute life threatening situation such as a myocardial infarction, victims of an alleged sexual assault, or under police custody were not asked to participate. Power analysis ( $\alpha = .05$ , power = .80) determined 64 patients were needed from each hospital for a total of 128.

#### Protection of Human Subjects

This research study observed all policies and procedures as set forth by the Human Subjects Committee of Texas Woman's University. The study was submitted for review and approved by the Human Subjects Review Committee of Texas Woman's University (Appendix B). Written agency permission was obtained according to the individual health care institution's research policy.

No significant adverse effects to either patients or nurses were anticipated. All individuals were given the opportunity to have questions answered by the researcher prior to and after either their participation or refusal.

All individuals were informed both verbally and in writing regarding the purpose of the study, guarantee of confidentiality, and potential benefits and risks. Only individuals able to provide informed consent were asked to participate. The statement "I understand



that the return of my completed questionnaire constitutes my informed consent to act as a subject in this research” was written on each satisfaction survey. No financial incentive was offered to any participant. Participants were informed it should take less than 20 minutes to complete the survey forms and they were free to stop at any time if uncomfortable answering any of the questions. Participants were informed participation was completely voluntary and there was no penalty for withdrawing from the study at any time.

Confidentiality was guaranteed by reporting only group data for each institution. No demographic data was reported which would identify specific participants. Individual participants were informed they could request a summary of the study results from the researcher.

Completed questionnaires were placed in a locked survey box provided in each participating ED. Only the researcher removed the questionnaires from the locked survey box. Completed questionnaires were reviewed only by the researcher. The researcher will shred all questionnaires within 1 year following data analysis.

Patients were told potential benefits and risks to their participation in the study. Potential benefits included their satisfaction of being able to contribute to the body of nursing knowledge regarding patient satisfaction with nursing care in the ED. Potential risks were negligible. These included minimal discomfort and/or anxiety while completing the questionnaire, potential breach of confidentiality, and concern over the effect on their nursing care for their consent or refusal to participate in the study as a

current or future ED patient especially for patients dissatisfied with their nursing care. To minimize potential risks, patients were informed not to place their name on any of the forms, to complete the questionnaires privately when a nurse or other health care employee was not present, to place the completed questionnaires back in the envelope, to seal the envelope, and to place the sealed envelope in the locked survey box located in the ED. Patients were able to withdraw at any time during the study without consequences. Patients were told that neither their study participation nor refusal would affect their care received in the ED as nurses were not informed as to which patients consented or refused to participate in the study.

Nurses were informed of potential benefits and risks to participation in the study. Potential benefits included satisfaction of being able to contribute to the body of nursing knowledge regarding job satisfaction and its relationship to patient satisfaction with nursing care in the ED. Potential risks were negligible. These included minimal discomfort and/or anxiety while completing the questionnaires, potential breach of confidentiality, and concern over the effect on their employment for consent or refusal to participate in the study, particularly for nurses dissatisfied with their job. To minimize potential risks, nurses were informed not to place their name on the questionnaires, to complete the questionnaires privately when on break or to take the questionnaires home to complete, to place completed questionnaires in the envelope, to seal the envelope, and to place the sealed envelope in the locked survey box located in the ED lounge. Nurses were able to withdraw at any time during the study without consequences. Nurses were

informed that neither study participation nor refusal would affect their job as nursing administration was not aware of who participated or declined to participate.

Debriefing involved a brief description of the purpose of the study in a cover letter, guarantee of confidentiality, and potential benefits and risks of the study. Participants were told that results were available from the researcher. A 3x5 card was placed in each packet for those who would like a summary of the survey results. Participants were requested to place their name and address on the 3x5 card and place the card separate from their survey in the locked survey box. Individuals were informed they may anonymously contact the researcher through Texas Woman's University if personal discomfort and/or anxiety resulted from either participating or refusing to participate in the study. The researcher's name and phone number were included in the cover letter. The phone number of the Texas Woman's University Office of Research and Grants was provided in the cover letter so individuals could call for questions regarding the study.

### Instruments

Two established satisfaction instruments plus a researcher-developed demographic form that included behavioral intent questions were used for data collection. Written permission was obtained from the author of each satisfaction instrument (Appendix C).

#### Consumer Emergency Care Satisfaction Scale

Patient satisfaction with ED nursing care was measured using the revised edition of the Consumer Emergency Care Satisfaction Scale (CECSS) developed by Davis (1988) to measure consumer satisfaction with ED nursing care. The CECSS was generated from a

concept analysis, from the Risser Patient Satisfaction Scale, and feedback from five content experts. The original 5-point Likert scale had 20 items with possible responses ranging from completely agree to completely disagree (Davis, 1988).

Exploratory factor analysis with 234 respondents measured construct validity. The original 20-item scale supported four subscales that loaded at .4 or greater and included psychological safety, discharge teaching, information giving, and technical competence. Internal reliability was tested using Cronbach's alpha coefficient. Overall alpha was .92. Subscale alpha levels were .93 for discharge teaching, .92 for psychological safety, .75 for technical competence, and .67 for information giving (Davis, 1988).

Subsequently, confirmatory factor analysis using a multiple groups approach with aggregate data from four researchers ( $N = 468$ ) produced two factors: caring and teaching, with alpha coefficients of .92 and .87 respectively. No overall alpha is now utilized. The original CECSS has been revised from 20 to 19 items with 15 being scored. Four negatively stated items are considered filler items used to minimize response set and are not scored. The use of similarities in language to describe patient satisfaction and caring was acknowledged and had been noted earlier by Larson and Ferketich (1993) who had studied patients' satisfaction with nurses' caring during hospitalization (Davis, Bush, & Thomas, 1997).

Scoring of the CECSS results in a total scale score ranging from 15 to 75. A score of less than 45 indicates dissatisfaction with nursing care and a score greater than 45 indicates satisfaction with nursing care. The caring subscale ranges from 12 to 60 with a

score less than 36 indicating dissatisfaction and greater than 36 indicating satisfaction. The teaching subscale score ranges from 3 to 15 with a score of nine or less indicating dissatisfaction and greater than nine indicating satisfaction (B. Davis, personal communication, April 21, 1998).

### Index of Work Satisfaction

The Index of Work Satisfaction (IWS) was utilized to measure nurses' job satisfaction. The IWS is a two-part instrument developed by Stamps and Piedmonte between 1972 and 1978 and published in 1986 in Nurses and Work Satisfaction: An Index for Measurement. The initial Likert scale had 60 satisfaction items which were later increased to 72, then decreased to 48 and then to 44 (Stamps, 1997a; Stamps & Piedmonte, 1986). Stamps made minor modifications to the instrument and published the second edition of Nurses and Work Satisfaction in 1997. Based on negative feedback regarding the complexity in scoring the IWS received from researchers who had utilized the instrument, a packet is now available for a nominal fee to assist researchers in scoring the IWS (Stamps, 1997a).

Part A of the IWS measures the relative importance of the six components of job satisfaction and consists of 15 pairs of all possible combinations of the six components of job satisfaction. Components include professional status, pay, organizational policies, autonomy, task requirements, and interaction. Respondents identify which of each pair of components is more important to their job satisfaction. In scoring, the importance of each

component is weighted using a modification of the paired comparison test. This allows for the six components to be rank-ordered in terms of relative importance.

Part B of the IWS is a 44-item Likert scale that measures the individual's current level of satisfaction with the six components. The value and range of responses is from one for strongly agree to seven for strongly disagree with four being the undecided middle score. For calculation purposes, positive items are reversed scored because the higher component score is indicative of a higher level of satisfaction.

Various sets of scores are calculated from Part B of the IWS. First, the component scale score is the average value from the possible range of scores for each component. Second is the component mean score for each of the six components which is the mean score based on the seven-point Likert scale. The adjusted component score is obtained by multiplying the component weighting coefficient from Part A by the component mean score from Part B. The IWS score is obtained by summing and then dividing by six, the adjusted component scores which produces the IWS value which reflects actual level of satisfaction with all components. The total scale score, which may range from 44 to 308, is obtained by summing all numerical scores from the Likert values from Part B of the IWS. The mean scale score is obtained by dividing the total scale score by 44, the total number of items on Part B of the IWS (Stamps, 1997b).

Individual satisfaction component scores and job satisfaction scores are interpreted according to quartiles. To be interpreted as satisfaction, scores should be above the 50th

percentile (third quartile) with a higher score indicative of a higher level of satisfaction (Stamps, 1997a; Stamps & Piedmonte, 1986).

Stamps and Piedmonte used two statistical methods to measure reliability of the IWS and one statistical method for validity. Cronbach's alpha which measured internal reliability and provided an estimate of the integrity of the six components was reported by Stamps and Piedmonte (1986) to range from .69 to .85 for the subscales and a total alpha of .91. Individual components' Cronbach's Alpha coefficient scores were .85 for pay, .83 for organizational policies, .82 for interaction, .76 for professional status, and .69 for autonomy and task requirements. Kendall's Tau was the second measure of reliability used to determine if there was any significant difference between the use of the total weighted IWS score and an unweighted score that utilizes only summed results for Part B of the IWS. Reliability results of .9213 provided additional support that the satisfaction items were accurately measuring the six components and the similarity of the weighted and unweighted scores.

Validity was assessed using factor analysis. Using a varimax rotation, 12 factors were produced that accounted for 62% of the variance. All but one factor (organizational policies) loaded at a level of .4 or greater. Based on these results, minor wording revisions were made to the IWS (Stamps & Piedmonte, 1986).

#### Data Collection

Following written approval from the Human Subject's Review Committee of Texas Woman's University and each participating health care institution, data collection was

initiated. Patient data collection was completed prior to nurse data collection at each hospital.

Patient data collection from Hospital A (NFP) was accomplished in 8 days during various hours of the day, evening, and night. On each study day, the researcher reviewed ED charts on all patients undergoing treatment to determine eligibility for inclusion in the study. Patients who met eligibility requirements were approached by the researcher to request their participation. All selected patients were informed both verbally and in writing regarding the purpose of the study, guarantee of confidentiality, and the potential benefits and risks.

Ninety-five patients were approached at Hospital A (NFP). Fourteen (15%) declined to participate. Of the 81 returned survey forms, 11 (14%) were not usable due to several omitted responses on either the demographic form and/or the satisfaction survey or a noted response set with the satisfaction questionnaire. The final number of usable patient questionnaires was 70 (86%). Each patient who agreed to participate was given a packet (Appendix D) containing the cover letter, patient demographic form which included behavior intent questions, the patient satisfaction questionnaire, a 3x5 card, and a pencil. The researcher explained each page to the patient and asked if there were any questions. Patients were asked to complete the satisfaction survey just prior to their leaving the ED in order for their entire encounter with their nurse to be evaluated.

Although many patients did place the sealed envelope containing their completed survey forms into the locked survey box, some patients asked the researcher to return for



the sealed envelope or the envelope was left in the room for the researcher to retrieve following the patient's departure from their room. The sealed envelope was immediately placed in the locked survey box by the researcher.

Data collection from nurses at Hospital A (NFP) began immediately following completion of patient data collection and was concluded within 3 weeks. Of the 40 registered nurses eligible for the study, 37 (93%) were approached personally by the researcher and their participation requested. All were informed of the purpose of the study, potential risks and benefits, and given a guarantee of confidentiality. All 37 agreed (100%) to participate. A packet (Appendix E) containing the cover letter, the demographic form which included the behavioral intent question, a 3x5 card, and the satisfaction survey was given to each nurse. The researcher explained each page and asked if there were any questions. Nurses were asked to either take the packet home to complete or to complete the packet privately while on break. Nurses were requested to return their completed survey forms to the envelope, seal the envelope, and place the envelope in the locked survey box in the lounge. One nurse contacted at home was sent and returned the packet by mail. Several attempts were made to contact the two remaining nurses at home without success. Two weeks following contact with the last nurse, an email was sent to all participating nurses thanking them for their participation and requesting that all completed surveys be placed in the locked survey box by July 1, 1998. Of the 38 who agreed to participate, 22 returned their packet for a 58% response rate. All nurse survey forms from Hospital A (100%) were usable.

Patient data collection at Hospital B (FP) was initiated 5 days following patient data completion at the not-for-profit hospital. Patient data collection was accomplished in 4 days during various hours of the day, evening, and night. On each study day, the researcher reviewed ED charts on all patients undergoing treatment in order to determine eligibility for inclusion in the study. Patients who met eligibility requirements were approached by the researcher to request their participation.

Of the 78 patients approached at Hospital B (FP), eight (10%) declined to participate which resulted in 70 (90%) usable surveys. Each patient who agreed to participate was given a packet (Appendix D) containing the cover letter, patient demographic form which included behavior intent questions, the patient satisfaction questionnaire, a 3x5 card, and a pencil. The researcher explained each page to the patient and asked if there were any questions. Patients were asked to complete the satisfaction survey just prior to their leaving the ED in order for their entire encounter with their nurse to be evaluated.

The majority of patients placed the sealed envelope containing their completed survey forms into the locked survey box. Some patients asked the researcher to return for the sealed envelope or the envelope was left in the room for the researcher to retrieve following the patient's departure from their room. The sealed envelope was immediately placed in the locked survey box by the researcher.

Data collection from nurses at Hospital B (FP) began immediately following completion of patient data collection and was concluded within 4 weeks. Of the 33 nurses

eligible for the study, all were approached personally by the researcher and their participation requested. All were informed of the purpose of the study, potential risks and benefits, and given a guarantee of confidentiality. Thirty-two nurses (97%) agreed to participate. A packet (Appendix E) containing the cover letter, the demographic form which included the behavioral intent question, a 3x5 card, and the satisfaction survey was given to each nurse. The researcher explained each page and asked if there were any questions. Nurses were asked to either take the packet home to complete or to complete the packet privately while on break. Nurses were requested to return their completed survey forms to the envelope, seal the envelope, and place the envelope in the locked survey box in the lounge. One nurse returned the completed survey by mail. A thank-you letter was sent to the ED nurses thanking them for their participation and requesting that all completed surveys be placed in the locked survey box by July 10, 1998. Of the 32 nurses who agreed to participate, 22 (69%) nurses returned their packet. Of the 22, three surveys were not usable because Part A of the IWS was left blank in two surveys and one survey was returned completely blank. This resulted in 19 (86%) usable surveys from nurses at Hospital B for a return rate of 59%.

### Pilot

A pilot study was conducted using the IWS (Stamps & Piemonte, 1986) to test the feasibility of continuing the larger project of measuring the relationship between nurses' job satisfaction and patients' satisfaction. An exploratory study investigated job expectations and satisfaction with these expectations in a sample of new and experienced

registered nurses in a not-for-profit, acute care facility which employed approximately 215 registered nurses in a city of 100,000 residents in the Southwestern United States. The main facility had 136 acute care beds and 75 in-patient psychiatric beds in an adjacent building. The pilot study also determined the reliability of the IWS (Stamps & Piedmonte, 1986) utilizing the above sample.

Research questions for the pilot were:

1. Which expectations relevant to job satisfaction are most desired by new graduate registered nurses as they enter the employing institution?
2. Which expectations relevant to job satisfaction are most desired by experienced registered nurses?
3. Is there a difference between the expectations relevant to job satisfaction for new graduate registered nurses and experienced registered nurses?
4. Is there a difference in the level of job satisfaction between new graduate registered nurses and experienced registered nurses?
5. What is the reliability coefficient of the Index of Work Satisfaction with this sample of registered nurses?

The sample included all eligible registered nurses within the facility. Eligible registered nurses included those who had been employed by the hospital 5 or more years and new graduates who had graduated 18 months or less prior to the study. Data collection involved the use of a packet that was either delivered to and collected from each individual in the sample or mailed to the individual and returned by mail. Of the 62

packets distributed, the final number in the sample was 27 new graduates and 30 experienced registered nurses for a total of 57 nurses. A demographic data sheet and the IWS (Stamps & Piedmonte, 1986) were utilized for data collection.

Index of Work Satisfaction results indicated that for both groups of nurses, pay (new nurses = 3.619, experienced nurses = 3.433) was the most desired component of job satisfaction while organizational policies (new nurses = 2.541, experienced nurses = 2.4056) was the least important component. Yet for both groups of nurses, the component scale score for pay was below the 50th percentile (new nurses = 24.9, experienced nurses = 21.8), indicating a low level of satisfaction with this component. After adjustment for desired level of importance and actual satisfaction, the highest rated satisfaction component for new nurses was autonomy (17.582) while professional status (17.635) was highest for experienced nurses. Both autonomy in the new nurses and professional status in the experienced nurses were below the 50th percentile, indicating a low level of satisfaction. Pay dropped to third for new nurses (14.990) and fourth for experienced nurses (12.435). In both groups, these scores were below the 50th percentile, indicating a low level of satisfaction.

For new nurses, the reliability coefficient ranged from .893070 for autonomy to .922638 for interaction. The IWS reliability coefficient was .877024 for new nurses. For experienced nurses, reliability coefficient ranged from .774777 for organizational policies to .856248 for professional status. The IWS reliability coefficient was .733441 for experienced nurses.

The IWS for new nurses was 13.695 and 13.465 for experienced nurses. Both overall scores were below the 50th percentile, indicating a low level of satisfaction. The t-test was utilized to determine if there was a difference between the level of satisfaction for new and experienced nurses. An equal variances t-test was not significant at the .05 level ( $t(55) = -.4215$ ,  $p = .675$ ). The results obtained in this pilot indicated a low level of satisfaction in both groups of nurses not only in individual expected components of job satisfaction but in satisfaction in the achievement of these job expectations. In addition, IWS scores indicated a low level of overall job satisfaction in both groups of nurses. Data indicated that in this sample of nurses, there was an incongruity between job expectations and satisfaction with these expectations that resulted in overall job dissatisfaction.

The next step was to investigate the relationship between nurses' job satisfaction and patients' satisfaction with nursing care. Because many patients first encounter a health care facility through exposure to the emergency department, it was most plausible to investigate the relationship between emergency nurses' job satisfaction and patients' satisfaction with nursing care.

#### Treatment of Data

Descriptive statistics were used to describe the sample and demographic data. Tables were utilized to display frequencies and percentages of demographic variables. Internal consistency reliability of the Index of Work Satisfaction and the Consumer Emergency Care Satisfaction Scale were assessed using Cronbach's alpha.

The original intent was to analyze each hypothesis using 2-Way Analysis of Variance (2-Way ANOVA). Because of the small number of patients responding “No” ( $N = 7$ ) to each behavioral intent question, the assumption of homogeneity of variance was violated for hypothesis one and two. This limited analysis of hypothesis one and two to descriptive statistics. The assumptions pertaining to normality, level of measurement, and independence were met for the four hypotheses. The alpha level for hypothesis three and four was set at .05. Due to the use of two different types of satisfaction questionnaires, satisfaction scores for individual nurses and patients were calibrated so they were in a common metric form for analysis.

## CHAPTER 4

### ANALYSIS OF DATA

A non-experimental comparative survey design was conducted to investigate the relationship between nurses' job satisfaction and patients' satisfaction with nursing care in the emergency department. The Index of Work Satisfaction (Stamps, 1997; Stamps & Piedmonte, 1986) was used to determine satisfaction with nurses' job expectations. The Consumer Emergency Care Satisfaction Scale (Davis, 1988; Davis et al., 1997) was used to measure patients' satisfaction with nursing care. In addition, patient and nurse demographic data and behavioral intent were obtained from study participants.

Data were analyzed using SPSS 8.0 and Microsoft Excel. A descriptive summary of demographic information for nurse and patient participants will be presented, followed by results for the four research hypotheses.

#### Description of Sample

Participants for this study included emergency department nurses and patients from a private not-for-profit (Hospital A, NFP) and a private for-profit (Hospital B, FP) health care institution in the Southwestern United States. Of the 151 questionnaires distributed to patients, 70 usable patient questionnaires were obtained from each health care institution, yielding a response rate of 93% collectively. Usable nurse questionnaires totaled 22 from Hospital A and 19 from Hospital B, with response rates of 58% and 59%, respectively.



### Nurse Demographic Results

A summary of demographics of nurses included in the study is presented in Table 2. For Hospital A (NFP), the majority of participants were female (86.4%) as were 100% of Hospital B (FP) nurses. For Hospital A, 45.5% were born between 1960-1969 while for Hospital B, more than one-half were born between 1950-1959 (52.6%). In both groups, the majority were white (95.5% Hospital A & 89.5% Hospital B). Most participants were married (54.5% Hospital A & 84.2% Hospital B) and had two or fewer children (63.6% Hospital A & 52.6% Hospital B).

Table 2

Frequency Distribution and Percentages of Demographics by Nurse Groups

Variable	Hospital A (NFP)		Hospital B (FP)	
	n	%	n	%
Gender				
Male	3	13.6		
Female	<u>19</u>	<u>86.4</u>	<u>19</u>	<u>100.0</u>
Total	22	100.0	19	100.0
Date of Birth				
1940-1949	4	18.2	4	21.1
1950-1959	7	31.8	10	52.6
1960-1969	10	45.5	3	15.8
1970-1979	<u>1</u>	<u>4.5</u>	<u>2</u>	<u>10.5</u>
Total	22	100.0	19	100.0
Ethnicity				
White	21	95.5	17	89.5
Missing	<u>1</u>	<u>4.5</u>	<u>2</u>	<u>10.5</u>
Total	22	100.0	19	100.0
Marital Status				
Married	12	54.5	16	84.2
Single	8	36.4	3	15.8
Life partner	1	4.5	0	0.0
Other	<u>1</u>	<u>4.5</u>	<u>0</u>	<u>0.0</u>
Total	22	100.0	19	100.0
Number of Children				
2 or less	14	63.6	10	52.6
3 or more	3	13.6	8	42.1
None	<u>5</u>	<u>22.7</u>	<u>1</u>	<u>5.3</u>
Total	22	100.0	19	100.0

Table 3 presents a summary of the education level of nurses included in the study.

Both groups of nurses were primarily graduates of an Associate Degree in Nursing

program (86.4% Hospital A & 42.1% Hospital B). Less than one-fourth of Hospital A nurses (13.6%) were generic Baccalaureate Nursing graduates compared to 26.3% of Hospital B (FP) nurses. For Hospital A, 59.1% graduated prior to 1995 while 73.7% of nurses from Hospital B graduated prior to 1995.

Table 3

Frequency Distribution and Percentages of Education by Nurse Groups

Variable	Hospital A (NFP)		Hospital B (FP)	
	n	%	n	%
<b>Basic Nursing Education</b>				
ADN	19	86.4	8	42.1
BSN	3	13.6	5	26.3
Diploma	<u>0</u>	<u>0.0</u>	<u>6</u>	<u>31.6</u>
Total	22	100.0	19	100.0
<b>Year of Graduation</b>				
1996 or later	3	13.6	0	0.0
1995 or earlier	13	59.1	14	73.7
Missing	<u>6</u>	<u>27.3</u>	<u>5</u>	<u>26.3</u>
Total	22	100.0	19	100.0
<b>Second Degree</b>				
BA/BS	2	9.1	3	15.8
Other	6	27.3	0	0.0
None	11	50.0	12	63.2
Missing	<u>3</u>	<u>13.6</u>	<u>4</u>	<u>21.0</u>
Total	22	100.0	19	100.0

In Table 4 is a summary of data related to employment status of nurses in the study. Almost three-fourths of all nurses work full-time (72.7% Hospital A & 73.7% Hospital B). Less than one-half (36.4%) of nurses at Hospital A (NFP) consider day shift as their primary shift although this was the highest percentage. Almost one-half (47.4%) of nurses

at Hospital B (FP) consider day shift as their primary shift. Over one-half (63.6%) of nurses at Hospital A were primary wage earner in the household, while only 26.3% of nurses at Hospital B were primary wage earners.

Table 4

Frequency Distribution and Percentages of Employment Status by Nurse Groups

Variable	Hospital A (NFP)		Hospital B (FP)	
	n	%	n	%
<b>Employment Status</b>				
Full-time	16	72.7	14	73.7
Part-time	<u>6</u>	<u>27.3</u>	<u>5</u>	<u>26.3</u>
Total	22	100.0	19	100.0
<b>Part-Time Hours</b>				
20 or less per week	2	33.3	3	60.0
More than 20 per week	3	50.0	2	40.0
Missing	<u>1</u>	<u>16.7</u>	<u>0</u>	<u>0.0</u>
Total	6	100.0	5	100.0
<b>Primary Shift</b>				
Day	8	36.4	9	47.4
Evening	6	27.3	3	15.8
Night	5	22.7	3	15.8
Rotating	2	9.1	2	10.5
Other	<u>1</u>	<u>4.5</u>	<u>2</u>	<u>10.5</u>
Total	22	100.0	19	100.0
<b>Primary Wage Earner</b>				
Yes	14	63.6	5	26.3
No	<u>8</u>	<u>36.4</u>	<u>14</u>	<u>73.7</u>
Total	22	100.0	19	100.0

Patient Demographic Results

A summary of patient demographics is presented in Table 5. In both hospitals, over one-half the patients in the study were female (58.6% Hospital A & 57.1% Hospital B).

The majority of Hospital A (NFP) patients (27.1%) were between 18 and 27 years of age while Hospital B (FP) patients (28.6%) were primarily between 28 and 37 years of age. Just over one-half of patients at Hospital A (58.6%) were white while the majority of Hospital B patients (82.9%) were white. Less than one-half of patients at Hospital A (41.4%) were married, compared with 61.4% of Hospital B patients.

Table 5

Frequency Distribution and Percentages of Demographics by Patient Groups

Variable	Hospital A (NFP)		Hospital B (FP)	
	n	%	n	%
<b>Gender</b>				
Male	29	41.4	30	42.9
Female	<u>41</u>	<u>58.6</u>	<u>40</u>	<u>57.1</u>
Total	70	100.0	70	100.0
<b>Date of Birth</b>				
1920-1930	4	5.7	1	1.4
1931-1940	3	4.3	3	4.3
1941-1950	5	7.1	7	10.0
1951-1960	16	22.9	19	27.1
1961-1970	15	21.4	20	28.6
1971-1980	19	27.1	12	17.1
Missing	<u>8</u>	<u>11.4</u>	<u>8</u>	<u>11.4</u>
Total	70	100.0	70	100.0
<b>Ethnicity</b>				
White	41	58.6	58	82.9
Black	10	14.3	2	2.9
Hispanic	3	4.3	2	2.9
Missing	<u>16</u>	<u>22.9</u>	<u>8</u>	<u>11.4</u>
Total	70	100.0	70	100.0
<b>Marital Status</b>				
Married	29	41.4	43	61.4
Single	26	37.1	21	30.0
Widow/ed	5	7.1	2	2.9
Life partner	2	2.9	0	0.0
Other	2	2.9	1	1.4
Missing	<u>6</u>	<u>8.6</u>	<u>3</u>	<u>4.3</u>
Total	70	100.0	19	100.0

A summary of (a) primary wage earner status, (b) first emergency department (ED) visit, and (c) private insurance, Medicare, or Medicaid is presented in Table 6. At both

hospitals, patients were primary wage earners (68.6% Hospital A & 55.7% Hospital B).

This was the first emergency department visit for 27.1% of Hospital A (NFP) patients and 57.1% of Hospital B (FP) patients. Less than one-half (45.7%) of Hospital A patients had private health insurance while 12.9% reported having Medicare and 8.6% Medicaid. The majority (88.6%) of Hospital B patients had private health insurance, 5.7% had Medicare, and 1.4% Medicaid.

Table 6

Frequency Distribution and Percentages of Primary Wage Earner, First Visit, and Insurance by Patient Groups

Variable	Hospital A (NFP)		Hospital B (FP)	
	n	%	n	%
<b>Primary Wage Earner</b>				
Yes	48	68.6	39	55.7
No	21	30.0	30	42.9
Missing	<u>1</u>	<u>1.4</u>	<u>1</u>	<u>1.4</u>
Total	70	100.0	70	100.0
<b>First Emergency Department Visit</b>				
Yes	19	27.1	40	57.1
No	<u>51</u>	<u>72.9</u>	<u>30</u>	<u>42.9</u>
Total	70	100.0	70	100.0
<b>Private Health Insurance</b>				
Yes	32	45.7	62	88.6
No	35	50.0	7	10.0
Missing	<u>3</u>	<u>4.3</u>	<u>1</u>	<u>1.4</u>
Total	70	100.0	70	100.0
<b>Medicare Insurance</b>				
Yes	9	12.9	4	5.7
No	58	82.9	65	92.9
Missing	<u>3</u>	<u>4.3</u>	<u>1</u>	<u>1.4</u>
Total	70	100.0	70	100.0
<b>Medicaid Insurance</b>				
Yes	6	8.6	1	1.4
No	61	87.1	68	97.1
Missing	<u>3</u>	<u>4.3</u>	<u>1</u>	<u>1.4</u>
Total	70	100.0	70	100.0

Table 7 depicts data relating to the patient (a) being able to recognize their RN in contrast to other ED personnel, (b) expectations of care, and (c) insurance requirements



and choice of ED. Patients at both Hospital A (72.9%) and Hospital B (72.9%) had no difficulty in recognizing their RN in contrast to other ED personnel. A high percentage of patients at both Hospital A (88.6%) and Hospital B (94.3%) stated the quality of nursing care met their expectations. The majority of patients at both Hospital A (88.6%) and Hospital B (74.3%) identified that choice of ED was not based on insurance requirements.

Table 7

Frequency Distribution and Percentages of Recognition of RN, Expectations, and Insurance Requirements by Patient Groups

Variable	Hospital A (NFP)		Hospital B (FP)	
	n	%	n	%
Were you able to recognize your RN in contrast to other ED personnel?				
Yes	51	72.9	51	72.9
No	15	21.4	18	25.7
Missing	4	5.7	1	1.4
Total	70	100.0	70	100.0
Did the quality of your nursing care meet your expectations?				
Yes	62	88.6	66	94.3
No	3	4.3	3	4.3
Missing	5	7.1	1	1.4
Total	70	100.0	70	100.0
Did you choose this ED because of insurance requirements?				
Yes	8	11.4	18	25.7
No	62	88.6	52	74.3
Total	70	100.0	70	100.0

## Findings

This study investigated the relationship between nurses' job satisfaction and patients' satisfaction in the emergency department. The study also examined the relationship between nurses' intent to remain with the institution and job satisfaction. Finally, the relationship between patients' intent to either return or to recommend the institution was examined. The first part of this section provides descriptive data of results from the behavioral intent surveys and the satisfaction instruments.

### Nurses

Table 8 summarizes nurses' data regarding (a) intent to remain employed with the institution, (b) intent to stay with the institution due to satisfaction, (c) actively seeking employment elsewhere due to dissatisfaction, and (d) impression of whether emergency department (ED) peers are seeking employment elsewhere due to job dissatisfaction.

Over three-fourths of nurses in both Hospital A (NFP, 77.3%) and Hospital B (FP, 78.9%) intend to remain employed with their current employer. Yet, just over one-half of nurses in Hospital A (59.1%) were staying due to satisfaction and just over one-fourth of Hospital B (26.3%) nurses were staying due to satisfaction. Interestingly, only 18.2% of Hospital A nurses and 21.1% of Hospital B nurses were currently looking for employment elsewhere due to job dissatisfaction. In addition, almost two-thirds of nurses in Hospital A (63.6%) and Hospital B (63.2%) were under the impression that their peers were looking for employment elsewhere due to their job dissatisfaction.

Table 8

Frequency Distribution and Percentages of Intent and Impression by Nurse Groups

Variable	Hospital A (NFP)		Hospital B (FP)	
	n	%	n	%
Is it your intent to remain employed in this health care institution?				
Yes	17	77.3	15	78.9
No	<u>5</u>	<u>22.7</u>	<u>4</u>	<u>21.1</u>
Total	22	100.0	19	100.0
Are you staying due to job satisfaction?				
Yes	13	59.1	5	26.3
No	<u>9</u>	<u>40.9</u>	<u>14</u>	<u>73.7</u>
Total	22	100.0	19	100.0
Are you currently looking for employment elsewhere due to job dissatisfaction?				
Yes	4	18.2	4	21.1
No	18	81.8	14	73.7
Missing	<u>0</u>	<u>0.0</u>	<u>1</u>	<u>5.3</u>
Total	22	100.0	19	100.0
Is it your impression that your peers in the ED are looking for employment elsewhere due to their job dissatisfaction?				
Yes	14	63.6	12	63.2
No	<u>8</u>	<u>36.4</u>	<u>7</u>	<u>36.8</u>
Total	22	100.0	19	100.0

Measurement of job satisfaction began with identification of job expectations. The Index of Work Satisfaction (IWS) (Stamps, 1997; Stamps & Piedmonte, 1986) quantified

the determination of, and satisfaction or dissatisfaction with expectations in two groups of emergency department nurses.

To assess the reliability of the IWS, Cronbach alphas were calculated for each subscale. The results are presented in Table 9. The nurses' data from the two hospitals were collapsed. Results ranged from .5174 for task requirement to .8404 for pay. The overall IWS reliability was .8117. Results were lower than those found by Stamps and Piedmonte (1986) only for task requirements (.69) and the overall IWS (.91) but similar or higher for autonomy (.69), professional status (.76), organizational policies (.83), interaction (.82), and pay (.85).

Table 9

Reliability Scores for Index of Work Satisfaction

Component	Cronbach's Alpha
Task requirements	.5174
Professional status	.6314
Organization policies	.6506
Autonomy	.6954
Interaction	.7714
Pay	.8404
IWS	.8117

The first step in analysis of the Index of Work Satisfaction (IWS) was development of a frequency matrix based on nurses' expectations which identified a numerical count of how often each component was chosen (Stamps, 1997b). The frequency matrix of nurses' expectations for Hospital A (NFP) is shown in Table 10 and in Table 12 for Hospital B (FP). Following completion of the frequency matrix, a proportion matrix was constructed

which converted frequencies to percentages. The percentage was calculated by dividing the cell value by the total number of respondents in the group (Stamps, 1997b). Table 11 identifies the Proportion Matrix for Hospital A and Table 13 for Hospital B. Results from the frequency and proportion matrices for each hospital are presented together.

Findings in Tables 10 and 11 indicate that for Hospital A (NFP) nurses, pay was chosen by 16 (73%) nurses over autonomy and professional status while 20 (91%) chose pay over interaction, and 21 (96%) chose pay over task requirements and organizational policies. Six (27%) nurses chose autonomy over pay, 12 (55%) chose autonomy over professional status, 15 (71%) chose autonomy over task requirements, and 17 (77%) chose autonomy over organizational policies and interaction. One (.05%) nurse chose task requirements over pay, 6 (29%) chose task requirements over autonomy, 9 (41%) chose task requirements over professional status, 13 (59%) chose task requirements over interaction, and 17 (77%) chose task requirements over organizational policies.

Organizational policies was chosen by 1 nurse over pay (.05%), by 4 (18%) over professional status, by 5 (23%) over autonomy and task requirements, and by 8 (36%) over interaction. Professional status was chosen by 6 (27%) nurses over pay, by 10 (46%) over autonomy, 11 (50%) over interaction, 13 (59%) over task requirements, and 18 (82%) over organizational policies. Two (.09%) nurses chose interaction over pay, 5 (23%) chose autonomy, by 9 (41%) chose task requirements, 11 (50%) chose professional status, and 14 (64%) chose organizational policies.

Table 10

Frequency Matrix of Nurse Expectations, Hospital A (NEP)

Least Important	Most Important					
	Pay	Autonomy	Task Req	Org Policies	Prof Status	Interaction
Pay	--	6	1	1	6	2
Autonomy	16	--	6	5	10	5
Task Req	21	15	--	5	13	9
Org Policies	21	17	17	--	18	14
Prof Status	16	12	9	4	--	11
Interaction	20	17	13	8	11	--

Table 11

Proportion Matrix of Percentages for Nurse Expectations, Hospital A (NEP)

Least Important	Most Important					
	Pay	Autonomy	Task Req	Org Policies	Prof Status	Interaction
Pay	--	0.273	0.045	0.045	0.273	0.091
Autonomy	0.727	--	0.286	0.227	0.455	0.227
Task Req	0.955	0.714	--	0.227	0.591	0.409
Org Policies	0.955	0.773	0.773	--	0.818	0.636
Prof Status	0.727	0.545	0.409	0.182	--	0.500
Interaction	0.909	0.773	0.591	0.364	0.500	--

Tables 12 and 13 findings indicate for Hospital B (FP) nurses, pay was chosen by 11 (58%) nurses over autonomy while 13 (68%) chose pay over professional status, 16 (84%) chose pay over task requirements and interaction, and 17 (90%) chose pay over organizational policies. Eight (42%) nurses chose autonomy over pay while 12 (63%) chose autonomy over professional status and interaction, 14 (74%) chose autonomy over organizational policies, and 15 (79%) chose autonomy over task requirements. Task requirements was chosen by 3 (16%) nurses over pay, 4 (21%) chose task requirements over autonomy, 5 (26%) chose task requirements over professional status, 6 (33%) chose task requirements over interaction, and 11 (58%) chose task requirements over organizational policies. Organizational policies was chosen over pay by 2 (11%) nurses, over professional status by 3 (16%), over interaction by 4 (21%), over autonomy by 5 (26%), and over task requirements by 8 (42%). Professional status was chosen over pay by 6 (32%) nurses, over autonomy by 7 (37%), over interaction by 9 (47%), over task requirement by 14 (74%), and over organizational policies by 16 (84%). Interaction was chosen over pay by 3 (16%) nurses, over autonomy by 7 (37%), over professional status by 10 (53%), over task requirements by 12 (67%), and over organizational policies by 15 (79%).

Table 12

Frequency Matrix of Nurse Expectations, Hospital B (FP)

Least Important	Most Important					
	Pay	Autonomy	Task Req	Org Policies	Prof Status	Interaction
Pay	--	8	3	2	6	3
Autonomy	11	--	4	5	7	7
Task Req	16	15	--	8	14	12
Org Policies	17	14	11	--	16	15
Prof Status	13	12	5	3	--	10
Interaction	16	12	6	4	9	--

Table 13

Proportion Matrix of Percentages for Nurse Expectations, Hospital B (FP)

Least Important	Most Important					
	Pay	Autonomy	Task Req	Org Policies	Prof Status	Interaction
Pay	--	0.421	0.158	0.105	0.316	0.158
Autonomy	0.579	--	0.211	0.263	0.368	0.368
Task Req	0.842	0.789	--	0.421	0.737	0.667
Org Policies	0.895	0.737	0.579	--	0.842	0.789
Prof Status	0.684	0.632	0.263	0.158	--	0.526
Interaction	0.842	0.632	0.333	0.211	0.474	--



The next step in Index of Work Satisfaction (IWS) scoring was to convert percentages in the proportion matrix to standard deviations based on a normal distribution of responses which is reported in a Z-Matrix table. The purpose of this conversion was to increase the weighting of components chosen by participants as being most important to their job satisfaction. The Z-values for each column were then summed and the mean value obtained. In order to eliminate negative mean values, 3.100 was added to each mean. A single number, the component weighting coefficient, was then produced. The purpose of the component weighting coefficient was to identify the importance of each component for the entire group of participants. The components were then ranked in order of importance (Stamps, 1997b). The Z-Matrix for Hospital A (NFP) is identified in Table 14 and in Table 15 for Hospital B (FP).

Results indicated that for Hospital A (NFP) nurses, pay was the most desired component with a value of 4.285 followed by autonomy (3.414), professional status (3.184), task requirements (2.798), interaction (2.707), and organizational policies (2.211). Hospital B (FP) nurses chose pay (3.887) as the most desired component of job satisfaction, followed by autonomy (3.482), professional status (3.251), interaction (3.092), task requirements (2.565), and organizational policies (2.321).

Table 14

Z-Matrix and Component Coefficients for Nurse Expectations, Hospital A (NFP)

Least Important	Most Important					
	Pay	Autonomy	Task Req	Org Policies	Prof Status	Interaction
Pay	--	-0.605	-1.691	-1.691	-0.605	-1.335
Autonomy	0.605	--	-0.566	-0.748	-0.114	-0.748
Task Req	1.691	0.566	--	-0.748	0.230	-0.230
Org Policies	1.691	0.748	0.748	--	0.908	0.349
Prof Status	0.605	0.114	-0.230	-0.908	--	0.000
Interaction	1.335	0.748	0.230	-0.349	0.000	--
Sum	5.926	1.571	-1.509	-4.444	0.420	-1.964
Mean	1.185	0.314	-0.302	-0.889	0.084	-0.393
Component Weighting Coefficient	4.285	3.414	2.798	2.211	3.184	2.707

Table 15

Z-Matrix and Component Coefficients for Nurse Expectations, Hospital B (FP)

Least Important	Most Important					
	Pay	Autonomy	Task Req	Org Policies	Prof Status	Interaction
Pay	--	-0.199	-1.003	-1.252	-0.480	-1.003
Autonomy	0.199	--	-0.805	-0.634	-0.336	-0.336
Task Req	1.003	0.805	--	-0.199	0.634	0.431
Org Policies	1.252	0.634	0.199	--	1.003	0.805
Prof Status	0.480	0.336	-0.634	-1.003	--	0.066
Interaction	1.003	0.336	-0.431	-0.805	-0.066	--
Sum	3.937	1.911	-2.673	-3.893	0.755	-0.038
Mean	0.787	0.382	-0.535	-0.779	0.151	-0.008
Component Weighting Coefficient	3.887	3.482	2.565	2.321	3.251	3.092

The following two tables present a summary of expectation and job satisfaction scores for nurses. In Table 16 are results for Hospital A (NFP) and Table 17 for Hospital B (FP).

Results indicated that for Hospital A (NFP), the total scale score was 179.6 out of a possible 308. Adjusting for values obtained from Part A of the IWS, adjusted component scores indicated professional status (17.966) was the component with which nurses were most satisfied. The adjusted component scores for professional status, autonomy (16.340), and interaction (13.216) fell within the second quartile indicating

dissatisfaction. Dissatisfaction was also evident with the final components, pay (9.219), task requirement (9.073), and organizational policies (6.641), which fell within the first quartile. The overall IWS score of 12.1 was within the second quartile indicating overall job dissatisfaction.

Table 16

Nurse Expectation and Satisfaction Scores, Hospital A (NEP) N = 22

Component	Expectations Component Weighting Coefficient	Satisfaction Component Scale Scores (Range)	Satisfaction Component Mean Score	Adjusted Component Scores
Pay	4.29	12.91 (6-42)	2.15	9.219
Autonomy	3.41	33.50 (8-56)	4.79	16.340
Professional Status	3.18	39.50 (7-49)	5.64	17.966
Task Requirements	2.80	19.45 (6-42)	3.24	9.073
Interaction	2.71	48.82 (10-70)	4.88	13.216
Organizational Policies	2.21	21.02 (7-49)	3.00	6.641
Total Scale Score: 179.6 Range: 44-308		Mean Scale Score: 4.1 Range: 1-7		
Index of Work Satisfaction: 12.1 Quartiles: 0.5-10.3, 10.4-20.0, 20.1-29.7, 29.8-39.7				

For Hospital B (FP), the total scale score was 170.1 out of a possible 308.

Adjusting for values obtained from Part A of the IWS, adjusted component scores

indicated that nurses were most satisfied with professional status (16.573). The adjusted component scores for professional status, autonomy (15.866), interaction (12.956), and pay (10.349) fell within the second quartile indicating dissatisfaction. Dissatisfaction was also evident with the final components, task requirement (8.461) and organizational policies (6.842), which fell within the first quartile. The overall IWS score of 11.8 fell within the second quartile indicating job dissatisfaction.

Table 17

Nurse Expectation and Satisfaction Scores, Hospital B (FP) N – 19

Component	Expectations Component Weighting Coefficient	Satisfaction Component Scale Scores (Range)	Satisfaction Component Mean Score	Adjusted Component Scores
Pay	3.89	15.97 (6-42)	2.66	10.349
Autonomy	3.48	31.89 (8-56)	4.56	15.866
Professional Status	3.25	35.68 (7-49)	5.10	16.573
Task Requirements	2.57	19.79 (6-42)	3.30	8.461
Interaction	3.09	41.89 (10-70)	4.19	12.956
Organizational Policies	2.32	20.63 (7-49)	2.95	6.842
Total Scale Score: 170.1 Range: 44-308		Mean Scale Score: 3.9 Range: 1-7		
Index of Work Satisfaction: 11.8 Quartiles: 0.5-10.3, 10.4-20.0, 20.1-29.7, 29.8-39.7				

Patients

Table 18 presents results of patients' (a) intent to return to the emergency department (ED) for future health care needs, (b) intent to recommend the ED to their family and friends, and (c) reason for returning or recommending the ED being due to satisfaction with their current visit. Results indicated the majority of patients in Hospital

A (NFP, 92.9%) and Hospital B (FP, 95.7%) would choose the current emergency department (ED) for future health care needs if not constrained by insurance requirements. Satisfaction with their current visit was identified by 77.1% of patients at Hospital A and 81.4% of Hospital B patients as the reason for their decision to return to the current ED for future health care needs.

The majority of patients at both Hospital A (92.9%) and Hospital B (97.1%) would recommend the current ED to their family and friends for their health care needs. Satisfaction with their current visit was identified by 77.1% of Hospital A and 90.0% of Hospital B patients as the reason for their decision to recommend the current ED.

Table 18

Frequency Distribution and Percentages of Intent by Patient Groups

Variable	Hospital A (NFP)		Hospital B (FP)	
	n	%	n	%
If you were able to choose any hospital regardless of your insurance requirements or place of residence, would you choose this ED for future health care needs?				
Yes	65	92.9	67	95.7
No	4	5.7	3	4.3
Missing	<u>1</u>	<u>1.4</u>	<u>0</u>	<u>0.0</u>
Total	70	100.0	70	100.0
Is your reason to return for future health care needs due to your satisfaction with your current visit?				
Yes	54	77.1	57	81.4
No	16	22.9	11	15.7
Missing	<u>0</u>	<u>—</u>	<u>02</u>	<u>2.9</u>
Total	70	100.0	70	100.0
Would you recommend this ED to your family and friends for their health care needs?				
Yes	65	92.9	68	97.1
No	<u>5</u>	<u>7.1</u>	<u>2</u>	<u>2.9</u>
Total	70	100.0	70	100.0
Is your reason for recommending this ED to your family and friends due to your satisfaction with your current visit?				
Yes	54	77.1	63	90.0
No	16	22.9	<u>7</u>	<u>10.0</u>
Total	70	100.0	70	100.0



Scoring of the Consumer Emergency Care Satisfaction Scale (CECSS) included summing the two subscales, caring and teaching, plus the entire instrument which resulted in a total satisfaction score. For the caring subscale, the possible range of scores was 12 to 60 with values less than 36 indicating dissatisfaction and values greater than 36 indicating satisfaction. The possible range of values for the teaching subscale was 3 to 15 with values less than 9 indicating dissatisfaction and values greater than 9 indicating satisfaction. The possible total scale score range was 15 to 75 with values less than 45 indicating dissatisfaction and values greater than 45 indicating satisfaction (B. Davis, personal communication, April 21, 1998).

Cronbach alpha scores for the CECSS are presented in Table 19. As with nurse results, patient CECSS reliability scores were calculated collectively for both hospitals. Results were .8863 for teaching and .9240 for caring. Results were similar to that found following revision of the CECSS (caring .92, teaching .87) by Davis and published by Davis et al. (1997).

Table 19

Reliability Scores for Consumer Emergency Care Satisfaction Scale

Component	Cronbach's Alpha
Teaching	.8863
Caring	.9240

Both Hospital A (NFP) and Hospital B (FP) patients (see Table 20) reported high levels of satisfaction with subscales and overall satisfaction. The caring subscale for

Hospital A was 48.47 and 48.58 for Hospital B. Hospital A patients reported a value of 12.36 for the teaching subscale and an overall satisfaction score of 60.66 while Hospital B patients reported a value of 13.65 for the teaching subscale and an overall satisfaction score of 62.65. The CECSS mean for Hospital A was 4.35 and 4.46 for Hospital B.

Table 20

Consumer Emergency Care Satisfaction Scale Scores by Patient Groups

Variable	Hospital A (NFP)	Hospital B (FP)
Caring Subscale Average Range: 12-60 < 36 = Dissatisfaction > 36 = Satisfaction	48.47 n = 68	48.58 n = 66
Teaching Subscale Range: 3-15 < 9 = Dissatisfaction > 9 = Satisfaction	12.36 n = 69	13.65 n = 65
CECSS Mean Range: 1-5	4.35	4.46
Overall Satisfaction Score Range: 15-75 < 45 = Dissatisfaction > 45 = Satisfaction	60.66 N = 67	62.65 N = 63

Research Hypothesis 1: There is a significant positive relationship between patients' satisfaction with emergency department nursing care and patients' intent to return for future health care needs irrespective of hospital type.

Patient satisfaction was measured by the Consumer Emergency Care Satisfaction Scale (CECSS). Intent to return was measured by either a "Yes" or "No" response on the

demographic form to the question “If you were able to choose any hospital regardless of your insurance requirements or place of residence, would you choose this ED for future health care needs?”

Because there was no difference in satisfaction scores across the two hospitals,  $F(1, 125) = 0.195, p > .05$ , patient satisfaction data were collapsed. Results indicated that patients who stated that they intend to return for future health care needs had higher levels of satisfaction with their nursing care than patients who do not intend to return (see Table 21). The CECSS mean satisfaction score for the “Yes” response was 62.500 and 48.286 for the “No” response. Satisfaction scores on the CECSS greater than 45 indicated satisfaction while scores less than 45 indicated dissatisfaction.

Table 21

Mean Scores of Intent to Return by Patients

Intent	N	M	SD	SEM
Yes	122	62.500	8.647	0.783
No	7	48.286	19.111	7.223

Descriptive statistics results for individual hospitals indicated that patients who stated that they intend to return for future health care needs had higher levels of satisfaction with their nursing care than patients who do not intend to return. For Hospital A (NFP), the CECSS mean satisfaction score for patients who intend to return was 61.516 and 50.500 for those who do not intend to return. For Hospital B (FP), the CECSS

mean satisfaction score for patients who intend to return was 63.517 and 45.333 for those who do not intend to return (see Table 22).

Table 22

Intent to Return by Hospital Groups

Variable	Hospital A (NFP) (N = 67)			Hospital B (FP) (N = 63)		
	M	n	SD	M	n	SD
Yes	61.516	62	9.287	63.517	60	7.879
No	50.500	4	15.927	45.333	3	26.312
Missing	48.000	1				
Total	60.657		10.031	62.651		9.831

Research Hypothesis 2: There is a significant positive relationship between patients' satisfaction with emergency department nursing care and patients' intent to recommend the emergency department irrespective of hospital type.

Patient satisfaction was measured by the Consumer Emergency Care Satisfaction Scale (CECSS). Intent to recommend was measured by either a "Yes" or "No" response on the demographic form to the question "Would you recommend this ED to your family and friends for their health care needs?"

Because there was no difference in satisfaction scores across the two hospitals,  $F(1, 126) = 0.617, p > .05$ , patient satisfaction data were collapsed. Results indicated that patients who stated that they intend to recommend the ED to family and friends had higher levels of satisfaction with their nursing care than patients who do not intend to recommend (see Table 23). The CECSS mean satisfaction score for the "Yes" response

was 62.439 and 47.286 for the “No” response. Satisfaction scores on the CECSS greater than 45 indicated satisfaction while scores less than 45 indicated dissatisfaction.

Table 23

Mean Scores of Intent to Recommend by Patients

Intent	N	M	SD	SEM
Yes	123	62.439	8.875	0.800
No	7	47.286	16.490	6.233

Descriptive statistics results for individual hospitals indicated that patients who stated that they intend to recommend the emergency department (ED) to family and friends had higher levels of satisfaction with their nursing care than patients who do not intend to recommend. For Hospital A (NFP), the CECSS mean satisfaction score for those who intend to recommend was 61.290 and 52.800 for those who do not intend to recommend the ED. For Hospital B (FP), the CECSS mean satisfaction score for those who intend to recommend was 63.607 and 33.500 for those who do not intend to recommend (see Table 24).

Table 24

Intent to Recommend by Hospital Groups

Variable	Hospital A (NFP) (N = 67)			Hospital B (FP) (N = 63)		
Intent	M	n	SD	M	n	SD
Yes	61.290	62	9.711	63.607	61	7.845
No	52.800	5	11.777	33.500	2	23.335
Total	60.657		10.031	62.651		9.831

Research Hypothesis 3: There is a significant positive relationship between emergency nurses' job satisfaction and nurses' intent to remain with the institution irrespective of hospital type

To answer this research hypothesis, the data were analyzed using a 2-Way ANOVA, where intent to remain and hospital type represented the independent factors. The dependent variable was nurse satisfaction scores measured by the Index of Work Satisfaction (IWS). Intent to remain was measured by either a "Yes" or "No" response on the demographic form to the question "Is it your intent to remain employed in this health care institution?"

ANOVA results indicated nurses' overall level of satisfaction was similar across the two hospitals,  $F(1, 35) = 0.024$ ,  $p > .05$  (see Table 25). Nurse satisfaction was not different for nurses who intend to stay compared to nurses who do not intend to stay,  $F(1, 35) = 3.069$ ,  $p > .05$ . There was no interaction between hospital and intent to stay,  $F(1, 35) = 1.119$ ,  $p > .05$ . Findings indicated nurses' satisfaction scores were low irrespective of nurses' intent to remain employed with the institution.

Table 25

Analysis of Variance for Intent to Remain by Nurses

Source	df	SS	MS	F
Intent (A)	1	7.736	7.736	3.069
Hospital (B)	1	5.961	5.961	0.024
AxB	1	2.521	2.521	1.119
Within-group error	35	78.850	2.253	

In Table 26 are collapsed mean scores for nurses' intent to remain with the institution. The mean IWS satisfaction score for the "Yes" response was 12.272 and 11.157 for the "No" response. IWS scores above the 50th percentile ( $> 20$ ) indicate satisfaction.

Table 26

Mean Scores of Intent to Remain by Nurses

Intent	N	M	SD	SEM
Yes	30	12.272	1.556	0.284
No	9	11.157	1.269	0.423

In Table 27 are results of individual hospitals according to "Yes" or "No" responses to the question "Is it your intent to remain employed with this health care institution?" For Hospital A (NFP), the IWS mean satisfaction score for nurses who intend to remain was 12.598 and 10.929 for those who do not intend to remain. For Hospital B (FP), the IWS mean satisfaction score for nurses who intend to remain was 11.899 and 11.442 for those who do not intend to remain (see Table 27).

Table 27

Intent to Remain by Hospital Groups

Variable	Hospital A (NFP) (N = 21)			Hospital B (FP) (N = 18)		
	M	n	SD	M	n	SD
Yes	12.598	16	1.552	11.899	14	1.530
No	10.929	5	1.478	11.442	4	1.090
Total	12.201		1.665	11.791		1.428

Research Hypothesis 4: There is a significant positive relationship between nurses' job satisfaction and patients' satisfaction irrespective of hospital type

To answer this research hypothesis, the data were analyzed using a 2-Way ANOVA, where type of hospital and either nurse or patient represented the independent factors. The dependent variable was either nurse satisfaction scores measured by the Index of Work Satisfaction (IWS) or patient satisfaction scores measured by the Consumer Emergency Care Satisfaction Scale (CECSS).

Since nurse and patient satisfaction scores were not directly comparable, each nurse and patient satisfaction score was calibrated to a common metric form. Each participant's score was transformed to a percentage of the highest possible score. Each participant's raw score was divided by the highest possible score and the quotient multiplied by 100 (D. Marshall, personal communication, April 8, 1998).

Results indicated patients reported higher satisfaction scores than nurses,  $F(1, 165) = 708.917, p < .05$  (see Table 28). No relationship was found based on type of hospital,  $F(1, 165) = 0.176, p > .05$ . In addition, there was no interaction between nurses' job satisfaction and patients' satisfaction irrespective of hospital type,  $F(1, 165) = 0.748, p > .05$ . Findings revealed patients were more satisfied than nurses.



Table 28.

Analysis of Variance for Satisfaction by Nurses and Patients

Variable	df	SS	MS	F
Hospital (A)	1	18.417	18.417	0.176
Nurse or Patient Person (B)	1	74229.219	74229.219	708.917*
AxB	1	104.708	104.708	0.748
Within-group error	165	23111.665	140.071	

\*p &lt; .05

## Summary

This chapter presented results from an investigation of the relationship between nurses' job satisfaction and patients' satisfaction in the emergency department (ED) and behavioral intent of both groups in relation to their satisfaction. Data were collected from nurses and patients at two health care institutions. The relationship between nurses' job satisfaction and patients' satisfaction was examined in two ways. Behavioral intent was measured by questions on demographic forms and satisfaction by satisfaction scales.

The following is a list of the study findings.

Research Hypothesis One: There is a significant positive relationship between patients' satisfaction with emergency department nursing care and patients' intent to return for future health care needs irrespective of hospital type

1. The overall level of patient satisfaction was similar across the two hospitals.
2. Patients who stated an intent to return for future health care needs reported higher levels of satisfaction than those who do not intend to return.

Additional descriptive findings include the following:

1. Patients reported high levels of satisfaction with caring and teaching and overall satisfaction with nursing care.
2. Ninety-three percent of Hospital A (NFP) and 96% of Hospital B (FP) patients reported they would choose the current ED for future health care needs if not constrained by insurance requirements.
3. Eighty-nine percent of Hospital A and 74% Hospital B patients identified that choice of ED was not based on insurance requirements.
4. Eighty-nine percent of Hospital A and 94% of Hospital B patients stated their nursing care met their expectations.
5. Seventy-seven percent of Hospital A and 81% of Hospital B patients stated satisfaction with their current visit was the reason for their decision to return to the current ED for future health care needs.

Research Hypothesis Two: There is a significant positive relationship between patients' satisfaction with emergency department nursing care and patients' intent to recommend the emergency department irrespective of hospital type.

1. The overall level of patient satisfaction was similar across the two hospitals.
2. Patients who intend to recommend the ED reported higher levels of satisfaction with nursing care than patients who do not intend to recommend.

Additional descriptive findings include the following:

1. Patients reported high levels of satisfaction with caring and teaching and overall satisfaction with nursing care.
2. Ninety-three percent of Hospital A (NFP) and 97% of Hospital B (FP) patients reported they would recommend the ED to their family and friends.
3. Seventy-seven percent of Hospital A and 90% of Hospital B patients reported satisfaction with their current visit was the reason for their decision to recommend the emergency department (ED).

Research Hypothesis Three: There is a significant positive relationship between emergency nurses' job satisfaction and nurses' intent to remain with the institution irrespective of hospital type.

1. No relationship was found between nurses' job satisfaction, type of hospital, and intent to remain with the institution. Findings indicated nurses' job satisfaction scores were low irrespective of nurses' intent to remain employed with the institution.

Descriptive findings include the following:

1. Seventy-seven percent of Hospital A (NFP) and 79% of Hospital B (FP) nurses reported their intent to remain employed with their current employer.
2. Fifty-nine percent of Hospital A and 26% of Hospital B nurses were staying due to their satisfaction.
3. Eighteen percent of Hospital A and 21% of Hospital B nurses were currently seeking employment elsewhere due to their job dissatisfaction.

4. Sixty-four percent of Hospital A and 63% of Hospital B nurses were under the impression peers were looking for employment elsewhere due to job dissatisfaction.

5. Hospital A nurses chose pay as being the most important variable for job satisfaction followed by autonomy, professional status, task requirements, interaction and organizational policies.

6. Hospital B nurses chose pay as the most desired component of job satisfaction, followed by autonomy, professional status, interaction, task requirements, and organizational policies.

7. Adjusting for level of expectation and actual satisfaction, both groups of nurses ranked the variables accordingly as professional status, autonomy, interaction, pay, task requirement, and organizational policies. All components were below the 50th quartile indicating low levels of satisfaction. Nurses' job satisfaction scores indicating overall dissatisfaction were similar across the two hospitals.

Research Hypothesis Four: There is a significant positive relationship between nurses' job satisfaction and patients' satisfaction irrespective of hospital type

1. Patients at both hospitals reported high levels of satisfaction with caring and teaching and overall satisfaction with nursing care.

2. In contrast, nurses' job satisfaction scores indicated job dissatisfaction at both hospitals.

3. Although there was a significant difference between nurses' job satisfaction scores and patients' satisfaction scores, there was no relationship between nurses' job

satisfaction and patients' satisfaction with nursing care irrespective of hospital type.

Findings revealed patients were more satisfied than nurses.

## CHAPTER 5

### SUMMARY OF THE STUDY

The problem of this study was to investigate the relationship between nurses' job satisfaction and patients' satisfaction in a private for-profit and a private not-for-profit emergency department (ED). Another aspect was to examine nurses' intent to remain employed with the institution and patients' intent to either return for future health care needs or to recommend the ED to family and friends. This chapter includes a summary of the study, discussion of findings, conclusions and implications, and recommendations for further study.

The theoretical framework of this study was based on Maslow's (1970) Hierarchy of Human Needs Theory and Vroom's (1964) Expectancy Theory. The concepts of nurses' job satisfaction and patients' satisfaction are both based on fulfillment of needs and expectations. The phenomenon of integrating into the profession of nursing can be adapted to Maslow's Hierarchy of Human Needs Theory based on motivation to satisfy the pursuit of self-actualization. Maslow's theory allowed for individual perception of needs relevant to job satisfaction and achievement of self-actualization. Maslow's Hierarchy of Human Needs Theory addressed patient satisfaction because basic needs represent patient expectations during the process of seeking health care.

Vroom's (1964) Expectancy Theory provided further theoretical support for the study. Job expectations determine needs an employee desires in a job. Job satisfaction is

the corresponding fit of needs and expectations to job characteristics. Vroom's Expectancy Theory addressed patient satisfaction since behavior and motivation of individuals "transcends the boundaries of applied fields" (1964, p. 5). Regardless of the situation, expectations motivate human behavior and its consequences. Patients enter an ED with preconceived expectations pertaining to the quality of care they will receive. Achievement of expectations results in a positive feeling and satisfaction when the care received was comparable to that expected.

Four research hypotheses were examined during this study:

1. There is a significant positive relationship between patients' satisfaction with emergency department nursing care and patients' intent to return for future health care needs irrespective of hospital type.
2. There is a significant positive relationship between patients' satisfaction with emergency department nursing care and patients' intent to recommend the emergency department irrespective of hospital type.
3. There is a significant positive relationship between emergency nurses' job satisfaction and nurses' intent to remain with the institution irrespective of hospital type.
4. There is a significant positive relationship between emergency department nurses' job satisfaction and patients' satisfaction irrespective of hospital type.

The review of literature contained three sections: studies examining nurses' job satisfaction, patients' satisfaction with nursing care, and the relationship between nurses'

job satisfaction and patients' satisfaction with nursing care. Because the literature on the concept of patient satisfaction was voluminous, only nursing studies were discussed.

### Summary

This study was a comparative survey of the relationship between ED nurses' job satisfaction and patients' satisfaction with nursing care, and the resultant behavioral intent for each group. The study was conducted in a private not-for-profit and a private for-profit health care institution. Agency approval was obtained in writing from both health care institutions. Procedures to maintain participant confidentiality were followed. Two established satisfaction instruments (Index of Work Satisfaction and Consumer Emergency Care Satisfaction Scale) in addition to a researcher-developed demographic form were used for data collection. Written permission was obtained from the author of each satisfaction instrument.

The majority of nurse participants were married, white females, born between 1950 and 1969, graduates of an Associate Degree Nursing program prior to 1995, and employed full-time in the ED. The majority of patient participants were married, white females, born between 1961 and 1980.

Research Hypothesis One: There is a significant positive relationship between patients' satisfaction with emergency department nursing care and patients' intent to return for future health care needs irrespective of hospital type

Research hypothesis one examined the relationship between patients' satisfaction with nursing care and intent to return to the emergency department (ED) for future health



care needs. The overall level of patient satisfaction was similar across the two hospitals.

Hypothesis one was supported through the use of descriptive statistics. Patients who stated an intent to return for future health care needs reported higher levels of satisfaction with nursing care than those who do not intend to return. Ninety-four percent of the total patients identified their intent to return for future health care needs.

Research Hypothesis Two: There is a significant positive relationship between patients' satisfaction with emergency department nursing care and patients' intent to recommend the emergency department irrespective of hospital type.

Research hypothesis two examined the relationship between patients' satisfaction with emergency department nursing care and patients' intent to recommend the emergency department (ED) to family and friends. The overall level of patient satisfaction was similar across the two hospitals. Hypothesis two was supported through the use of descriptive statistics. Patients who intend to recommend the ED to family and friends reported higher levels of satisfaction with their nursing care than patients who do not intend to recommend. Ninety-five percent of the total patients indicated their intent to recommend the ED to their family and friends.

Research Hypothesis Three: There is a significant positive relationship between emergency nurses' job satisfaction and nurses' intent to remain with the institution irrespective of hospital type.

Research hypothesis three investigated the relationship between emergency nurses' job satisfaction and nurses' intent to remain with the health care institution. Use of the

2-Way ANOVA showed non-support for the hypothesis. Nurses' job satisfaction scores were not an indication of intent to stay/not to stay in the present position.

Research Hypothesis Four: There is a significant positive relationship between nurses' job satisfaction and patients' satisfaction irrespective of hospital type.

Research hypothesis four investigated the relationship between emergency department nurses' job satisfaction and patients' satisfaction with nursing care. The hypothesis was not supported via application of the 2-Way ANOVA. While emergency department patients were well satisfied with their nursing care, their satisfaction was not attributed to nurses' job satisfaction.

### Discussion of Findings

This study investigated the relationship between nurses' job satisfaction and patients' satisfaction in the emergency department (ED) of a private for-profit and a private not-for-profit health care institution. Also measured were nurses' behavioral intent to remain with the institution and patients' behavioral intent to either return for future health care needs or to recommend the ED to family and friends. In this section, research findings will be discussed according to the four research hypotheses formulated for the study.

#### Research Hypothesis One

Research hypothesis one examined the relationship between patients' satisfaction with emergency department nursing care and patients' intent to return for future health care needs irrespective of hospital type. Patients at both hospitals reported they would

choose the current ED for future health care needs if not constrained by insurance requirements. In fact, patients at both hospitals identified that choice of ED was not based on insurance requirements. Brown et al. (1993) stressed the importance of patient satisfaction in relationship to return visits since many patients have a choice of health care provider. Patients in this study stated satisfaction with their current visit was the reason for their decision to return to the current ED for future health care needs.

Patients at both hospitals reported high levels of satisfaction with caring and teaching and overall satisfaction with nursing care. No significant difference was found between satisfaction scores for the two hospitals. A comparison to prior research findings can not be made at this time between satisfaction with nursing care, intent to return, and hospital type because no prior studies were located in the literature.

Patients at both hospitals in the present study stated their nursing care met their expectations. Descriptive results revealed that 89% of Hospital A (NFP) and 94% of Hospital B (FP) patients reported that their nursing care meet their expectations. The present study supported prior findings that patient satisfaction is based on achievement of expectations (Donabedian, 1980). Patients in the present study who stated an intent to return for future health care needs reported higher levels of satisfaction with their nursing care than those who do not intend to return for future health care needs. Although some patients in the present study were clearly less satisfied with their nursing care than their counterparts, it will be essential to replicate the findings with a larger sample size. Several prior research studies also indicated a relationship between achievement of

expectations, satisfaction, and intent to return for future health care (Bader, 1988; Swan et al., 1985; Woodside et al., 1989).

Cleary et al. (1989) found patients' satisfaction with nursing care more important than satisfaction with physicians as an indicator of overall satisfaction because nurses have more direct contact with patients than physicians. Satisfaction with nursing care was significantly related to hospitalized patients' intent to return for future health care needs (Atkins et al., 1996). Several studies investigating this relationship in ED patients also found a significant relationship between patients' satisfaction with nursing care and intent to return (Andrea, 1996; Atnip & Geroche, 1992; Mack et al., 1995; Raper, 1996).

### Research Hypothesis Two

Research hypothesis two examined the relationship between patients' satisfaction with emergency department nursing care and patients' intent to recommend the ED to family and friends irrespective of hospital type. Patients at both hospitals reported high levels of satisfaction with caring and teaching and overall satisfaction with nursing care. The overall level of patient satisfaction was similar across the two hospitals. No comparison to prior research findings can be made at this time between satisfaction with nursing care, intent to recommend, and hospital type because no prior studies were located in the literature.

Patients in the present study reported they would recommend the ED to family and friends. Satisfaction with their current visit was identified by patients as the reason for their decision to recommend the ED. Patients who identified their intent to recommend

the ED to family and friends reported higher levels of satisfaction than those who do not intend to recommend. Although some patients in the present study were clearly less satisfied with their nursing care than their counterparts, it will be essential to replicate the findings with a larger sample size.

Previous research studies also indicated a relationship between satisfaction and intent to recommend (Bader, 1988; Zeithaml et al., 1990). Abramowitz et al. (1987) found expectations and nursing services directly related to overall patients' satisfaction. Intent to recommend was predicted by expectations, satisfaction with nursing care, and overall satisfaction. Mack et al. (1995) indicated ED staff interaction correlated highly with intent to recommend.

### Research Hypothesis Three

Research hypothesis three investigated the relationship between emergency nurses' job satisfaction and nurses' intent to remain with the institution irrespective of hospital type. The majority of nurses at both health care institutions intend to remain employed with their current employer. Although only 50% of Hospital A (NFP) and 25% of Hospital B (FP) nurses were staying due to satisfaction, less than 25% of nurses at either health care institution were currently seeking employment elsewhere due to job dissatisfaction. In addition, nurses at both institutions were under the impression that peers were looking for employment elsewhere due to job dissatisfaction.

Opposite findings were reported in Zaring's (1990) study which revealed that although three-fourths of nurses were satisfied with their current job, only two-thirds did

not intend to change position. Zaring's study also detected that nurses were most satisfied with enjoyment of work, followed by quality of work, and interaction with peers. Nurses were most dissatisfied with pay, administration, and task requirements. There were significant inverse relationships between satisfaction and intent to change position. The enjoyment of work and quality of patient care contributed most to job satisfaction whereas the greatest contributor to intent to stay was enjoyment of work, followed by interaction. The finding that enjoyment of work and interaction contributed significantly to intent to stay may be explained by Barr and Bush's (1998) phenomenological study that described feelings of critical care nurses regarding their experiences of caring. Nurses expressed numerous negative "feelings of anger, hopelessness, powerlessness, frustration, and burnout" (p. 215) regarding economic and bureaucratic changes over which they had no control. Yet, many positive feelings were expressed regarding peer, patient, and family interaction and being able to perform caring functions of nursing such as physiological and psychosocial nursing interventions.

In the present study, nurses at both hospitals chose pay, autonomy, and professional status as the three most important components of job satisfaction. Hospital A (NFP) nurses chose task requirements and Hospital B (FP) nurses chose interaction as the fourth most important component. Interestingly, organizational policies was chosen as least important by both groups of nurses. After adjusting each component for level of expectation in relation to actual satisfaction, the variables were ranked as professional status, autonomy, interaction, pay, task requirements, and organizational policies

respectively, by both groups of nurses. All components were below the 50th quartile indicating a low level of satisfaction.

Several prior research studies examined the relationship between job expectations and satisfaction with expectations (Everly and Falcione, 1976; Oechsle and Landry, 1987; Stamps, 1997a). Larson's et al. (1984) findings indicated that one-half the variance of job satisfaction was explained by expectations and the importance placed on expectations. Although there was agreement on the necessity of investigating factors relevant to nurses' job satisfaction, there was no agreement as to order of importance of factors (Blegen, 1993; Loher et al., 1985).

Pay was reported being important for job satisfaction in the first published study of nurses' job satisfaction (Nahm, 1940). Nurses have remained consistent over the last 50 years in the value of pay to job satisfaction. Williams' (1990) found although pay was the most desired variable, it ranked last in level of satisfaction and was rated as dissatisfied. Satisfied components included professional status which ranked third in regard to importance and first in level of satisfaction; autonomy ranked second in level of importance and actual satisfaction; and interaction ranked fourth in level of importance and third in satisfaction. Two studies by Johnston (1991, 1997) also determined pay was the most important component of job satisfaction. In the 1991 study, pay was closely followed by professional status and autonomy as the most desired components of job satisfaction. Yet, results indicated nurses were dissatisfied with all components. Johnston's 1997 study found pay followed by autonomy, professional status, and

interaction most important. As with Johnson's 1991 study, all components were at the dissatisfied level. Henneman-Low (1994) also determined pay was the most desired component of job satisfaction followed by autonomy, professional status, and interaction, yet autonomy and interaction were the components with which nurses were most satisfied. In contrast, Everly and Falcione (1976) concluded interpersonal relationship with peers was most important to job satisfaction. Tumulty et al. (1994) found nurses satisfied with the professional status of nursing, followed by interaction and autonomy, yet dissatisfied with task requirements, organizational policies, and lastly, pay. Campbell (1996) also determined professional status and interaction were the variables with which nurses were most satisfied.

Fung-kam (1998) found dissatisfaction with autonomy, professional status, and pay although these components were identified as the most desired. Autonomy was determined the most important factor relevant to nurses' job satisfaction in several additional studies (Campbell, 1996; Cavanagh & Coffin, 1992; Pierce et al., 1996; Weisman et al., 1980).

In the present study, nurses' satisfaction scores indicating overall dissatisfaction was similar across the two hospitals. Surprisingly, nurses' satisfaction scores were not different for nurses who intend to stay in contrast to those who do not intend to stay. Also, there was no relationship between type of hospital and intent to stay. Findings indicated nurses' satisfaction scores were low irrespective of nurses' intent to remain employed with the institution. Therefore, hypothesis three was not supported. However,



the results should be interpreted with caution because of the small number of nurses from each of the two participating health care institutions and the low power (.471) of the study.

Although none utilized the Index of Work Satisfaction, several prior research studies did support the relationship between nurses' job satisfaction and behavioral intent to remain with the institution. Price and Mueller (1981) found job satisfaction the greatest predictor of intent to remain. Also, nurses with the highest salary had a greater intent to remain independent of job satisfaction. Similar results were found by Cavanagh and Coffin's (1992) study which identified a strong relationship between job satisfaction and intent to remain. Noticeably, pay was not significantly related to job satisfaction but intent to remain.

Beckworth (1996) demonstrated a significant relationship existed between job satisfaction and intent to remain with the institution while job dissatisfaction led to increased turnover. Irvine and Evans (1995) showed a strong positive relationship between behavioral intent and turnover, a strong negative relationship between job satisfaction and behavioral intent, and a small negative relationship between job satisfaction and turnover. Pierce et al. (1996) found by increasing perceived autonomy, nursing turnover decreased.

Leveck and Jones (1996) reported job satisfaction predicted staff retention and quality of care. Two factors explained staff retention: experience on unit (tenure) and job satisfaction. Zaring's (1990) study identified significant inverse relationships between job

satisfaction and intent to change position. Enjoyment of work and quality of patient care contributed most to job satisfaction whereas the greatest contributor to intent to stay was enjoyment of work, followed by interaction.

#### Research Hypothesis Four

Research hypothesis four examined the relationship between nurses' job satisfaction and patients' satisfaction with nursing care in the emergency department irrespective of hospital type. Patients at both hospitals reported high levels of satisfaction with caring and teaching and overall satisfaction with nursing care. In contrast, nurses' job satisfaction results indicated job dissatisfaction at both hospitals. A significant difference was found between nurses' satisfaction scores and patients' satisfaction scores irrespective of hospital type. Findings revealed patients were more satisfied than nurses. Research hypothesis four was not accepted because no relationship was found between nurses' job satisfaction and patients' satisfaction scores.

To date, there is limited research investigating the relationship between nurses' job satisfaction and patients' satisfaction with nursing care. Although neither study utilized the same instruments as the present study, one study partially supported findings of the present study. Campbell (1996) found no relationship between nurses' job satisfaction and patients' satisfaction. In comparison, Atkins et al. (1996) identified a strong positive relationship between nurses' job satisfaction and patients' satisfaction with nursing care. Atkins' et al. (1996) study reinforced the importance of the nurse-patient relationship as

both information sharing by nurses and the nurses' concern and caring attitude were the most significant indicators of patients' satisfaction.

In summary, the literature supported findings of the present study that patients' intent to return or to recommend the ED was influenced by patients' satisfaction with nursing care. The findings of the present study did not support predominant prior research that indicated a relationship between nurses' job satisfaction and intent to remain with the institution. Although the present study failed to find a relationship between nurses' job satisfaction and patients' satisfaction, only two studies were located in the literature that directly investigated this relationship and differing results were found in the two studies.

### Conclusions and Implications

The derived theoretical proposition aimed at patient satisfaction was supported. That portion of the proposition stated that when patients' expectations are met and satisfaction occurs, patients are more likely to return and to recommend the institution. Patients who reported their intent to return or to recommend the health care institution had higher levels of satisfaction than those who do not intend to return or to recommend. Positive relationships for both intent to return and intent to recommend were expected since the literature supported both statements (Abramowitz et al., 1987; Andrea, 1996; Bader, 1988; Donabedian, 1980; Mack et al., 1995; Swan et al., 1985; & Woodside et al., 1989).

Other propositions stated that when nurses' expectations are met and job satisfaction occurs, nurses are more likely to remain with the institution, and when nurses

indicate job satisfaction, patients are more likely to be satisfied with their nursing care.

These propositions were not upheld by statistical results in the present study.

A few studies lent strength to the two latter propositions but the gaps and divisions in the literature were evident regarding nurses' satisfaction. Loher et al. (1985) and Blegen (1993) found no one job characteristic had a stronger relationship with job satisfaction than any other. Stamps (1997) called for systematic inquiry into the relationship between job expectations and job satisfaction. Price and Mueller (1981), Beckworth (1996), Irvine and Evans (1995), Leveck and Jones (1996) and others determined nurses' job satisfaction to be the greatest predictor of intent to remain, and disclosed relationships between job satisfaction and behavioral intent respectively. Reports in the recent literature support Vroom's statement that "the more satisfied a worker, the stronger the force . . . to remain . . . and the less probability of . . . leaving it voluntarily" (1964, p. 175). The present sample of nurses may be different in some way(s) from the nurses in previous studies. Perhaps the passage of time and changes in the economy have had an effect on nurses' job satisfaction and their nursing actions, as well as their intent to remain with an institution.

Donabedian (1980) and Atkins et al. (1996) stressed that inherent in achievement of patients' satisfaction is job satisfaction of the institutions's practitioners. Further, Atkins et al. claimed a strong positive relationship existed between nurses' job satisfaction and patients' satisfaction with nursing care. On the other hand, in the only two studies which examined the relationship between nurses' job satisfaction and patients' satisfaction,

Atkins et al. (1996) and Campbell (1996), the latter found no relationship between the concepts. The need for further research into the relationship between (a) nurses' job satisfaction and intent to remain with the institution and (b) nurses' job satisfaction and its relationship to patient satisfaction seems evident.

Would the results in the present study have been different if the majority of nurses had been generic Baccalaureate Nursing graduates rather than Associate Degree and Diploma graduates? In the present study, the majority of nurses were graduates of an Associate Degree Nursing program. Therefore, no conclusions can be drawn regarding the relationship between educational preparation and satisfaction.

A different job satisfaction tool which measured nurses' caring may have produced other findings. In Barr and Bush's (1998) phenomenological study, nurses expressed many positive feelings regarding the ability to perform caring functions of nursing. Atkins et al. (1996) found information sharing, concern, and caring to be the most significant indicators of patient satisfaction. In support of this, the researcher, while collecting data, observed the ED nurses performing caring actions such as teaching, touching, advocating, and supporting their patients.

In speculating as to possible factors/limitations which affected results of the present study, methodology and instrumentation must be considered. Matching of nurses to patients offers a vehicle which may have resulted in different findings. Rather than using an availability sample, a purposeful sampling technique may be necessary. In addition, rather than collecting data at various times of the day, evening, and night, perhaps only

one shift should be selected. As to the Hawthorne effect, no comment by patients or nurses gave indication of this possible limitation to the conclusions. The two instruments, however, seemed adequate to the tasks, in that validity and reliability testing in the present study supported coefficients derived in past studies. The instruments may be recommended to other researchers.

Based on the reality of the statistical results of the study, the modified model is depicted in Figure 2. The patient concepts and relationships remain as shown in Figure 1. However, nurses' job satisfaction and its relationship to nurses' behavioral intent was not supported, thus no arrow indicating this relationship is shown. Additionally, the samples in the present study did not support a statistical relationship between nurses' job satisfaction and patients' satisfaction, thus again, no arrow is displayed between those two concepts. The hypothesized path between nurses' job satisfaction and patients' satisfaction is deleted as the model is respecified based on the findings. The modified model should be further tested in other populations for validation.

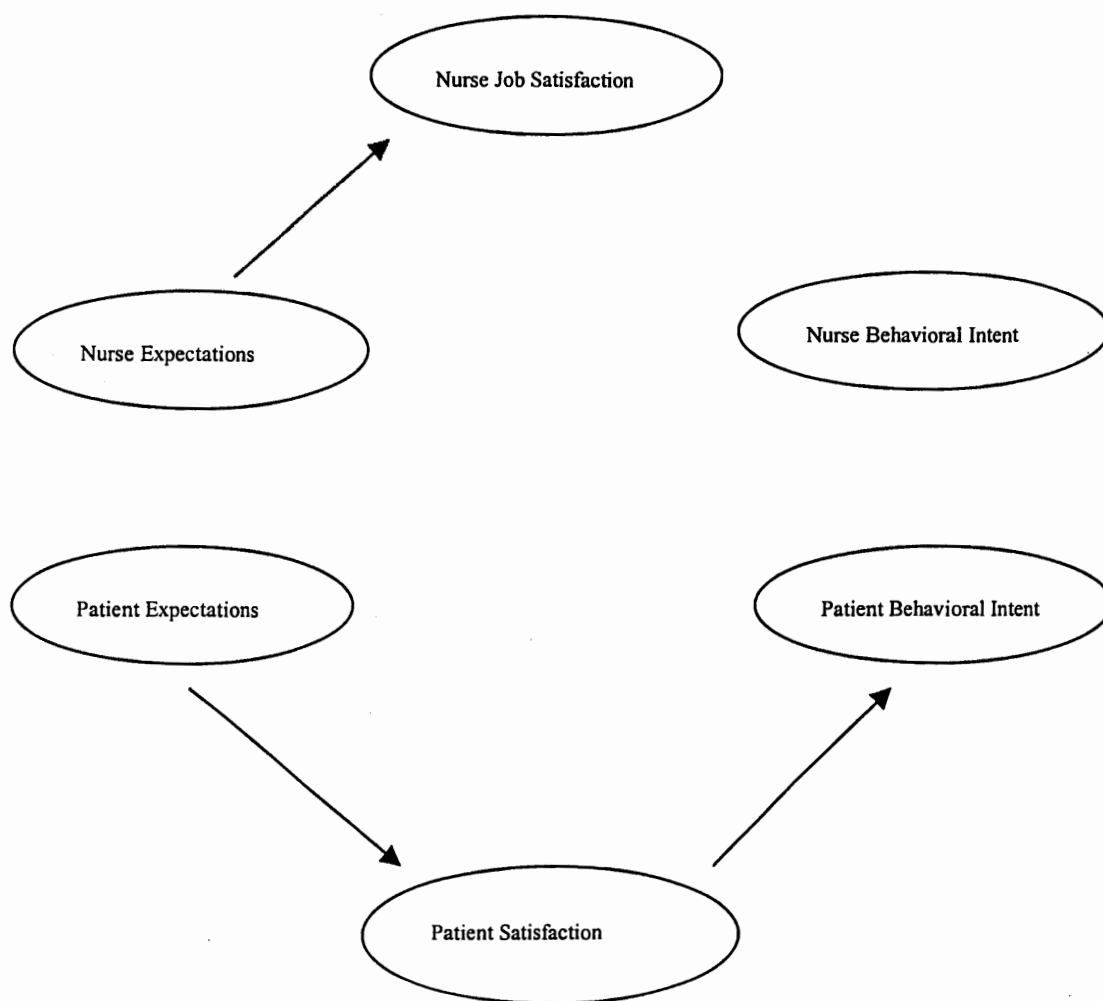


Figure 2. Expectations, Satisfaction, and Behavioral Intent

### Recommendations for Further Study

The recommendations follow from the conclusions and implications. Systematic inquiry into the following is warranted: (a) nurses' job satisfaction and intent to remain with the institution, and (b) nurses' job satisfaction and its relationship to patient satisfaction. A nurse job satisfaction instrument which has a focus of nurse caring should be developed and tested. A similar quantitative study could use purposive sampling by matching the patient with the nurse who cared for that patient, but use the same instruments and replicate the present study.

Qualitative studies may reveal factors which remain hidden at the present time. The interview has long been known to elicit deeper feelings and motivations of persons than can be gathered by questionnaires.



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## APPENDIX A



TEXAS WOMAN'S UNIVERSITY  
COLLEGE OF NURSING

AGENCY PERMISSION FOR CONDUCTING STUDY\*

150

THE \_\_\_\_\_

GRANTS TO Judith Walsh  
a student enrolled in a program of nursing leading to a Doctoral Degree at Texas Woman's University, the privilege of its facilities in order to study the following problem:

The Impact of Nurses' Job Satisfaction on Patient  
Satisfaction in the Emergency Department.

The conditions mutually agreed upon are as follows:

1. The agency ~~(may)~~ (may not) be identified in the final report.
2. The names of consultative or administrative personnel in the agency ~~(may)~~ (may not) be identified in the final report.
3. The agency (wants) ~~(does not want)~~ a conference with the student when the report is completed.
4. The agency is (willing) ~~(unwilling)~~ to allow the completed report to be circulated through interlibrary loan.
5. Other The name of the institution will in no way be identified in the study

Date: May 19, 1998

[Redacted Signature]  
Signature of Agency Personnel

Judith Walsh  
Signature of Student

Margaret T. Beart  
Signature of Faculty Advisor

\*Fill out and sign three copies to be distributed as follows: Original - Student; First copy - Agency, Second copy - TWU College of Nursing.

TEXAS WOMAN'S UNIVERSITY  
COLLEGE OF NURSING

AGENCY PERMISSION FOR CONDUCTING STUDY\*

151

THE \_\_\_\_\_

GRANTS TO Judith Walsh

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

The Impact of Nurses' Job Satisfaction on Patient  
Satisfaction in the Emergency Department.

The conditions mutually agreed upon are as follows:

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

Date: 5/21/98

Agency

Judith Walsh  
Signature of Student

Margaret T. Beard  
Signature of Faculty Advisor

\*Fill out and sign three copies to be distributed as follows: Original - Student; First copy - Agency, Second copy - TWU College of Nursing.

## APPENDIX B

TEXAS WOMAN'S  
UNIVERSITY  
DENTON / DALLAS / HOUSTON

HUMAN SUBJECTS  
REVIEW COMMITTEE  
P.O. Box 425619  
Denton, TX 76204-5619  
Phone: 940/898-3377  
Fax: 940/898-3416

March 9, 1998

Ms. Judith Walsh  
2612 North 32nd Street  
Waco, TX 76708

Dear Ms. Walsh:

Your study entitled "The Impact of Nursing Job Satisfaction on Patient Satisfaction in the Emergency Department" has been reviewed by a committee of the Human Subjects Review Committee and appears to meet our requirements in regard to protection of individuals' rights.

Be reminded that both the University and the Department of Health and Human Services (HHS) regulations typically require that agency approval letters and signatures indicating informed consent be obtained from all human subjects in your study. **These consent forms and an annual/final report (attached) are to be filed with the Human Subjects Review Committee at the completion of the study. Because you do not utilize a signed consent form for your study, the filing of signatures of subjects with the Human Subjects Review Committee is not required.**

This approval is valid one year from the date of this letter. Furthermore, according to HHS regulations, another review by the Committee is required if your project changes. If you have any questions, please feel free to call the Human Subjects Review Committee at the phone number listed above.

Sincerely,



Chair

Human Subjects Review Committee

cc. Graduate School  
Dr. Margaret Beard, College of Nursing  
Dr. Carolyn Gunning, College of Nursing

## APPENDIX C



UNIVERSITY OF MASSACHUSETTS  
AMHERST

Arnold House  
Box 30430  
Amherst, MA 01003-0430  
(413) 545-1312  
FAX: (413) 545-6536

School of Public Health  
and Health Sciences

Department of  
Community Health Studies  
155

March 3, 1998

Judith Walsh  
2612 North 32<sup>nd</sup>. Street  
Waco, Texas 76708-2639

Dear Judith:

I appreciated receiving your recent letter. I am very happy to have you use the IWS again in your research.

As you know, the IWS questionnaire itself is a copyrighted measurement tool, with the copyright held by myself and Market Street Research, Inc., a full-service marketing research and evaluation firm located in Northampton, Massachusetts. If you wish to use the IWS questionnaire, a fee of \$12.50 payable to Market Street Research covers permission to use the questionnaire, a print-ready hard copy formatted for use in your study, and an IBM-compatible floppy diskette which you can use in the event you wish to add any additional items that are of specific interest to you. Other services available from Market Street Research include:

- A step-by-step instruction manual for scoring the IWS
- Data entry services and scoring assistance
- Reports comparing local results to national averages for the IWS
- Technical assistance in modifying or expanding the questionnaire

I have enclosed a complete description of these services as well as a price list, in case you need any assistance in your study. If you have any questions about any of these services, please feel free to call either myself or Market Street Research.

Good luck with your research and keep me posted on your progress.

Sincerely,

A handwritten signature in cursive script that reads "Paula Stamps". The signature is written in black ink and is positioned below the word "Sincerely,".

Paula Stamps, Ph.D.  
University of Massachusetts  
Phone: (413)545-6880  
Fax: (413)545-6536  
Email: [chrdus@sover.net.com](mailto:chrdus@sover.net.com)

DAVIS  
CONSUMER EMERGENCY CARE SATISFACTION SCALE (CECSS)

Barbara A. Davis, PhD, RN

157

Request Form

I request permission to copy the Davis Consumer Emergency Care Satisfaction Scale by Davis for use in my research entitled:

The Impact Of Nurses' Job Satisfaction on Patient Satisfaction

in the Emergency Department.

In exchange for this permission, I agree to submit to Dr. Davis a copy of each data collection tool (i.e. subject demographic sheet and CECSS) for each subject tested or a copy of the coding sheets. These data will be used to establish a normative data base for clinical populations. No other use will be made of submitted data. Credit will be given to me in reports of normative statistics that made use of data I submitted for pooled analyses.

Judith Walsh  
(Signature)

4/27/98  
(Date)

Position and full address of  
principal investigator

2612 North 32nd Street

Waco, Texas 76708

Doctoral Candidate

Texas Woman's University

Permission is hereby granted to copy the CECSS for use in the research listed above.

A. <sup>PhD</sup> PhD, RN

4-7-9

(Date)

send two signed copies of this form to:

A. Davis, PhD, RN  
School of Nursing  
University  
Hal Greer Boulevard  
WV 25755-9500



## APPENDIX D

Dear Emergency Department Patient:

I am a nursing doctoral student at Texas Woman's University in Denton, Texas. I am interested in knowing if you intend to return for future health care needs or if you would recommend this emergency department to your family and friends. I am requesting your assistance with my research study by asking you to answer some questions about the nursing care you received in this emergency department today.

Your participation is completely voluntary. Neither your participation nor refusal will influence the care you receive today or in the future in this emergency department. No one involved in your care will be aware of your participation or refusal. The hospital has given me approval to conduct my study.

Your completion of the forms will be accepted as your informed consent and permission to be included in this study. It should take you less than 20 minutes to complete the forms.

There will be no direct benefit to you for participating. There may be an indirect benefit as you will be assisting in contributing to nursing knowledge.

Participation will result in minimal risk. Completion of the patient satisfaction survey may result in personal discomfort for those dissatisfied with their emergency department nursing care.

The researcher will try to prevent any problem that could happen because of this research. Texas Woman's University does not provide medical services or financial assistance for injuries that might happen because you are taking part in this research study.

Confidentiality is guaranteed to all participating in the study. Do not place your name on any survey forms. All results will be reported as group data. No results will identify you as a participant.

If you agree to participate, please complete the following pages. To help my analysis, please answer every question. Complete the survey forms privately when your nurse or other health care employee are not in the room. Please complete prior to your discharge from the emergency department. Do not place your name on any of the forms. After you complete the demographic form and the patient satisfaction survey, place both forms in the attached envelope and seal it. Place the sealed envelope in one of the secured boxes located in the emergency department.

If you are uncomfortable in answering any question and wish to stop, you may do so without penalty. If you wish to discuss your participation or have any questions or concerns relating to this study, you may contact me through my faculty advisor, Dr. Margaret Beard, at 1-940-898-2420. You may contact me anonymously. You may also contact the Office of Research and Grants at Texas Woman's University at 1-940-898-3375.

If you would like a summary of the results of this study, please place your name, address, and zip code on the enclosed 3x5 card. Place the 3x5 card separate from your survey forms in the secured box.

Thank you for your participation.

Sincerely,

Judith Walsh, RN, MS

Demographic Data Sheet: The purpose of this sheet is to obtain general ideas regarding those completing the satisfaction survey. Please DO NOT sign your name on this sheet.

Please circle your answer and fill in the blanks where asked.

Your gender: 1. Male 2. Female

Your present marital status:

1. Married 2. Single 3. Widow/Widower 4. Life Partner 5. Other

Your year of birth: \_\_\_\_\_ Your ethnicity: \_\_\_\_\_

Are you the primary wage earner in your immediate family/household?

1. YES 2. NO

Is this your first visit to this emergency department?

1. YES 2. NO

Do you have private health care insurance?

1. YES 2. NO

Do you have Medicare insurance?

1. YES 2. NO

Do you have Medicaid insurance?

1. YES 2. NO

Were you able to recognize your registered nurse (RN) in contrast to other emergency department personnel?

1. YES 2. NO

Did the quality of your nursing care meet your expectations?

1. YES 2. NO

Did you choose this emergency department because of insurance requirements?

1. YES 2. NO

If you were able to choose any hospital regardless of your insurance requirements or place of residence, would you choose this emergency department for future health care needs?

1. YES      2. NO

Is your reason to return for future health care needs due to your satisfaction with your current visit?

1. YES      2. NO

Would you recommend this emergency department to your family and friends for their healthcare needs?

1. YES      2. NO

Is your reason for recommending this emergency department to your family and friends due to your satisfaction with your current visit?

1. YES      2. NO

"I UNDERSTAND THAT THE RETURN OF MY COMPLETED QUESTIONNAIRE CONSTITUTES MY INFORMED CONSENT TO ACT AS A SUBJECT IN THIS RESEARCH."

# DAVIS CONSUMER EMERGENCY SATISFACTION SCALE©

**DIRECTIONS:** For each statement indicate how much you agree or disagree with the statement based on this visit to the emergency room by putting an X in the appropriate space. Think of the nurse who spent the most time with you.

**EXAMPLE:** Completely Agree Completely Disagree

1. The nurse thought I understood more than I really did. :   X   : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ :

The answer to question A indicated that you are quite certain that the nurse thought you understood more than you really did.

	Completely Agree					Completely Disagree
1. The nurse was skillful in performing his/her duties.	: _____	: _____	: _____	: _____	: _____	:
2. The nurse seemed to be knowledgeable about by illness/problem.	: _____	: _____	: _____	: _____	: _____	:
3. The nurse knew what treatment I needed.	: _____	: _____	: _____	: _____	: _____	:
4. The nurse gave me instructions about caring for myself at home.	: _____	: _____	: _____	: _____	: _____	:
5. The nurse should have been more attentive than he/she was.	: _____	: _____	: _____	: _____	: _____	:
6. The nurse told me what problems to watch for.	: _____	: _____	: _____	: _____	: _____	:
7. The nurse told me what to expect at home.	: _____	: _____	: _____	: _____	: _____	:
8. The nurse explained all procedures before they were done.	: _____	: _____	: _____	: _____	: _____	:
9. The nurse seemed to busy at the nurses' station to spend time talking with me.	: _____	: _____	: _____	: _____	: _____	:

	Completely Agree				Completely Disagree
10. The nurse explained things in terms I could understand.	: _____	: _____	: _____	: _____	: _____
11. The nurse was understanding when listening to my problem.	: _____	: _____	: _____	: _____	: _____
12. The nurse seemed genuinely concerned about my pain, fear, and anxiety.	: _____	: _____	: _____	: _____	: _____
13. The nurse was as gentle as he/she could be when performing painful procedures.	: _____	: _____	: _____	: _____	: _____
14. The nurse treated me as a number instead of a person.	: _____	: _____	: _____	: _____	: _____
15. The nurse seemed to understand how I felt.	: _____	: _____	: _____	: _____	: _____
16. The nurse gave me a chance to ask questions.	: _____	: _____	: _____	: _____	: _____
17. The nurse was not very friendly.	: _____	: _____	: _____	: _____	: _____
18. The nurse appeared to take time to meet my needs.	: _____	: _____	: _____	: _____	: _____
19. The nurse made sure all that all my questions were answered.	: _____	: _____	: _____	: _____	: _____

## APPENDIX E



Dear Emergency Department Nurse:

I am a nursing doctoral student at Texas Woman's University in Denton, Texas. I am interested in the effect of nursing job satisfaction on patient satisfaction with nursing care in the emergency department. I am also interested in knowing if you intend to remain employed with this hospital. I am requesting your assistance by asking you to answer some questions about how you feel about your job.

Your participation is completely voluntary. Neither your participation nor refusal will influence your position in this emergency department. No one in administration will be aware of your participation or refusal. Hospital administration has given me approval to conduct my study.

Your completion of the survey forms will be accepted as your informed consent and permission to be included in this study. It should take you less than 20 minutes to complete the survey forms.

There will be no direct benefit to you for participating. There may be an indirect benefit as you will be assisting in contributing to nursing knowledge.

Participation will result in minimal risk to you. Completion of the job satisfaction survey may result in personal discomfort for those dissatisfied with their job.

The researcher will try to prevent any problem that could happen because of this research. Texas Woman's University does not provide medical services or financial assistance for injuries that might happen because you are taking part in this research study.

Confidentiality is guaranteed to all participating. All results will be reported as group data. No results will identify you as a participant.

If you agree to participate, please complete the following pages. To help my analysis, please answer every question. Complete the survey forms privately when you are on break or take the forms home to complete. Do not place your name on any survey forms.

After you complete the demographic form and the job satisfaction survey, place both forms in the attached envelope and seal it. Place the sealed envelope in the designated secured box in the emergency department. If you received the survey forms by mail, please return them in the enclosed stamped, addressed envelope within one week.

If you are uncomfortable in answering any of the questions and wish to stop, you may do so without risk of penalty. If you wish to discuss your participation or have any questions or concerns, you may contact me through my faculty advisor, Dr. Margaret Beard, at 1-940-898-2420. You may contact me anonymously. You may also contact the Office of Research and Grants at Texas Woman's University at 1-940-898-3375.

If you would like a summary of the results of this study, please place your name, address, and zip code on the enclosed 3x5 card. Place the 3x5 card separate from your survey forms.

Thank you for your participation.

Sincerely,

Judith Walsh, RN, MS

Demographic Data Sheet: The purpose of this sheet is to obtain general ideas regarding those completing the satisfaction survey. Please DO NOT sign your name on this sheet. Please circle your answer and fill in the blanks where asked.

Your gender: 1. Male          2. Female

Your present marital status:

1. Married    2. Single    3. Widow/Widower    4. Life Partner    5. Other

Number of children: \_\_\_\_\_ Ages of children: \_\_\_\_\_

Your year of birth: \_\_\_\_\_ Your ethnicity: \_\_\_\_\_

Basic nursing degree and YEAR of graduation:

1. A.D.N. \_\_\_\_\_ 2. B.S.N. \_\_\_\_\_ 3. Diploma \_\_\_\_\_

Your employment status:

1. Full-time    2. Part-time: average number of hours per week \_\_\_\_\_

In addition to your basic nursing degree, do you have another degree?

If so, please circle the appropriate answer and fill in your primary area of study:

1. BA/BS in \_\_\_\_\_ 2. MA/MS in \_\_\_\_\_  
3. Other (please state) \_\_\_\_\_ 4. None

Primary shift and hours worked (such as 7 am to 3 pm):

1. Day \_\_\_\_\_ 2. Evening \_\_\_\_\_ 3. Night \_\_\_\_\_  
4. Rotating \_\_\_\_\_ 5. Other \_\_\_\_\_

Are you the primary wage earner in your immediate family/household?

1. YES          2. NO

Is it your intent to remain employed in this health care institution?

1. YES          2. NO

Are you staying due to job satisfaction?

1. YES          2. NO

Are you currently looking for employment elsewhere due to job dissatisfaction?

1. YES          2. NO

Is it your impression that your peers in the emergency department are looking for employment elsewhere due to their dissatisfaction with their job?

1. YES          2. NO

## Index of Work Satisfaction

### Part A (Paired Comparisons)

Listed and briefly defined on this sheet of paper are six terms or factors that are involved in how people feel about their work situation. Each factor has something to do with "work satisfaction." We are interested in determining which of these is most important to you in relation to the others.

Please carefully read the definitions for each factor as given below:

1. Pay--dollar remuneration and fringe benefits received for work done.
2. Autonomy--amount of job-related independence, initiative, and freedom, either permitted or required in daily work activities.
3. Task requirements--tasks or activities that must be done as a regular part of the job.
4. Organizational policies--management policies and procedures put forward by the hospital and nursing administration of this hospital.
5. Interaction--opportunities presented for both formal and informal social and professional contact during working hours.
6. Professional status--overall importance or significance felt about your job, both in your view and in the view of others.

Scoring. These factors are presented in pairs on this questionnaire. Only 15 pairs are presented: this is every set of combinations. No pair is repeated or reversed.

For each pair of terms, decide which one is **more important** for your job satisfaction or morale. Please indicate your choice by a check on the line in front of it. For example: If you feel that Pay (as defined above) is more important than Autonomy (as defined above), check the line before Pay.

\_\_\_\_\_ Pay      or      \_\_\_\_\_ Autonomy

We realize it will be difficult to make choices in some cases. However, please do try to select the factor which is more important to you. Please make an effort to answer every item; do not go back to change any of your answers.

Used with permission from Nurses and Work Satisfaction: An Index for Measurement, 2nd edition, by Paula L. Stamps, Ph. D., 1997.

“I UNDERSTAND THAT THE RETURN OF MY COMPLETED QUESTIONNAIRE  
CONSTITUTES MY INFORMED CONSENT TO ACT AS A SUBJECT IN THIS  
RESEARCH.”

- |                                   |    |                               |
|-----------------------------------|----|-------------------------------|
| 1. _____ Professional Status      | or | _____ Organizational Policies |
| 2. _____ Pay                      | or | _____ Task Requirements       |
| 3. _____ Organizational Policies  | or | _____ Interaction             |
| 4. _____ Task Requirements        | or | _____ Organizational Policies |
| 5. _____ Professional Status      | or | _____ Task Requirements       |
| 6. _____ Pay                      | or | _____ Autonomy                |
| 7. _____ Professional Status      | or | _____ Interaction             |
| 8. _____ Professional Status      | or | _____ Autonomy                |
| 9. _____ Interaction              | or | _____ Task Requirements       |
| 10. _____ Interaction             | or | _____ Pay                     |
| 11. _____ Autonomy                | or | _____ Task Requirements       |
| 12. _____ Organizational Policies | or | _____ Autonomy                |
| 13. _____ Pay                     | or | _____ Professional Status     |
| 14. _____ Interaction             | or | _____ Autonomy                |
| 15. _____ Organizational Policies | or | _____ Pay                     |

### Part B (Attitude Questionnaire)

The following items represent statements about how satisfied you are with your current nursing job. Please respond to each item. It may be difficult to fit your responses into the seven categories; in that case select the category that **comes closest** to your response to the statement. It is very important that you give your **honest** opinion. Please do not go back and change any of your answers.

**Instructions for scoring:** Please circle the number that most closely indicates how you feel about each statement. The **left** set of numbers indicate degrees of **agreement**. If you strongly agree with the first statement, circle 1; if you agree with it, circle 2; if you mildly or somewhat agree, circle 3. The **right** set of numbers indicate degrees of **disagreement**. If you strongly disagree with the first statement, circle 7; if you disagree, circle 6; if you mildly or somewhat disagree, circle 5. The **center** number (4) means "undecided." Please use it as little as possible.

**Remember:** The more strongly you feel about the statement, the further from the center you should circle, with agreement to the left and disagreement to the right.

	Agree			Disagree		
1. My present salary is satisfactory.	1	2	3	4	5	6 7
2. Nursing is not widely recognized as being an important profession.	1	2	3	4	5	6 7
3. The nursing personnel on my service pitch in and help one another out when things get in a rush.	1	2	3	4	5	6 7
4. There is too much clerical and "paperwork" required of nursing personnel in this hospital.	1	2	3	4	5	6 7
5. The nursing staff has sufficient control over scheduling their own shifts in my hospital.	1	2	3	4	5	6 7
6. Physicians in general cooperate with nursing staff on my unit.	1	2	3	4	5	6 7
7. I feel I am supervised more closely than is necessary.	1	2	3	4	5	6 7
8. It is my impression that a lot of nursing personnel at this hospital are dissatisfied with their pay.	1	2	3	4	5	6 7
9. Most people appreciate the importance of nursing care to hospital patients.	1	2	3	4	5	6 7
10. It is hard for new nurses to feel "at home" in my unit.	1	2	3	4	5	6 7
11. There is no doubt whatever in my mind that what I do on my job is really important	1	2	3	4	5	6 7

	Agree							Disagree						
12. There is a great gap between the administration of this hospital and the daily problems of the nursing service.	1	2	3	4	5	6	7							
13. I feel I have a sufficient input into the program of care for each of my patients.	1	2	3	4	5	6	7							
14. Considering what is expected of nursing service personnel at this hospital, the pay we get is reasonable.	1	2	3	4	5	6	7							
15. I think I could do a better job if I did not have so much to do all the time.	1	2	3	4	5	6	7							
16. There is a good deal of teamwork and cooperation between various levels of nursing personnel on my service.	1	2	3	4	5	6	7							
17. I have too much responsibility and not enough authority.	1	2	3	4	5	6	7							
18. There are not enough opportunities for advancement of nursing personnel at this hospital.	1	2	3	4	5	6	7							
19. There is a lot of teamwork between nurses and doctors on my own unit.	1	2	3	4	5	6	7							
20. On my service my supervisors make all the decisions I have little direct control over my own work.	1	2	3	4	5	6	7							
21. The present rate of increase in pay for nursing service personnel at this hospital is not satisfactory.	1	2	3	4	5	6	7							
22. I am satisfied with the types of activities that I do on my job.	1	2	3	4	5	6	7							
23. The nursing personnel on my service are not as friendly and outgoing as I would like.	1	2	3	4	5	6	7							
24. I have plenty of time and opportunity to discuss patient care problems with other nursing service personnel.	1	2	3	4	5	6	7							
25. There is ample opportunity for nursing staff to participate in the administrative decision-making process.	1	2	3	4	5	6	7							
26. A great deal of independence is permitted, if not required of me.	1	2	3	4	5	6	7							
27. What I do on my job does not add up to anything really significant.	1	2	3	4	5	6	7							
28. There is a lot of "rank consciousness" on my unit: nurses seldom mingle with those with less experience or different types of educational preparation.	1	2	3	4	5	6	7							

	Agree							Disagree						
29. I have sufficient time for direct patient care.	1	2	3	4	5	6	7							
30. I am sometimes frustrated because all my activities seem programmed for me.	1	2	3	4	5	6	7							
31. I am sometimes required to do things on my job that are against my better professional nursing judgment.	1	2	3	4	5	6	7							
32. From what I hear from and about nursing service personnel at other hospitals, we at this hospital are being fairly paid.	1	2	3	4	5	6	7							
33. Administrative decisions at this hospital interfere too much with patient care.	1	2	3	4	5	6	7							
34. It makes me proud to talk to other people about what I do on my job.	1	2	3	4	5	6	7							
35. I wish the physicians here would show more respect for the skill and knowledge of the nursing staff.	1	2	3	4	5	6	7							
36. I could deliver much better care if I had more time with each patient.	1	2	3	4	5	6	7							
37. Physicians at this hospital generally understand and appreciate what the nursing staff does.	1	2	3	4	5	6	7							
38. If I had the decision to make all over again, I would still go into nursing.	1	2	3	4	5	6	7							
39. The physicians at this hospital look down too much on the nursing staff.	1	2	3	4	5	6	7							
40. I have all the voice in planning policies and procedures for this hospital and my unit that I want.	1	2	3	4	5	6	7							
41. My particular job really doesn't require much skill or "know-how."	1	2	3	4	5	6	7							
42. The nursing administrators generally consult with the staff on daily problems and procedures.	1	2	3	4	5	6	7							
43. I have the freedom in my work to make important decisions as I see fit, and can count on my supervisors to back me up.	1	2	3	4	5	6	7							
44. An upgrading of pay schedules for nursing personnel is needed at this hospital.	1	2	3	4	5	6	7							