1992

The relationship between retention of the staff nurse and perceptions of the work environment

Melanie Poole
San Jose State University

Follow this and additional works at: https://scholarworks.sjsu.edu/etd_theses

Recommended Citation

Poole, Melanie, "The relationship between retention of the staff nurse and perceptions of the work environment" (1992). *Master's Theses*. 495.
DOI: <https://doi.org/10.31979/etd.4u6k-79be>
https://scholarworks.sjsu.edu/etd_theses/495

This Thesis is brought to you for free and open access by the Master's Theses and Graduate Research at SJSU ScholarWorks. It has been accepted for inclusion in Master's Theses by an authorized administrator of SJSU ScholarWorks. For more information, please contact scholarworks@sjsu.edu.

INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

University Microfilms International
A Bell & Howell Information Company
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA
313/761-4700 800/521-0600

Order Number 1351066

**The relationship between retention of the staff nurse and
perceptions of the work environment**

Poole, Melanie Ruthe, M.S.

San Jose State University, 1992

U·M·I

300 N. Zeeb Rd.
Ann Arbor, MI 48106

THE RELATIONSHIP BETWEEN RETENTION OF THE STAFF NURSE
AND PERCEPTIONS OF THE WORK ENVIRONMENT

A Thesis

Presented to

The Faculty of the Department of Nursing
San Jose State University

In Partial Fulfillment
of the Requirements for the Degree
Master of Science

By

Melanie Poole

December 1992

APPROVED FOR THE DEPARTMENT OF NURSING

Coleen Saylor, Ph.D., R.N.

Jayne Cohen, D.N.Sc., R.N.

Linda Gifford, M.P.A., Director Human
Resource Services

APPROVED FOR THE UNIVERSITY

ABSTRACT

THE RELATIONSHIP BETWEEN RETENTION OF THE STAFF NURSE AND PERCEPTIONS OF THE WORK ENVIRONMENT

by Melanie Poole

This thesis explored the relationship between the staff nurse's perception of the work environment and staff retention. Utilizing a cross-sectional survey research design, data were collected to measure perceptions of the work environment and retention among a sample of registered staff nurses ($N=207$) in a large, full-service, public hospital.

The analyses indicated that the work environment may be an important factor in registered staff nurse retention. A statistically significant positive correlation between years as a registered nurse and innovation was found. Furthermore, there was a statistically significant negative correlation between years in current position as a staff nurse and task orientation. Review of the findings generated recommendations for health care administrators to focus on the work environment for further study.

ACKNOWLEDGEMENTS

To the graduate
faculty and advisors for
their perseverance
and instruction
and
to my husband
and family
for their
endless support.

TABLE OF CONTENTS

	Page
ABSTRACT	iii
LIST OF TABLES	vii
LIST OF FIGURES	viii
Chapter	
1. INTRODUCTION	1
Background	1
Problem Statement	3
Research Question	4
Purpose	4
Definition of Terms	4
Summary	5
2. CONCEPTUAL FRAMEWORK AND REVIEW OF RELATED LITERATURE	6
Conceptual Framework	6
Work Environment Scale (WES)	7
Jones' Conceptual Model	9
Review of Related Literature	11
Summary	15
3. RESEARCH METHODOLOGY	17
Research Design	17
Setting and Sample	17
Human Subjects Approval	18
Data Collection	18

Chapter	Page
Measurement	19
Data Analysis	21
4. DATA ANALYSES AND INTERPRETATION	23
Introduction	23
Demographics	23
Retention of Staff Nurses	26
Perceptions of Work Environment	27
Retention and Work Environment Correlations	28
5. CONCLUSIONS AND RECOMMENDATIONS	31
Summary	31
Conclusions	32
Recommendation for Further Study	34
Summary	35
REFERENCES	36
APPENDICES	
A. Demographic Data Survey	41

LIST OF TABLES

Table	Page
1. Demographic Data on Gender	24
2. Race or Ethnic Background	24
3. Marital Status	25
4. Age Category	25
5. Retention	26
6. Perception of Work Environment	27
7. Correlations Among Retention and Work Environment	29

LIST OF FIGURES

Figure	Page
1. Conceptual Framework for Nursing Turnover	10

Chapter 1

INTRODUCTION

With the costs of health care increasing, with the demand for services rising, and with the competition between hospitals growing, health care institutions are seeking effective and efficient ways to provide health care services to their populations under the new realities of the 1990s. As the rising cost of health care significantly affects the institution's ability to compete in the industry, cost containment becomes imperative. As a result of these trends, nursing administrators emerge as active participants in the management of health care costs and the delivery of health care services.

The roles and responsibilities of the nurse executive have changed dramatically in the last decade. In addition to an expanded clinical role, nurse managers are responsible for developing cost effective programs that utilize scarce health care resources and that attract and retain nursing professionals. A well-trained staff is the key to cost effectiveness, and the retention of well-trained staff is a mandatory component in a cost effective program.

Background

While previous trends in nursing focused on recruitment of nurses, much less attention was placed on retention efforts. Past recruitment campaigns produced a strategic

marketing program which was expensive and ignored causes of attrition which sabotage a cost effective program. These campaigns marked by cruises, cars, free lodging, and sign-on bonuses ignored the cost of attrition. To maintain a high level of performance and cost effectiveness, recruitment and retention demand equal attention.

In the past, administrators stepped up recruitment efforts to attract new nurses to fill vacancies. Recent emphasis focuses on retention efforts by various institutions. Research is developing models to determine the cost of staff nurse turnover. Jones (1990a; 1990b) describes replacement costs ranging from \$6,886 to \$15,152 per staff nurse. Jones' study (1990a; 1990b) includes all relevant cost areas such as advertising, recruiting costs, temporary staff, overtime, hiring costs, orientation training and decreased productivity for the period of introduction. Administrators must effectively compare costs of turnover with those of retention efforts. Recently, research examines retention efforts by focusing on the multiple factors which contribute to a nurse's decision to resign.

Success in retaining nurses is increased by identifying those elements in the work environment that attract as well as detract from the job experience. The work environment is the focus of related research. Job satisfaction occurs when nurses' perceptions match the employing institution's goals

and expectations (Whaley, Young, Adams, & Biordi, 1989). The presence of negative factors in the work environment are tolerated if positive factors are also made available (Constable & Russell, 1986). The administration's ability to act upon variables in the work environment which are identified as possible reasons for a lack of retention or tenure enable the administrator to affect change and to reduce turnover (Hinshaw & Atwood, 1982).

Problem Statement

Staff recruitment and retention of registered nurses are widely recognized problems among health care institutions. Implementing changes may lead to a more positive work environment which promotes retention of experienced nurses, reduces recruitment costs, and may result in retention programs becoming more cost effective. The nursing literature focuses on the past nursing shortages and offers solutions which address the recruitment aspect (Helmer & McKnight, 1988; Wolf, 1981). Although a great deal of attention focused on recruitment of nurses during the past shortage, retention efforts remained obscure. Recruitment and retention are dual aspects of the same problem in the maintenance of an ample supply of well-educated nurses (Johnson, 1988). Retention is a critical issue. It is important for nurse executives to recognize the value of a well-developed and well-defined retention program that addresses the work environment issues

of the staff nurse.

Research Question

The question for this research is: What is the relationship between retention of the staff nurse and perceptions of the work environment?

Purpose

This study examines some of the complex work environment variables which may affect the retention of staff nurses. Retention of nurses is needed to be cost effective and competitive in the industry of health care delivery.

Definition of Terms

For the purpose of this study the following terms are used:

1. Staff nurse is any registered nurse providing direct patient care in the acute care hospital. Registered nurses assigned in outpatient clinics, registered nurses at the head nurse level or above, and registered nurses not providing direct care are excluded.

2. Work environment is "a dynamic system composed of four domains: physical features, organizational structure and policies, supra-personal and task factors, and social climate" (Moos, 1986, p.23).

3. Turnover is "the result of voluntary resignation (quitting), not of dismissal, retirement, disability, leave of absence, or other type of absence" (Mann & Kunkan, 1988, p. 18).

Summary

In order to address the problem of maintaining an ample supply of well-educated nurses, nurse executives must give equal attention to recruitment and retention policies. This study examines how the retention of nurses relates to the nurse's perceptions of the work environment.

Chapter 2

CONCEPTUAL FRAMEWORK AND REVIEW OF RELATED LITERATURE

Conceptual Framework

The conceptual framework for examining the relationship between the staff nurses' perceptions of the work environment and retention within an organization uses the concept of work environment by Moos (1976). In addition, the conceptual model for nursing turnover by Jones (1990a; 1990b) is used to connect the concept of work environment to turnover.

Moos (1986) defines the work environment as "a dynamic system composed of four domains: physical features, organizational structure and policy, supra-personal and task factors and social climate" (p. 23). Moos (1976) postulated that the work environment, much like a person, has a unique "personality." Work environment can be portrayed with clarity and accuracy, and certain work environments are more supportive than others. People intuitively believe that their work environment has a profound influence on their ability to function within that organization. Moos (1976) found that the work environment which a person works has an important impact on the person's attitudes, moods, behavior, health, and overall sense of well being. This model is used to understand the existence of widely diverse environments. The Work Environment Scale, Form R, has been used to study

production workers specializing in a high-technology product, fire station attendants from a county maintained fire department, and health care workers from a residential care setting. Different factors such as physical surroundings, organizational culture, interpersonal relationships, and task factors influenced the shaping of the individuals within these diverse environments. Therefore, work environment alters or influences many aspects of employee morale and performance (Moos, 1986).

Work Environment Scale (WES)

The Work Environment Scale (WES) developed by Insel and Moos (1974) can be used to describe and contrast the social environment of work settings, comparisons of employee, manager perceptions, comparisons of actual work settings, and the preferred work environment. These attributes combined will assess and facilitate potential change in the work environment. The 10 WES subscales assess 3 domains, or sets of dimensions: (a) the relationship, (b) the personal growth, and (c) the system maintenance and system change dimensions. The 10 subscales which measure the important aspects of the work environment are as follows:

Involvement is the commitment or concern an employee has about the job. This is demonstrated by the amount of constructive activity or enthusiasm an employee has with fellow employees concerning their job.

Peer cohesion is the degree to which employees are friendly to and supportive of each other. This is demonstrated by interaction among employees.

Supervisor support is the management's support of the employees. In addition, supervisor support is the ability of each manager to enhance support for one another.

Autonomy is the employees' independence. The ability of the employees to be self-governing is an example of autonomy.

Task orientation is employee efficiency. The ability of the employee to complete job assignments is an objective example of task orientation and employee efficiency.

Work pressure is the urgency to complete particular job assignments on time.

Clarity is the degree to which expectations and the ability to communicate these expectations is well understood.

Control is the amount of authority and the management's ability to exert influence over the employees. The way in which management utilizes rules and pressure to keep order demonstrates control.

Innovation is the institution's ability to allow change or creativity. The extent to which new approaches are encouraged or emphasized to take place in the work environment demonstrates innovation to employees.

Physical comfort is the extent to which the physical

environment or the surroundings contribute to the employee's work.

Each of these 10 subscales measured a significant factor in the staff nurses' work environment. Since explicit feedback information often motivates people in an environment to seek to change that environment, retention of nurses can be enhanced by utilizing the results from the Work Environment Scale (Moos, 1976).

Jones' Conceptual Model

The conceptual model for nursing turnover by Jones (1990a) defines the multiple environments which influence the practice of nursing. The conceptual model (Figure 1) shows that nursing turnover is greatly influenced by work environmental factors. Jones (1990a; 1990b) further states that the costs and benefits of turnover can be analyzed and evaluated. The results can be utilized to alter hospital and nursing departmental policies and practices needed to reduce nursing turnover (Jones, 1990a; 1990b).

As Figure 1 shows, this model is made up of multiple environments. These environments are: (a) nursing department environment, (b) hospital environment, and (c) health care environment.

The nursing department environment is the focus of this study, and the nurses' perceptions refer to this location. According to Jones (1990a), it is made up of (a) goals and philosophy, (b) departmental resources,

Figure 1. Conceptual Framework for Nursing Turnover.
Note. Adapted from Staff nurse turnover cost: Part 1, a conceptual model by C.B. Jones (1990, p. 19).

(c) departmental structure, and (d) working conditions. These are other names for many of the concepts described by Moos (1976) as work environment and measured by the WES.

The hospital environment refers to the local hospital. It is made up of (a) political factors, (b) economic factors, (c) organizational dynamics, and (d) hospital policy. This environment also affects the nursing department level environment and is measured, in part, by the WES.

The health care environment may include factors from a national perspective: (a) regulatory factors, (b) political factors, (c) economic factors, and (d) social factors. This environment affects both of the preceding environments, but it is outside the scope of this current study.

Review of Related Literature

Turnover

"Turnover is defined as the result of voluntary resignation (quitting), not of dismissal, retirement, disability, leave of absence, or other type of absence" (Mann & Kunkan, 1988, p. 18). Prescott and Bowen (1987) describe turnover as a revolving door syndrome. This syndrome is characterized by nurses becoming more easily dissatisfied as they became aware that jobs are plentiful. The revolving door syndrome makes retention efforts a major concern for nursing administrators. Turnover rates for registered nurses range from 25 to 61 percent (Hinshaw,

Smeltzer, & Atwood, 1987; Marquis, 1988; White, 1981).

Nursing literature abounds with research on the causes of nursing turnover (Helmer & McKnight, 1988; Wolf, 1981).

Wolf (1981) identifies four major reasons for turnover:

(a) the employee, (b) the work division and responsibility, (c) supervision and coordination, and (d) the administrative system. Helmer and McKnight (1988) surveyed nurses and also determined that administrators and directors of nursing need to do a better job of managing if they are to attract and to retain registered nurses. They outline eight potential solutions which echo Wolf (1981). These solutions require a shift in management attitudes and practices.

The plan recommends that management (a) develop the management skills of the first line administrators, (b) reward education by paying a differential for bachelor's (BSN) and master's prepared nurses, (c) develop the interpersonal skills of the top administration and encourage them to be available on the units, (d) define and communicate job expectations and define the professional nurse role, (e) involve the staff nurses in identifying innovative solutions to cope with staffing problems, (f) provide parking for staff during shifts where parking is costly and difficult, (g) provide meals to night shift, (h) develop programs to integrate registry nurses, and (i) encourage education for all staff.

Registered nurse staff turnover necessitates excessive

training and recruitment costs. As Surpin (1988) states, "the inability to retain large number of registered nurses also influences the ability to recruit new registered nurses, as former nurses let others know of their dissatisfaction. This becomes a large inhibiting factor to effective recruitment" (p. 23).

Prestholdt, Lane, and Mathews (1988) find that the decision to quit involves a complex but rational and careful process. They conclude that reducing nurse turnover is a challenging task because it is not caused by any one factor.

Many studies have been conducted to determine which factors influence attrition or retention. Helmer and McKnight (1988) concur with Huey and Hartley's (1988) assessment that the same problems reappear repeatedly. The factors shown to emerge are: (a) optimal nurse-patient ratios which are based on the true patient acuity, (b) flexible staffing and scheduling, (c) elimination of rotating shifts, (d) involvement of staff in developing patient care guidelines, and (e) strong supportive nursing administration (Huey & Hartley, 1988).

Work Environment

The work environment is studied as a contributing factor affecting retention. Robinson et al. (1991) studied the combined ability of perceived work environment, demographics, and work-related factors to predict burnout and eventual turnover. This study utilizes the WES to

assess the individual perceptions of the work environment. Robinson et al. (1991) identify high work pressure and low involvement as contributors to burnout or turnover. They recommend that the work environment be structured to increase task efficiency, to encourage innovation, and thus reduce work pressure.

Cyclic shortages have occurred for the past several decades and research studies have focused on retention as a solution to the turnover crisis. One study identifies 41 hospitals as "magnet hospitals." These hospitals are particularly successful in attracting and retaining professional nursing staff and have reputations for providing a good work environment while providing good nursing care (Kramer & Schmalenberg, 1988a; 1988b). Results from this study find magnet hospitals have a mean turnover of 9%. This suggests that the magnet hospitals deal effectively with nursing turnover by creating working environments conducive to decreasing nursing turnover. In addition, these hospitals value education and innovation and strive to produce the best in everyone through respect, caring and striving for excellence.

Turnover Costs

Previous research attempted to determine the costs associated with turnover. Wolf's (1981) early estimates of the cost of replacing one registered nurse who resigns ranges from \$2,500 to \$3,000. Although many researchers

include the costs of turnover (Hicks & White, 1981; Hinshaw, Smeltzer, & Atwood, 1987), the wide range in turnover costs reported are inconsistent and unsubstantiated in the nursing literature.

More recently, Jones (1990a; 1990b) developed a tool to more accurately measure both direct and indirect costs associated with nursing turnover. The study defines direct costs as those costs involved in the hiring process. They include advertising, recruiting, and the costs of vacancies. The indirect costs are expenses for termination, orientation, training, and the estimated amount of money utilized until the new nurse is fully productive. This research finds the turnover cost per registered nurse to range from \$6,886 to \$15,152 (Jones, 1990a; 1990b). The total annual nursing turnover cost equals 11% of the mean total annual registered nurse salaries paid by the institutions. Jones (1990b) concludes that turnover cost was \$900,000 in 1988 for the 10 hospitals included in her study.

Summary

The literature analyzes numerous factors in relation to nurse turnover and the work environment. For example, Robinson et al. (1991) find that greater work pressure and low involvement in decision making greatly influence burnout and the potential for turnover. Kramer and Schmalenberg (1988a; 1988b) find that magnet hospitals create work

environments which are considered conducive to reducing turnover by placing value on education and innovation and by respecting the individual. The WES can be utilized to measure the staff nurse's perception of his/her work environment, and the findings can help to facilitate changes in the work environment in order to enhance job satisfaction and to reduce turnover rates.

Chapter 3

RESEARCH METHODOLOGY

Research Design

This applied research utilizes a cross-sectional survey research design. Its purpose is to answer the question: What is the relationship between retention of the staff nurse and the nurse's perceptions of the work environment? The independent study variable is the work environment, and the dependent variable is retention of staff nurses. Perceptions of the work environment are measured by the Work Environment Scale. Retention is measured by years as a registered nurse and years in current position. By using a survey questionnaire for data collection, perceptions of the work environment for the staff nurse are measured. The lack of control of other variables in this research design is outweighed by the advantages of the survey style of research: (a) flexibility and (b) broadness of scope (Polit & Hungler, 1991).

Setting and Sample

The sample for this study consists of 207 acute care registered staff nurses employed at a northern California hospital. The hospital is a large, full-service, public hospital, and it is affiliated with a large teaching hospital. The hospital serves a population base of 800,000. All registered staff nurses that provide direct patient care

in the acute care hospital are included in this study. Excluded from the study are staff nurses assigned in the various outpatient clinics, registered nurses at head nurse level and above, and others not giving direct care.

Human Subjects Approval

This study is a part of the larger staff nurse, work setting study. This study was approved by the hospital Human Subjects Review Board (1/25/91-04) and was approved by San Jose State University Human Subjects Review Board.

Data Collection

The Work Environment Scale (WES), Form R (Insel & Moos, 1974), and a demographic data survey form (Appendix A) are utilized in a larger study of staff nurse work setting study. The hospital administration department provided a comprehensive list of registered staff nurses in the acute care setting. Each name on the list was assigned an individual number.

Packets were assembled and included: (a) a brief description of the research project, (b) a demographic survey sheet, (c) the Work Environment Scale, Form R (Insel & Moos, 1974), and (d) a return envelope, pre-addressed with postage provided. Each demographic survey sheet and each WES answer sheet was preassigned a number which corresponded to a specific name on the staff list.

The packets were assembled and grouped according to unit and head nurse. The principal investigators delivered

the packets to the appropriate head nurse. Each head nurse was previously introduced to the study during staff meetings. The head nurses then handed out the packets to the nurses in their units. The research project was promoted by placing flyers encouraging participation and instructions for returning the survey. The flyers were located in staff lounges and nursing stations, and they were left in place 4 weeks.

The questionnaires returned in pre-addressed envelopes were examined for completeness and tallied using a template. Totals were placed in the raw score box on each questionnaire. Raw scores were coded and entered on a computer coding sheet to facilitate data entry and statistical analysis.

Measurement

Staff Nurse Retention

Staff nurse perception of the work environment was measured by the Work Environment Scale (WES), Form R (Insel & Moos, 1974). This instrument was developed by Insel and Moos (1974). The WES measures the work environment of all types of work settings. The WES contains 10 subscales, and each subscale contains nine questions which measure a particular portion of the work setting. The subscales are: (a) involvement, (b) peer cohesion, (c) supervisor support, (d) autonomy, (e) task orientation, (f) work pressure, (g) clarity, (h) control, (i) innovation, and (j) physical comfort.

Reliability and Validity

The reliability of an instrument is the degree of consistency with which it measures the attribute that it is designed to measure. Therefore, the measuring tool must be consistent, stable, and dependable (Polit & Hungler, 1991). Internal consistencies are designed to measure whether the tool measures one concept and nothing else. Internal consistency is the most widely used approach to estimating an instrument's reliability (Polit & Hungler, 1991).

Moos (1986) uses Cronbach's alpha for each of the 10 WES subscales. The internal consistencies are in acceptable range with scores ranging from moderate for peer cohesion (.69) to substantial for involvement (.84), work pressure (.80), innovation (.86), and physical comfort (.81). The higher values reflect a higher degree of internal consistency (Polit & Hungler, 1991).

Validity is the second important criterion by which an instrument's psychometric adequacy is evaluated. Validity refers to the degree to which an instrument actually measures the attribute that it is supposed to be measuring (Polit & Hungler, 1991). Moos (1986) uses intercorrelations to compare the 10 subscales' scores. The subscale intercorrelations indicate that the subscales measure distinct though somewhat related aspects of work environments. The subscales involvement, peer cohesion, and supervisor support are positively correlated to one another

and also to the autonomy and task orientation subscales. Innovation and clarity also show moderately positive correlations with the involvement, peer cohesion, and supervisor support subscales. There is a negative correlation between the involvement, peer cohesion, and supervisor support subscales and both the work pressure and control subscales.

Scoring

The Work Environment Scale score is tabulated by using a template. The questions are arranged in columns. Each column of responses accounts for one of the 10 subscales. The choices for answers for each question are true or false. There are 9 questions in each of the 10 subscales; therefore, scoring ranges from 0 to 9 for a particular subscale of the WES.

Data Analysis

The data were entered into a computer for analysis using the Statistical Package for the Social Sciences (SPSS). Descriptive statistics (frequency and per cent occurrence) were calculated on the demographic data. The Pearson product moment correlation coefficient was computed between each of the 10 work environment subscales: (a) involvement, (b) peer cohesion, (c) supervisor support, (d) autonomy, (e) task orientation, (f) work pressure, (g) clarity, (h) control, (i) innovation, and (j) physical comfort and each of the retention measures: (a) years as

registered nurse, (b) years in current position, and (c) level in nursing. Probability values were calculated as an estimate of the probability the correlation occurred by chance.

Limitation

This study is limited by the setting. The study was conducted in one public hospital which may not be a true representation of hospitals in the geographic area. The study is also limited by sample size. Those who choose to answer the survey questionnaire may not be representative of registered nurses at large. The design of the cross-sectional study precludes inferring cause and effect of the findings. In addition, the data were gathered at one point in time; therefore, findings from this study should be generalized with caution.

Chapter 4

DATA ANALYSES AND INTERPRETATION

Introduction

The purpose of this study is to explore the relationship between the staff nurse's perception of the work environment and staff retention. By improving staff nurse retention, hospitals can provide higher quality and cost effective health care.

This chapter is a summary of the data collected from the survey of hospital staff nurses. The results are described in three sections. The first section describes the demographics. The second section focuses on the two variables of work environment and staff retention individually. The third section discusses the correlation between staff retention and the work environment.

Demographics

Demographic data included the staff nurses' gender, ethnic background, marital status, and age. A total of 207 staff nurses participated in the study.

Among the sample of 207 staff nurses, 95% were female as shown in Table 1. While there was a diversity of ethnic backgrounds, Table 2 shows that 72% were Caucasian. Table 3 shows that more than half of the participating staff nurses were married. As is indicated in Table 4, as the age increases, there is an increase in the population of nurses

Table 1

Demographic Data on Gender (N=207)

Gender	Frequency	Percent
Male	11	5.3
Female	<u>196</u>	<u>94.7</u>
Total	207	100.0

with the largest group of nurses being 35-39 years of age. An almost symmetric decrease in population occurs with the age groups over 39 years of age.

Table 2

Race or Ethnic Background (N=207)

Ethnic Group	Frequency	Percent
Asian	22	10.6
Black	4	1.9
Caucasian	148	71.5
Hispanic	7	3.4
Other	23	11.1
Missing data	<u>3</u>	<u>1.4</u>
Total	207	100.0

Table 3

Marital Status (N=207)

Marital Status	Frequency	Percent
Single	38	18.4
Married	139	67.1
Divorced	<u>30</u>	<u>14.5</u>
Total	207	100.0

Table 4

Age Category (N=207)

Age Category	Frequency	Percent
20-24	6	2.9
25-29	23	11.1
30-34	39	18.8
35-39	51	24.6
40-44	37	17.9
45-49	23	11.1
50-54	9	4.3
55-over	12	5.8
Missing data	<u>7</u>	<u>3.4</u>
Total	207	100.0

Retention of Staff Nurses

Categories were formed for the number of years as a registered nurse and for the number of years in current position. Table 5 shows that 51% have been registered nurses 10 years or less (0-5=27.5%, 6-10=23.2%). Table 5 reflects the number of years as a registered nurse in

Table 5

Retention (N=207)

	Frequency	Percent
<hr/>		
Years as RN		
0-5	57	27.5
6-10	48	23.2
11-15	28	13.5
16-20	27	13.0
Over 20	<u>47</u>	<u>22.7</u>
Total	207	100.0
Years in Position		
0-5	132	63.8
6-10	36	17.4
11-15	19	9.2
16-20	11	5.3
Over 20	<u>9</u>	<u>4.3</u>
Total	207	100.0
<hr/>		

current position. The majority of nurses, or 64%, have been in the current position 5 years or less.

Perceptions of Work Environment

Table 6 shows the mean score and the standard deviation along with the normed average range established by Moos (1976) for perceptions of work environment. The mean score for the subscale peer cohesion, which measured the extent to which fellow workers are friendly and supportive of each other, was 6.3. This was higher than the normed average

Table 6

Perception of Work Environment (N=207)

Subscale	Mean	Standard Deviation	Normed Average Range
Involvement	6.4	2.2	5.5-6.5
Peer Cohesion	6.3	2.0	5.5-6.0
Supervisor Support	5.5	2.4	5.5-6.0
Autonomy	5.9	1.9	5.0-6.0
Task Orientation	6.5	2.0	5.5-6.0
Work Pressure	5.7	2.6	4.0-5.0
Clarity	5.8	2.2	5.5-6.0
Control	6.1	1.8	4.5-5.0
Innovation	4.2	2.4	4.0-5.0
Physical Comfort	4.0	2.8	4.5-5.0

range of 5.5-6.0.

Task orientation measured the extent to which the work environment emphasized efficiency and completing the related tasks, and the mean was 6.5. The normed average range was 5.5-6.0. Work pressure measured the amount of pressure to get the tasks completed. The mean was 5.7 compared to the normed average range of 4.0-5.0. The mean for the subscale control, which measured management's ability to exert control, was 6.1; and the normed average range was 4.5-5.0. Physical comfort measures the extent to which the physical surroundings contribute to a pleasant work environment. The mean was 4.0; and the normed average range was 4.5-5.0. The mean for all other subscales fell within the normed average range.

Retention and Work Environment Correlations

Pearson product moment correlation coefficient, or the Pearson r , is a measure of the calculation used by researchers to explore the degree of association between two or more variables (LoBiondo-Wood & Haber, 1986). In Table 7, the correlation coefficients between the 10 subscales and the categories years as a registered nurse and years in current position are given. That is, the 10 subscales are each correlated with each of the category's years as a registered nurse and years in current position, the retention measures.

Years in current position are negatively correlated

with the subscale of task orientation at a statistically significant level ($p < .05$) with $r = -.14$. That is, the greater the years in a position, the lower is the perceived task orientation.

Table 7

Correlations Among Retention and Work Environment (N=207)

Measure	Years as Registered Nurse	Years in Current Position
Involvement	$r = .13$ $p = .06$	$r = -.03$ $p = .71$
Peer Cohesion	$r = .08$ $p = .25$	$r = .04$ $p = .56$
Supervisor Support	$r = .02$ $p = .77$	$r = -.09$ $p = .18$
Autonomy	$r = -.01$ $p = .90$	$r = -.12$ $p = .08$
Task Orientation	$r = -.04$ $p = .62$	$r = -.14$ $p = .04^*$
Work Pressure	$r = .01$ $p = .89$	$r = .01$ $p = .95$
Clarity	$r = .04$ $p = .54$	$r = -.07$ $p = .33$
Control	$r = .01$ $p = .84$	$r = .11$ $p = .11$
Innovation	$r = .14$ $p = .04^*$	$r = .02$ $p = .74$
Physical Comfort	$r = -.02$ $p = .77$	$r = -.07$ $p = .31$

Note. * = Statistically Significant ($p < .05$)

The category of years as a registered nurse is positively correlated with the subscale of innovation at a statistically significant level ($p < .05$) with $r = .14$. Thus, the greater the number of years as a registered nurse, the more they perceived the institution's ability to be innovative.

Years in current position are negatively correlated with the subscales of involvement, supervisor support, autonomy, clarity, and physical comfort as shown in Table 7. Years as a registered nurse are also negatively correlated with autonomy, task orientation, and physical comfort, although there is no systematic relationship (Huck, Cormier, & Bounds, 1974, p. 31).

Years in current position are positively correlated with the subscales of peer cohesion and work pressure as shown in Table 7. Years as a registered nurse are also positively correlated with the subscales involvement, peer cohesion, supervisor support, work pressure, clarity, and control.

In summary, the subscales of peer cohesion, task orientation, work pressure, and control were above the normed average range while physical comfort was below the normed average range. Results suggest that years in current position has a significant negative correlation with task orientation while years as a registered nurse has a statistically significant positive correlation with the subscale innovation.

Chapter 5

CONCLUSIONS AND RECOMMENDATIONS

Summary

The purpose of this study was to explore the relationship between the perception of the work environment and staff nurse retention. This chapter provides insights from the survey and provides suggestions for both nursing and hospital administration in the area of work environment and its impact on staff nurse tenure. Finally, recommendations are made for further research in the area of work environment.

This correlational study of 207 registered staff nurses found that the majority are married, white females in their mid thirties. The study found the staff nurse perception scores as measured against Moos' (1986) normed average range were high in peer cohesion, task orientation, work pressure, and control. On the other hand, the subscale physical comfort was below the normed average range. The subscales involvement, supervisor support, autonomy, clarity, and innovation all fell within the normed average range.

A significant positive correlation was found between years as a registered nurse and the subscale of innovation. In addition, there was a negative correlation between years in current position as a staff nurse and the subscale of task orientation.

Conclusions

Understanding how staff nurses perceive their work environment is helpful to the nurse or hospital administrator who wishes to promote a positive, long term, employment relationship. Based upon the results of this study, the staff nurse perceptions of (a) involvement, the commitment or concern an employee has about the job, (b) supervisor support, management's support, (c) autonomy or independence, (d) clarity, the degree to which expectations are clearly communicated, and (e) innovation, the amount of creativity, matched Moos' (1986) normed average range. However, the staff nurses' perceptions were higher than the normed average range for (a) peer cohesion, the degree to which employees are friendly and supportive of each other, (b) task orientation or employee efficiency, (c) work pressure, the urgency to complete tasks, and (d) control, the amount of management authority. These findings may be peculiar to registered nurses due to the specific nature of the work.

The type of work a staff nurse performs is often very technical requiring great skill. The staff nurse must follow hospital policy and procedures as a guide to patient care. In addition to the direct patient care, the staff nurse must incorporate the entire department and organize and delegate work to fellow team members. The staff nurse's tasks often involve initiating treatment changes based on

complex government regulations to reduce costs as well as length of patient stay.

This study found that two perceptions of the work environment were related to retention and eight were not. There was a statistically significant positive correlation between years as a registered nurse and innovation. The longer a registered nurse worked at the hospital, the more resourceful they perceived the hospital to be. The longer a person has been a nurse or has been on a particular unit, the more innovative they perceive that unit. Perhaps the nurse who is older and has been in nursing for a number of years will identify innovation because he/she has stayed with nursing for the patient care contact. Turnover of staff nurses is not only costly in terms of recruitment costs but also in terms of lost experience and expertise. An experienced nurse is able to incorporate a variety of skills in his/her job performance. It takes well-developed nursing skills and expertise to monitor patients, make critical and instant nursing decisions. None of these skills can easily be provided by new staff nurses.

Furthermore, there was a statistically significant negative correlation between years as a registered nurse in current position and the subscale task orientation. The greater the years in a position, the lower is the perceived task orientation. The more experienced nurse may also provide an opportunity for developing team work. They

understand the tasks and how the unit or department works together to provide quality patient care. Turnover of nurses reduces the cohesiveness of the team.

Recommendation for Further Study

Replication of the study in a different geographical location and type of hospital would yield valuable results. Replication of the study using a different registered nurse population from a private hospital setting would also provide valuable data. Further studies on work environment perceptions might also include additional variables.

A longitudinal study design to study how perceptions of the environment correlate with retention over a period of years would provide valuable data. Finally, a study on the possibility of changing registered nurses' perceptions as a result of changes in the work place would provide valuable data for administration.

Based upon the results of this study, hospitals could assess activities and procedures to increase the nurses' contentment. The department of nursing and each individual unit could be structured so as to increase task efficiency and to encourage the use of innovation. Providing a more positive work environment may lead to increased retention of registered nurses. This information would be used to develop programs to enhance the job environment. Another recommendation is to plan different retention strategies into the program to reach the specific nursing units with

different needs. In other words, customize the retention goals to meet the needs of specific units.

Summary

In summary, findings from this study are in agreement with the purpose of the study. The purpose of this study was to explore the relationship between staff nurse retention and their perceptions of the work environment. This was shown by a statistically significant positive correlation between years as a registered nurse and innovation, and a statistically significant negative correlation of years in current position was found with task orientation. However, eight dimensions were not significantly correlated.

Further research is needed to predict a cause and effect relationship between perception of the work environment and retention. However, this study supports the existence of a relationship between retention and two perceptions of the work environment. Furthermore, it suggests that the work environment may be an important factor in registered nurse retention.

References

References

- Constable, J. F., & Russell, D. W. (1986). The effect of social support and the work environment upon burnout among nurses. Journal of Human Stress, 12(1), 20-26.
- Helmer, F. T., & McKnight, P. (1988). One more time-- solutions to the nursing shortage. Journal of Nursing Administration, 18(11), 7-15.
- Hicks, G., & White, C. H. (1981). The costs of orienting and training new nurses. Insight, 5(27), 2.
- Hinshaw, A. S., & Atwood, J. R. (1982). Anticipated turnover: A preventive approach. Western Journal of Nursing Research, 4(3), 54.
- Hinshaw, A. S., Smeltzer, C. H., & Atwood, J. R. (1987). Innovative retention strategies for nursing staff. Journal of Nursing Administration, 17(6), 8-16.
- Huck, S. W., Cormier, W. H., & Bounds, W. G. (1974). Reading statistics and research. New York: Harper & Row.
- Huey, F., & Hartley, S. (1988). What keeps nurses in nursing. American Journal of Nursing, 88(2), 181-188.
- Insel, P. M., & Moos, R. (1974). Work environment scale form R. Palo Alto, CA: Consulting Psychologists Press, Inc.
- Johnson, S. (1988). A family-oriented work environment essential for nurse retention. Recruitment and Retention Report, 2(8), 1-4.

- Jones, C. B. (1990a). Staff nurse turnover cost, Part I: A conceptual model. Journal of Nursing Administration, 20(4), 18-22.
- Jones, C. B. (1990b). Staff nurse turnover cost, Part II: Measurements and results. Journal of Nursing Administration, 20(5), 27-32.
- Kramer, M., & Schmalenberg, C. (1988a). Magnet hospitals: Part I, institutions of excellence. Journal of Nursing Administration, 18(1), 13-24.
- Kramer, M., & Schmalenberg, C. (1988b). Magnet hospitals: Part II, institutions of excellence. Journal of Nursing Administration, 18(2), 11-19.
- LoBiondo-Wood, G., & Haber, J. (1986). Nursing research: Critical appraisal and utilization. St. Louis: C. V. Mosby.
- Mann, E. E., & Kunkan, J. J. (1988). Retaining staff: Using turnover indices and surveys. Journal of Nursing Administration, 18(7,8), 17-23.
- Marquis, B. (1988). Attrition: The effectiveness of retention activities. Journal of Nursing Administration, 18(3), 25-29.
- Moos, R. (1976). The human context environment determinants of behavior. NY: John Wiley & Sons.
- Moos, R. (1986). Work environment scale manual (2nd ed.). Palo Alto, CA: Consulting Psychologists Press.
- Polit, D.F., & Hungler, B. P. (1991). Nursing research

- principles and methods. Philadelphia: J. B. Lippincott.
- Prescott, P. A., & Bowen, S. A. (1987). Controlling nursing turnover. Nursing Management, 18(6), 606.
- Prestholdt, P. H., Lane, I. M., & Mathews, R. C. (1988). Predicting staff nurse turnover. Nursing Outlook, 36(3), 145-147.
- Robinson, S. E., Roth, S. L., Keim, J., Levenson, J., Flentje, J. R., & Bashor, K. (1991). Nurse burnout: Work related and demographic factors as culprits. Research in Nursing & Health, 14, 223-228.
- Surpin, J. (1988). Improved working conditions. Caring, 1(5), 26-27.
- Whaley, B. A., Young, W. B., Adams, C., & Biordi, D. L. (1989). Targeting recruitment efforts for increased retention. Journal of Nursing Administration, 19(4), 34-39.
- White, C. H. (1981). The nursing shortage: There is no solution. Insight, 5(20), 2.
- Wolf, G. (1981). Nursing turnover: Some causes and solutions. Nursing Outlook, 24(4), 233-236.

APPENDIX A
Demographic Data Survey

Staff Nurse Work Setting StudyBackground Information

1. Gender: ☐ Female ☐ Male
2. Age _____
3. Ethnic background: ☐ African-American ☐ Asian-American
 ☐ Caucasian ☐ Hispanic
 ☐ American Indian ☐ Other
4. Marital Status: ☐ Single
 ☐ Married
 ☐ Separated/Divorced
 ☐ Widowed
5. Number of children: ☐ Ages of children: _____
6. If you use child care services, how dependable are they?
 ☐ Very dependable
 ☐ Usually dependable
 ☐ Sometimes dependable
 ☐ Rarely dependable
7. Highest nursing degree completed: _____
8. Are you currently enrolled in an academic program
leading to a degree? ☐ Yes ☐ No
If yes, please describe _____
9. How long have you been a registered nurse?
 ☐ years, ☐ months
10. How long have you been in your present position?
 ☐ years, ☐ months
11. What is your clinical level (I, II, III, IV or V)? _____
12. Have you been or are you currently functioning as a
charge nurse? ☐ yes ☐ no
assistant head nurse? ☐ yes ☐ no
13. In what unit do you work most frequently? _____
14. On the average, how many hours do you work per week? _____

Thank you for taking the time to complete this questionnaire. Your responses will contribute to a better understanding of improved work arrangements for nurses.