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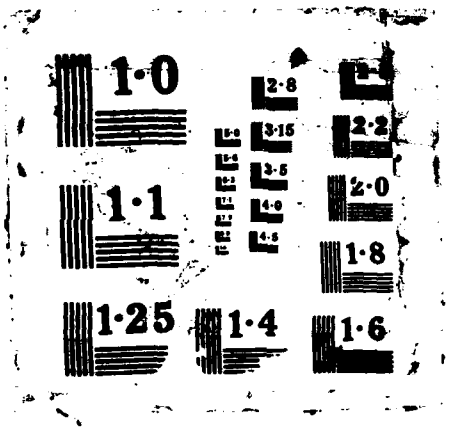
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ABSTRACT

Nursing turnover is costly in money, personnel, and employee morale. The research in nursing turnover has alluded to job satisfaction, the personal reasons or the job itself as possible causes.

This study identified U.S. Air Force Nurse Corps officers at risk for turnover, how satisfaction impacts on the turnover, the impact of Work Role Design and Individual Motivation on the satisfactions, and the stated reasons for turnover. It was reasoned that if satisfaction factors do have an impact on turnover, more administrative attention could be focused on these factors through Work Role Design and/or Motivational Theory to decrease turnover.

The sample population consisted of 1,200 active duty nurses working in Medical Treatment Facilities worldwide. The specialities included: Administration, Clinical Nursing, Nursing Education, Mental Health Nursing, and the Operating Room. In all, 885 surveys were returned (73.75%).

The major findings indicate that the turnover intentions resemble the actual Nurse Corps' turnover. The nurses indicate they are satisfied. Their demographic characteristics of age, sex, marital status, rank, time of station, and time in Air Force, and level of Air Force satisfaction did have an effect on the turnover intentions.

Consistency and equity of organizational policies and the motivating potential were the most important work role design factors in determining the satisfactions; equity of rewards was the most important individual motivator. Stated reasons for turnover were related to working conditions, politics, the job, family responsibilities, supervision, and policies. Reasons for staying were related to the job, benefits, politics/policies, educational opportunity, and personal reasons.

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TURNOVER AMONG AIR FORCE NURSES

by

John C. Nichols
Major, USAF, NC

A thesis submitted to the faculty of
The University of Utah
in partial fulfillment of the requirements for the degree of

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College of Nursing

The University of Utah

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THE UNIVERSITY OF UTAH GRADUATE SCHOOL

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of a thesis submitted by

John C. Nichols

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Feb 20, 1987 — Verla B. Collins
Chair: Verla B. Collins

February 20, 1987 — Judith A. Kiernan
Judith A. Kiernan

2-20-87 — John W. Seybolt
John W. Seybolt

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FINAL READING APPROVAL

To the Graduate Council of the University of Utah:

I have read the thesis of John C. Nichols **in its final form and have found that (1) its format, citations, and bibliographic style are consistent and acceptable; (2) its illustrative materials including figures, tables, and charts are in place; and (3) the final manuscript is satisfactory to the Supervisory Committee and is ready for submission to the Graduate School.**

March 9, 1987
Date

Verla B. Collins
Verla B. Collins
Chair, Supervisory Committee

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Linda K. Amos
Chair/Dean

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David W. Pershing
David W. Pershing, Acting
Dean of The Graduate School

I dedicate this thesis to my mother, Virginia L. Nichols, R.N., whose devotion to nursing, and love for me, has inspired me to fulfill "our" dreams.

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CHAPTER 1

INTRODUCTION

Nursing turnover has been a complex, expensive problem for nurse administrators for quite some time now, especially in light of the reported nationwide shortages of qualified registered nurse (RN) replacements. It is estimated that as of November 1980, there were 1,615,846 nurses licensed to practice nursing in the United States (Nurses Today - A Statistical Portrait, 1982); and, according to a recent USA Today article, by 1995 the total number needed will exceed 1,829,000 nurses (Johnson, 1986).

Numerous articles and reports have been written about a propounded national shortage of nurses, citing many reasons for it, but with little offered as plausible solutions (AHA's Nursing Commission releases preliminary report on the shortage, 1981; Alley, 1982; Fralic, 1980; Kernaghan, 1982; Park, 1982; State studies seeking causes, cures for the nursing shortage, 1981; Wandelt, Pierce, & Widdowson, 1981; White, 1980).

According to White (1980, p. 60), "In terms of educational preparation, nursing is the most unusual occupation in the health care field. Nurses may be licensed after two, three, or four years of training; and there is

little agreement about how the graduates of these programs differ in their professional competency and duties after licensing". He further found that young women still want to be admitted to [nursing] education programs, but that only one in five or six applicants could be accepted in California. Furthermore, of the six admitted, five will graduate, three pass licensing exams, two work as nurses, and only one work in a hospital. He also concludes that nursing is a troubled profession having problems associated with identity and morale, licensing controversies, attrition in educational programs, and reality shock, leaving the nurses with feelings of helplessness.

Decker, Moore and Sullivan (1982) state that there is a nationwide shortage, but believe it is not because nursing schools are not turning out sufficient graduates. They feel it is due to the fact that up to 40 percent of all registered nurses (RNs) are simply not working. Hallas (1980) and Wandelt, Hales, Merwin, Olsson, Pierce, and Widdowson (1980) have shown that 32.7 percent and 40 percent [respectively] of those RNs surveyed were not working in nursing. However, according to the National League for Nursing statistics, total nursing school enrollment decreased in 1984 by 5.3 percent.

Aiken, Blendon, and Rogers (1981) report that hospitals have been forced to close operating beds because nurses were unavailable and that the nursing coverage, especially

in intensive care units was dangerously low. The other critical areas include the operating room and psychiatry.

A few years ago the shortage crisis was thought to be over (Seybolt, 1983; 1986); however, hospitals across the nation are again finding it difficult to obtain qualified nursing personnel to fill their staffing vacancies, especially in the critical care areas. These vacancies are thought to be caused by many factors, i.e., increases in patient census, critical care needs, and stress; a backfire in the part time trend; the emphasis on primary care and all RN staffing; a growth in alternative health services; sagging school enrollments (Nursing Shortage is back, 1986; RN Shortage Surfaces, 1986); and turnover. Although the nursing shortage is creating problems for nurse recruiters in filling staffing vacancies, more studies of the shortage problem may not be needed; rather, emphasis should be placed upon redesigning the workplace to keep hospitals attractive to nurses (Fralic, 1980) and on how to retain the nurses currently employed (Decker, et al., 1982; Weisman, 1982). White (1980) concludes that nursing staff is a considerable [financial] investment to a hospital, and in order to protect this investment, more emphasis should be placed on why nurses remain with an organization, rather than on why they leave it.

Turnover (Mobley, 1982) is generally defined as the cessation of membership in an organization by an individual

who received monetary compensation from the organization. It is possible to distinguish between the voluntary separations (employee-initiated) and the involuntary separations (organization-initiated, plus death, and mandatory retirement).

Many different turnover rates are given in the literature. The nursing turnover range in the civilian workforce has reported from a low of 30 percent (Duxbury & Armstrong, 1982) to a high of 200 percent (Wolf, 1981) with an apparent average of around 60 to 70 percent (Lemler & Leach, 1986). In 1954, the American Nurses' Association, in a survey of 311 nonfederal hospitals, found a crude turnover rate of 42 percent; a second sample of 428 nonfederal hospitals, in 1962, showed an increase in the rate to 58 percent (Price, 1981). According to a recent study by the National Association of Health Care Recruiters [NAHCR] (June, 1986), of the 204 member hospitals responding, the national turnover rate for the last three years (1984, 1985, 1986) has been at 18%, with a range of 2 to 48 percent. The rate in 1980 was listed as 30 percent.

As with the turnover rate, many different associated costs are also reported. The minimal replacement costs are estimated to exceed $3,000 for the lowest level employee (Seybolt, 1983; 1986), while the average has been reported to range from $600 to $2,500 per nurse (Hoffmann, 1981; Seybolt & Walker, 1980). The NAHCR (1986) survey reports

the national average cost for 1986 at $1,276 per full time equivalent (FTE), with a range of $0 to $6,211. This figure has increased by $203 ($1,073) over the 1985 total and $243 ($1,033) over the 1984 total. In 1980, the average cost per FTE was $731.

Brief (1976) and Hoffman (1985) feel these high turnover costs are due to advertising, recruitment and selection of nurse replacements; socializing the replacement in regard to the norms; orientation and training of the replacement; and turnover costs (separation pay, overtime paid to other employees, loss of efficiency prior to separation, etc.). In Nurse supply, distribution and requirements, third report to Congress, 1982, the California Hospital Association estimated that the net recruiting costs for attracting a new staff nurse averaged $7,548 per nurse (Boag, 1983). Mobley (1982) cautions that these figures (turnover and replacement costs) may be misleading to the casual observer and should not be compared with each other unless the methods of computation are known.

According to Mobley (1982, p. v-vi), employee turnover is important to organizations, individuals, and society. For the organization, turnover can have a negative cost impact in terms of lost recruiting, training, socialization investments, disruption and replacement costs, and a variety of indirect costs. On the positive side, turnover

displaces poor performers, creates promotion opportunities, and brings in new people with new ideas. For the individual, turnover can positively be associated with the pursuit of their career objectives or with movement away from a stressful situation. On the negative side, the individual may lose nonvested benefits, may disrupt the family social support system, and can be subject to the "grass looks greener" phenomenon only to find later disillusionment. Finally, from the societal perspective, turnover may be positive in the mobility and migration of new industries where an excessive turnover could depress productivity growth and orderly development. Mowday (1984), lists additional negative consequences as demoralization of the coworker, negative public relations, and operational disruption. He feels organizations should look at who is leaving, and how easily they can be replaced.

Price (1981) gives three reasons why high nursing turnover is important to hospitals: 1) High nursing turnover seriously complicates the hospital's goal of providing quality care for its patients; 2) creates the lack of alternate career structures; and 3) causes the geographical maldistribution of nurses in the United States.

Hinshaw and Atwood, in Nursing staff turnover, stress, and satisfaction: Models, measures, and management (1983), list numerous studies in the management and nursing literature that focus on the causes and correlates of

turnover. A few of these factors include a negative correlation to job satisfaction; individual characteristics such as age, mobility, and initial expectations of the job; organizational characteristics such as leadership patterns, participation in decision making, integration, and reward and pay incentives; and an environmental characteristic of job opportunity. Brief (1976) lists other causes as due to family reasons, salary, and role conflict. Other studies, list some of these factors as "personal reasons" or "unavoidable" which may be due to pregnancy and/or marriage (Bayley, 1981; Catania, 1964; Diamond & Fox, 1958; Gulack, 1983; Lemler & Leach, 1986; Nash, 1966; and Saleh, Lee, & Prien, 1965).

Essentially, one could assume from the literature, if nurses are satisfied with their jobs, they should be less likely to leave them, although, others factors, such as mobility, may prevent the dissatisfied employee from doing so. Mobley (1982), however, stresses that the best indicator of turnover is the individual's intent to leave, whether or not the actual cause is known.

Purpose

The purpose of this research is to look at the phenomenon of nursing turnover, from a managerial perspective, as it relates to U.S. Air Force Nurse Corps officers, utilizing a descriptive design. The research uses a survey entitled "Work Role Design," developed by John W.

Seybolt, Ph.D., Professor of Management, University of Utah. The survey will measure the nurses' levels of satisfactions and turnover intent, and identify if their biographic, demographic, and/or professional status has an impact on either. Results will be used to diagnose and provide possible solutions to potential problems with premature nurse turnover. Additionally, this study will enhance the body of nursing knowledge related to nurse turnover in general. Furthermore, due to the low reported annual turnover rate in the Air Force Nurse Corps, the potential exists for the civilian sector to learn from the Air Force's management techniques.

Problem

As of 30 September 1986, the the United States Air Force Nurse Corps had 5,124 registered nurses on active duty, working in either one of the 124 medical treatment facilities worldwide; or they were assigned to other locations, where they worked in administration, recruiting, training, education, flight nursing, etc. (Medical Programming and Analysis Division, September 1986.)

Currently (as of fiscal year (FY) 1986, October 1985 to September 1986), in raw data (see Table 1), the Nurse Corps had 504 nurses turnover (415 separations [45 involuntary and 370 voluntary] and 89 retirements) which equates to an annual turnover rate of 9.8 percent. This percentage equates to 82.3 percent for separations [involuntary - 8.9

Table 1

USAF Medical Service Separation Analysis
Nurse Corps

By Category	FY 85		FY 86	
Category	Total	%	Total	%
Involuntary Separation	54	11.4	45	8.9
Voluntary Separation	342	72.0	370	73.4
Retirements	79	16.6	89	17.7
Total	475	100.0	504	100.0
End Strength	4931		5124	
% Loss of end strength	9.63		9.84	

By Reason				
Reason	Total	%	Total	%
Involuntary Separation:				
Disapproved Ext of Term	9	1.9	8	1.6
Substandard Performance	8	1.7	3	.6
Unfit for Duty	2	.4	-	-.-
Court Martial	5	1.1	3	.6
Misconduct	-	-.-	2	.4
Fail Nurse Boards	1	.2	3	.6
Twice Fail Promotion	29	6.1	26	5.1
Total	54	11.4	45	8.9
% Loss of End Strength	1.09		.88	
Voluntary Separation:				
7 day option	21	4.4	32	6.3
Ended Tour of Service	256	53.9	265	52.6
Attend School	-	-.-	1	.2
Substandard Performance	-	-.-	11	2.2
Misconduct	-	-.-	6	1.2
In Lieu of Court Martial	-	-.-	2	.4
Pregnancy	46	9.7	28	5.6
Interservice Transfer	1	.2	3	.6
Death	-	-.-	2	.4
Miscellaneous	18	3.8	20	3.9
Total	342	72.0	370	73.4
% Loss of End Strength	6.94		7.22	
Retirement:	79	16.6	89	17.7
% Loss of End Strength	1.60		1.74	
Total Voluntary Separation and Retirements	421	86.6	459	91.1
Adjusted Voluntary Separation and Retirement % Loss of End Strength	8.54		8.96	

[Source: USAF Medical Service Separation Analysis, Nurse Corps, 1986]

percent, and voluntary - 73.4 percent]) and 17.7 for retirements (Source: USAF Medical Service Separation Analysis, Nurse Corps, 1986).

According to the Chief of Nurse Recruiting, (Headquarters, USAF Recruiting Service), the cost of recruiting each nurse was $1,780 for FY 1985; however, when recruiters salaries and cost of facilities are included, the total cost per nurse was $4,472. This figure includes applicant costs (transportation, meals, establishing a case file, etc.); travel; convention support; audiovisual expenses; communication expenses; listings; advertisement (outdoor & periodical); printed products; etc. The chief cautions that this figure is soft data equated from the total budget, but may not correlate to the number of applicants.

Other intangible costs, not included in the recruitment costs, are for the Nurse Selection Board (three senior Nurse Corps officers), which meets monthly, in San Antonio Texas, to select qualified applicants; and, the National Agency Check ($15.02; Source: Defense Investigative Service, 1986) performed on each selected applicant.

Once selected, other costs (average) include those for: Military Indoctrination of Medical Service Officers ($3,000), and moving the nurse to their duty location ($5,946) (Source: Chief, Nurse Corps Career Management Branch, Air Force Military Personnel Center). Orientation

of the new nurse averages from 4 to 6 weeks (Source: Unpublished report, Nurse Internship Program Evaluation, 1985); multiplying the number of hours (160 to 240 hours) by the average hourly wage of a new nurse ($15.76 [source: Wright-Patterson Air Force Base, Accounting and Finance Office]) totals $2,521 to $3,782.

Other costs, difficult to price out include: other training, i.e., internship and speciality training; the trainer costs; and the cost of turnover itself (payment of accrued benefits to and lost productivity of the leavers; overtime; and staff morale of the stayers). In addition, another intangible cost relates to the idea that those nurses who separate are experienced, while their replacements normally have little if any experience.

It becomes extremely difficult to determine an exact total replacement cost, however, taking all the figures into consideration, the direct costs of replacement may well exceed $17,000 per nurse, especially if the indirect, intangible costs are included.

Apparently, the current nursing shortage has not yet caused the Nurse Corps to fail in meeting its recruitment goals, as they continually meet them each year. However, according to a U.S. Air Force, Nurse Recruiter for this local area, certain specialities are given more attention, i.e., nurse anesthesia, operating room nursing, and psychiatric nursing.

Problem Statement

Thus far in the Nurse Corps, the percentage of voluntary turnover and retirement is 91.1 percent of all turnover, resulting in an overall turnover rate of 8.96 percent. This small percentage may indicate that a problem with turnover does not exist. With the current turnover trends in the civilian sector and the reported increase in the nursing shortage, the potential for this percentage to increase exists and the needed replacements may not be available. In light of the high costs associated with turnover, any change in the rate, plus or minus, of 1/10 of 1 percent can result in either an increased cost or savings of over $83,000. This potential combines with the high turnover costs to demand the organizational managers in the Nurse Corps be prepared to predict turnover, and initiate methods to correct it.

Therefore, the problem becomes how to identify those attitudes that tend to cause turnover, and be able to predict when this turnover will occur, before a major problem with turnover exists.

CHAPTER 2

REVIEW OF LITERATURE

To understand the concept of turnover, its causes and correlates, a review of the literature on turnover, job satisfaction, and retention was undertaken to study the impact upon nursing in general. A large volume of research has been conducted on these concepts and reported on in the management, nursing, and psychological journals. In addition, many books have also been written on the topics, giving the manager ample opportunity to become well versed in these complex concepts.

Turnover

It is estimated that between 1,500 and 2,000 publications, including journal articles, books, monographs, technical reports, and working papers have been written about the concept of turnover (Muchinsky & Morrow, 1980). Muchinsky and Tuttle (1979) summarized 50 years of predictive turnover research in five categories: test score predictors, biodata predictors, personal factors, attitudinal factors, and work related factors. Their review follows:

> Test Score Predictors: Part of the early attempts to predict employee turnover used standardized tests dealing with: personality, interest, intelligence, or

aptitude. The overall results appear inconclusive.

Biodata Predictors: Specific items used were rarely stipulated by the researchers; however, the evidence reported indicates that biodata items can predict turnover.

Personal Factors: The personal factors included as predictors of turnover include: age, tenure, family size, and family responsibility. Almost all studies report that age is negatively related to turnover. All studies report that tenure and turnover are inversely related. The relationship between family size and turnover is moderated by whether the employee is the primary or secondary wage earner. The degrees of responsibility seem positively related to turnover.

Attitudinal Factors: The research on attitudinal factors is the most extensive, and the results most consistent. Job dissatisfaction is associated with turnover; showing an inverse relationship.

Work Related Factors: The research on work related factors of turnover is diverse. Some of these areas included the work-unit size, task repetitiveness, receipt of recognition, and job autonomy.

In another review of the literature, Porter and Steers (1973) feel that while consideration of the role of overall satisfaction in the decision to participate is important, little can be seen as to the roots of the satisfaction. Just knowing that the employee is dissatisfied and about to leave tells little about why he or she is dissatisfied or what can be done to retain him or her. The authors feel that in order to do so, you must look at the organization wide factors of: pay and promotion, and the organization's size. A second set of factors centers around the immediate work environment, i.e., supervisory style, work-unit size, and peer group interaction. The third set of factors deal with job content, i.e., the overall reaction to the job (general level of satisfaction with the tasks assigned), task repetitiveness, job autonomy and responsibility

(variety, autonomy, feedback, and task identity), and role clarity. A fourth set are personal factors, which are unique to the individual, and include: age, tenure, similarity with vocational interests, personality characteristics, and family considerations. In general, the decision to participate or to withdraw [turnover] is looked upon as a balance of the received or potential rewards with the desired expectation. The authors suggest that the expressed intention to leave may be the logical, next step in employee withdrawal, after experiencing dissatisfaction. They conclude that more emphasis should be placed on the psychology of the withdrawal process.

High turnover of college graduates was found to be significantly related to the discrepancies, noted by the graduates, between their actual job experiences and their expectations at the time of hiring (Dunnette, Arvey, and Banas, 1973). The authors conclude that college graduates placed in situations under managers who successfully utilize and challenge, rather than delimit and stifle their abilities, tend to be more effective performers over the long run.

The aspect of organizational commitment as it related to turnover was studied by Porter, Crampton, and Smith (1976). Their results showed that those who voluntarily left the organization during the study period had begun to show a definite decline in their commitment prior to

actually leaving. They concluded that in the event a marked decline in commitment starts to occur, it is likely signaling a voluntary termination in the near future.

Organizational commitment, along with employee rewards and costs, was addressed by Rusbult and Farrell (1983). Commitment refers to the idea that the individual employee will remain with the job and feel psychologically attached to it, whether or not it is satisfying or not. Job commitment is said to increase with increases in job rewards, decreases in job costs, increases in investment size and decreases in the alternative quality. Finally, job commitment directly influences job turnover. In general, the results of their analysis showed that greater job rewards and lower job costs induced greater employee satisfaction, and that greater commitment was encouraged by higher rewards, lower costs, greater investment of resources, and poorer quality alternatives. It was the process of change (declining rewards, increasing costs, divestiture, and improving alternative quality) that distinguishes between those who leave or stay with an organization.

Tenure was used as the moderating variable in determining the relationship between organizational commitment and turnover (Werbel & Gould, 1984). The findings indicate that during the first year of employment, no relationship existed between commitment and turnover. As

the amount of tenure increased, an inverse relationship between commitment and turnover becomes more apparent

To identify possible linkages in the satisfaction turnover relationship, Mobley (1977) introduced his original, heuristic model of turnover. A simplified version of the model was tested by Mobley, Horner, and Hollingsworth (1978), and was found to be valid. They found that the one single significant regression coefficient with turnover was intention to quit and that the effect of job dissatisfaction was on thinking of quitting and intentions rather than on turnover itself. Mobley, Griffeth, Hand and Meglino (1979) proposed a more comprehensive model that considers organizational, individual, and economic/labor market determinants of the turnover decision process. They concluded that their conceptual model calls attention to the possible main effects of satisfaction (present oriented), the expected utility of the current role (future oriented), and the expected utility of alternative roles.

Mobley (1982, p. 112 & 113) gave an interpretive summary of the research on the causes and correlates of turnover (Table 2).

In a study of female factory workers, Koch and Rhodes (1981), found that organizational, job, and personal characteristics are as equally important in the explanation of turnover. Those variables that were significantly related to turnover were tenure [negative], cycle time

Table 2

Summary of Research

	Consistent	Moderate	Inconclusive
Labor market	Level of Unemployment		Inflation
Organizational variables	Pay levels	Supervisory style Work-unit size Routinization, task repetitiveness Autonomy and responsibility Centralization Integration Communication	Type of Industry Organization size
Individual variables	Age Tenure Satisfaction with job content	Source of referral Family responsibility Interests Aptitude and ability Satisfaction-pay Satisfaction-promotion Satisfaction-coworkers Satisfaction-supervisor Satisfaction-conditions of work Expectancy of finding an alternative	Personality Sex Education Professionalism Performance Career expectations Absenteeism
Integrative variables	Overall satisfaction Behavioral intentions to quit Organizational commitment		Stress

Source: Mobley (1982), Table 5.5. "An interpretive summary of research on causes and correlates of turnover".
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(amount of time needed to complete a task) [positive], peer leadership [positive], communication flow [negative], training time [negative], family income [negative], and satisfaction with pay [negative]. Personal factors which were not significantly related to turnover included age, training status, educational level, community of origin, and number in family working. Overall hierarchical regression indicated that personal, organizational, and job characteristics were all of significance, and apart from the influence of family income, there appeared to be little in the findings that would differentiate women from men, in the same setting.

Although turnover from an organization is normally deemed as negative, to show the converse, Dalton and Todor (1979 & 1982) examined the positive aspects of the turnover process. They found that, for the organization, turnover costs may be misrepresented because of a failure to account for the benefits as well as the costs of turnover. Economically, it was suggested that mobility and migration are essential for long term growth. With the sociological aspects, mobility aids in the social and economic development of the individual. Finally, turnover may be a coping mechanism for the individual under stress. Blocking this may lead to absenteeism, apathy, sabotage, and other nonproductive behaviors. Turnover also allows for the rectification of errors made by the individual during the

initial job selection process.

This aspect of positive turnover was furthered by Abelson and Baysinger (1984) when they looked at optimal versus dysfunctional turnover. They feel that if employee performance is high, turnover is considered dysfunctional; the converse is also true, if performance is low, turnover would be functional. The optimum level is dependent upon the performance of the individual along with the costs of turnover/retention behavior.

The role of performance upon turnover is examined by Dreher (1982). In his search of the limited research on performance and turnover, he found, in the academic theater, high performers had a higher tendency to leave the organization. In the nonacademic setting, there were contradictory results. From his study of a large national oil company, he concluded that there was no indication that the high performers left more often; however, he found that stayers were being promoted at a faster rate than leavers.

In summary, employee turnover remains a frequently researched phenomenon, where one factor, job satisfaction, has consistently, even if not strongly, shown an inverse relationship. However, just knowing that the employee is dissatisfied and about to leave the organization tells little about why the employee is dissatisfied. The best indicator of impending turnover is the employee's behavioral intentions to quit. Other consistent findings

have dealt with pay levels, age, tenure, satisfaction with job content, and organizational commitment. Additional findings, presented in the literature, but not as consistent are supervisory style, work-unit size, routinization, autonomy and responsibility, centralization, integration, communication, family responsibilities, interests, aptitude and ability, satisfaction with pay, promotion, coworkers, supervisor, and conditions of work, and expectancy of finding a quality alternative.

Job Satisfaction

No discussion of turnover is complete without some mention of job satisfaction, especially due to the overall, consistent, inverse relationship between the two. Locke (1969) estimated that as of 1969, over 4,000 articles may have been written on job satisfaction; Gruneberg (1979) suggests that the number is higher due to the considerable number of publications on the topic each year. Work in the field of job satisfaction began in the 1920s; however, the first intensive study was published by Hoppock in 1935 (Locke, 1976).

Many definitions are given for job satisfaction, including Locke's (1969, p. 316) global definition in "What is Satisfaction":

> Job satisfaction is the pleasurable emotional state resulting from the appraisal of one's job as achieving or facilitating the achievement of one's job values. Job dissatisfaction is the unpleasurable emotional state resulting from the appraisal of one's job as

> frustrating or blocking the attainment of one's job values or as entailing disvalues. Job satisfaction and dissatisfaction are a function of the perceived relationship between what one wants from one's job and what one perceives it as offering or entailing.

He further states (p. 330):

> A job is not an entity, but an abstraction referring to a combination of tasks performed by an individual in a certain physical and social context for financial (and other) remuneration. Since a job is not perceived or experienced as such, it cannot initially be evaluated as a single unit. Overall job satisfaction is the sum of the evaluations of the discriminating elements of which the job is composed.

In 1976 (p. 1307), he refines the definition to:

> Job satisfaction results from the perception that one's job fulfills or allows the fulfillment of one's important job values, providing and to the degree that those values are congruent with one's needs.

Smith, Kendall, and Hulin (1969, p. 6) simply define job satisfaction as "the feelings a worker has about his job."

The traditional theory of job satisfaction (Ewen, Hulin, Smith, & Locke, 1966) presents the idea of a linear relationship of satisfaction, i.e., if the presence of one variable in the work situation leads to job satisfaction, then its absence will lead to job dissatisfaction, and vice versa. These factors could be identified as "intrinsic" (internal to the individual), or "extrinsic" (externally associated with the job).

Two content theories have dominated the literature in an attempt to specify the particular needs that must be satisfied or the values that must be attained for an individual to be satisfied with his or her job: Maslow's

Need Hierarchy theory and Herzberg's Motivation-Hygiene theory.

Maslow's theory (Maslow, 1954) asserts that man has five basic categories of needs: physiological needs, including food, water, air, etc.; safety needs, including freedom from physical threats and harm as well as economic security; belongingness and love needs; esteem needs of two types: the need for mastery and achievement, and the need for recognition and approval of others; and the need for self-actualization, which is defined as "the capability to become everything one is capable of becoming." The theory states that these needs are arranged in a hierarchy, and that the lower level needs, i.e., physiological, must be fulfilled before one can meet the higher level, intrinsic needs.

Herzberg, (1959; 1966a; 1966b) developed his famous Motivation-Hygiene, or two factor theory, where he classed certain factors as either potentially motivating or hygienic. The motivating factors were: achievement, recognition, the work itself, responsibility, advancement, and growth; all of which, he felt led to extreme satisfaction. His hygiene factors included: company policy and administration, supervision, the relationship with the supervisor, work conditions, salary, the relationship with peers, personal life, the relationship with subordinates, status, and security; which lead to extreme dissatis-

faction. He differed from the classical theory in that he believed that the motivators caused job satisfaction, and without them, instead of the person becoming dissatisfied, he or she was just "not satisfied." With the hygiene factors, if not met, the person would be dissatisfied; however, when met, this did not lead to satisfaction, it just meant that the person was not "dissatisfied." The justification for Herzberg's theory came from the belief that man has two sets of needs, physical and psychological growth. The physical needs motivate according to a pain-avoidance principle; i.e., when frustrated they produce discomfort; when fulfilled, produce relief from the discomfort, but no positive pleasure. The attainment of psychological growth needs brings pleasure, but the failure to grow does not bring displeasure.

Gender differences in job satisfaction have been reported in the literature. Hulin and Smith (1964), in their research of the existing literature found that higher job levels and higher wages generally contributed to higher job satisfaction and that these job levels and wages were more often held by males. Their study showed that females did seem to have a lower level of job satisfaction than their male counterparts; however, they felt (p. 91) that the "gender" was not the crucial factor, "It is, rather, the entire constellation of variables which consistently covary with gender; for example, pay, job level, promotion

opportunities, societal norms, etc., that is likely causing the differences in job satisfaction." Hulin and Smith (1965) also countered Herzberg's theory, by developing a linear model of job satisfaction. In their research of five separate areas of worker's job satisfaction (satisfaction with: work, pay, promotion opportunities, coworkers, and supervisors) and six independent variables (age, tenure on the job, tenure with the company, job level, salary, and salary desired minus salary received), they found that for predicting job satisfaction, the work itself and pay seemed to be the best.

Research has also been done on why people work. Vroom (1964) found that the reason can best be explained in terms of job availability and the worker's preference between working and not working. His expectancy theory suggests that the worker's behavior is due not only to his preference, but also to a likelihood that a particular act will be followed by a particular outcome. He feels that it is important to distinguish between the valence of an outcome (anticipated satisfaction) and its value (actual satisfaction). For a work role to be satisfying, it must provide high pay, substantial promotional opportunities, considerate and participative supervision, an opportunity to interact with one's peers, varied duties, and a high degree of control over work methods and work pace.

Some of the most comprehensive work on job satisfaction

was carried out by Smith, Kendall, and Hulin (1969) with the development of the Job Description Index (JDI) (Seybolt, 1976). Their main concern was with the five facets of job satisfaction: satisfaction with pay, coworkers, promotions, supervision, and the work itself.

In order to establish proper conditions for internal work motivation, a job must: 1) allow workers to feel personally responsible for an identifiable and meaningful portion of the work, 2) provide work outcomes which are intrinsically meaningful or otherwise experienced as worthwhile, and 3) provide feedback about performance effectiveness (Hackman & Lawler, 1971). The harder and better an individual works on such a job, the more opportunities he or she will have to experience higher order need satisfactions and the the more incentive he or she will have for continued effective performance.

Herzberg's job satisfaction technique has been used in numerous studies. Atchison and Lefferts (1973) studied the turnover of Air Force pilots, and found that although Herzberg's technique calls for an individual interview, if the motivational factors were put into a Likert scale, predictions could have been possible. They also found that there were no significant differences between leavers and stayers when using the interview method. Karp and Nickson (1973) also tested Herzberg's theory on a sample of the black working poor. They were able to associate their

motivational factors with the satisfying experiences significantly more than with dissatisfying experiences, and were also able to associate hygienic factors significantly more with dissatisfying experiences than satisfying ones (Herzberg's theory). They concluded that they were able to indicate how much satisfaction and dissatisfaction was perceived; however, they could not tell to what extent it disturbed the individual.

The level of education has also been examined as it relates to higher individual expectations. Seybolt (1976) felt that if the job and work organization do not meet the expectations of the highly educated individual, the individual will be less satisfied than the individual with lower education in a similar job. However, the individual with lower education, and therefore lower expectations, will be more satisfied when the lower expectations are met and will be less satisfied than the more highly educated individual in a job which offers more than what is expected.

In summary, job satisfaction has been studied extensively. Locke (1976) defined job satisfaction as the perception that one's job fulfills or allows the fulfillment of important job values, to the degree that the values are congruent to his or her needs.

The traditional theory (Ewen, Hulin, Smith, & Locke, 1966) simply states that if variables in the job lead to

satisfaction, then the absence of those variables will lead to dissatisfaction. These factors may be intrinsic or extrinsic. Two content theories have dominated the literature: 1) Maslow's hierarchy of needs theory (Maslow, 1954), where lower level needs must be satisfied before the individual can progress to the fulfillment of higher level needs; and 2) Herzberg's dual factor "motivation-hygiene" theory (Herzberg, et al., 1959, 1966a, & 1966b), where motivators (intrinsic), when present, lead to satisfaction, and if not present, simply mean that the person is not satisfied, and hygiene factors (extrinsic), if not present lead to job dissatisfaction, and if present, simply mean that the person is not dissatisfied.

Hulin and Smith (1964) explored other factors in order to explain job satisfaction. They found that gender led to lower levels of job satisfaction in females, and that when the satisfaction of pay, promotion opportunity, coworkers, and supervisors are associated with age, tenure, job level, and salary, the work itself and pay seem to be the best predictors. Vroom (1964) used the expectancy theory to explain job satisfaction, i.e., the worker's behavior is due not only to preference, but also to the likelihood that a particular act will be followed by a particular outcome. Hackman and Lawler (1971) introduced the job motivational factors of 1) responsibility for the job, 2) meaningful work, and 3) feedback. Herzberg's theory was tested by

Atchison and Lefferts (1972), and Karp and Nickson (1973) in which they were unable to validate the theory. Seybolt (1976) found that the individual's level of education will influence the individual's expectations as related to pay, job variety, and work complexity.

Job Satisfaction Studies In Nursing

Many studies are also present in the literature that relate specifically to nursing. The reported causes have varied from study to study, with many combining the factors of satisfaction. Hinshaw and Atwood (1983), in their extensive review of satisfaction literature found that the research [in health care settings] results did not convey consensus regarding a single, most predictive theoretical model, and the industrial studies reviewed have untested generalizability to health care workers. They felt:

> Much of the literature is theoretical in nature, advancing substantive recommendations without presenting data to evaluate nursing staff, cost, or client outcomes. Such an evaluation process is crucial for a practice profession that needs not only to identify factors that influence the delivery of care, but is also accountable for manipulating those factors and instituting strategies to counter negative consequences, e.g., high voluntary staff turnover.

The first published study of job satisfaction in nursing was conducted by Nahm (1940). She found that overall, nurses had a high degree of satisfaction (60 percent). In general, she determined that the most important factors differentiating satisfied and

dissatisfied nurses were: interest in the work, general adjustment of the individual, relationships with superior officers, family and social relationships, hours of work, income, and opportunities to advance and attain ambitions. Pickens and Tayback (1957), also found high levels of satisfaction associated with working hours, security, promotions, supervision, and coworkers; and low levels of satisfaction with opportunities for promotion, salary, and non-nursing (clerical) duties.

In studying attitudes, Anderson and Haag (1963) identified certain differences in attitudes based on sex, age, and type of work. They found that 1) women are generally more conservative in their opinions than men, 2) older workers seem to be more satisfied with their supervisors and more content with their jobs, and 3) persons holding lower level jobs are concerned more with the quality of immediate supervision. Seybolt and Walker (1980) and Walker and Madsen (1981) also studied attitudes and found that almost one-half the nurses responding felt that the level of stress was unfavorable.

National surveys of nurses have been used to determine what is causing satisfaction and/or dissatisfaction. Godfrey (1975) in a study on working conditions, showed that nurses essentially liked the work they did, but also had some gripes about their job. The factors most appreciated were: interesting work, enough authority and

responsibility to get the job done right, congenial associates, and job security. The most frequent complaints were: inadequate staffing, low salaries, the working hours and shifts, and the physical working conditions. In another national study, Godfrey (1977, 1978a, 1978b, 1978c) found those factors that were listed as major satisfiers were: helping people, intellectual challenge, and enjoying the work. Of minimal importance were: financial security and prestige. The major dissatisfiers were: unsafe practices, poor leadership, and communications breakdown. What nurses want from their jobs are: opportunity for professional growth, choice of hours worked, supportive administration, and adequate staffing. Females found the intrinsic satisfier of bedside nursing more important; while males found the extrinsic satisfiers of pay and security more important. Donovan (1980), in another national survey found similar results. Munro (1982, 1983) also used a national sample, to investigate the correlates of job satisfaction among recent graduates of nursing programs and to determine how those factors compared with those identified by Herzberg. Of the six motivators identified by Herzberg, five were included in this analysis (achievement, work itself, responsibility, advancement, and growth). Overall, nurses were most satisfied with the intrinsic portions of their job. They were the least satisfied with working conditions, pay, opportunities for promotion and

advancement, fringe benefits, and their supervisors.

These results are similar to Benton and White (1972), where the nurses indicated those factors of greatest importance to be safety, security, social, esteem, and self-actualization factors. The factors having least importance were pay and personnel policies. They concluded that the greater the importance of a factor to the nurse, the more it is expected to be provided; if not provided, the greater the level of dissatisfaction, and the less likely they will give maximum performance. Lysaught (1972) contends that unless there are changes in the intrinsic and extrinsic reward systems for nurses, it is likely that they [the nurses] will find it difficult to meet their lower level needs for security.

In studies of job satisfaction patterns of nurses relative to other health care workers in the same hospital, and among nurses in different hospitals, Imparato (1972) found, within the same hospital, nurses were clearly more satisfied with supervision, pay, and opportunity for promotion. Between hospitals, nurses in the urban areas were significantly less satisfied with the work itself than those nurses in the suburban hospitals. Sanger, Richardson, and Larson (1985) surveyed two nursing units, similar in most respects, except that one unit had a lower turnover rate than the other. The results showed that neither the job, age, length of employment, nor shift were predictive

of job satisfaction. In addition, the unit with lower turnover scored higher in the mean scores of satisfaction.

In other multiple hospital studies, Everly and Falcione (1976), found that job satisfaction was due in part to the relationship orientation, internal work rewards, external work rewards, and administrative policies. Beyers, Mullner, Byre, and Whitehead (1983), cite that most studies of nurse job satisfaction indicate that salaries and fringe benefits are less important to RNs than other factors, but that compensation is indirectly related to both satisfaction and the length of time an RN remains in a position. Several factors have been shown to relate to RN job satisfaction: the way nursing care is structured in a hospital, working conditions, commitment to the organization, opportunities for promotion, and the pressures of the work.

Other factors affecting job satisfaction, ranked from highest to lowest, are achievement, interpersonal relations, work itself, policy and administration, responsibility, supervision - technical, salary, working conditions, recognition, and advancement (Longest, 1974). This study also showed that registered nurses do not perceive the factors that influence their job satisfaction with the same relative importance as many other categories of workers. These results are similar to Feldman (1977) where nurses scored lowest on the [illegible] satisfaction when compared to engineers.

In two of the few studies of military nurses, Nichols (1971; 1974) found five aspects of the job that were identified as both, most important, and most satisfying to U. S. Army nurses: challenge in the job, working relationships with coworkers, type of clinical work, periodic increases in salary, and amount of salary. Two items also considered most important, but not as satisfying, were independence in making professional decisions and assignment according to preference. Rated important but especially dissatisfying were: impartial treatment of employees, quality of supervision, opportunity to voice opinions at work, and information regarding the evaluation of work. This study has shown that registered nurses do not perceive the factors that influence their job satisfaction with the same relative importance. Campbell (1985), in a 1984 survey of U. S. Air Force nurses, found, in general, they were highly satisfied. Of those responding, mental health nurses report the lowest satisfaction, while the environmental health nurses, midwives, and nurse administrators report the highest.

Nursing students and new graduates are often the subjects in satisfaction research. Burton and Burton (1982), studying the job expectations of senior nursing students, found that in order for hospitals to attract and keep qualified nursing graduates, nurse administrators must work toward increasing the tangible and intangible rewards

offered. Better pay and benefits, a friendly and supportive working atmosphere, participation in decision making, and a high quality clinical care program can help close the gap between the student's expectations and the reality of their first job. Cronin-Stubbs (1977), in a study of new nursing graduates, found a prevalence of extrinsic factors (inadequate staffing, the work pace, interpersonal relations with subordinates) as dissatisfiers, which seemed to make the work environment an important factor to the new nurse. The other dissatisfiers involved other workers, the competence of coworkers, and the relationships with subordinates. Successful completion of tasks (achievement) and acts of notice and praise (recognition) were important sources of job satisfaction for the new graduate.

It has also been argued that many aspects of role stress are attributed to underutilization of nurses' education (Brief, 1976). This underutilization leads to one's role expectations being unmet and the resulting job dissatisfaction influences the high rate of inactivity among nurses.

Director's of Nursing have also given their input as to the importance of job satisfaction factors (Kovner & Oliver, 1977). Job satisfaction factors listed most frequent were: achievement, recognition, work itself, interpersonal relations, and supervision - technical. The factors of dissatisfaction listed more often included,

work itself, achievement, interpersonal relations, supervision - technical, and hospital policy. Similar results are reported by Grivest (1958), who found the most significant factors affecting satisfaction were in the area of human relations (communications, personal relations, supervisory techniques, and status recognition.

Supervision is another area than is often blamed for causing low levels of satisfaction. Rozell (1977), looked at the influence the head nurse has on the staff nurses' satisfaction. The most important result of the study was the fact that the greater the influence of head nurses experienced by staff nurses, the less need satisfaction the staff nurses felt. On the other hand, the greater the satisfaction of the staff nurses, the smaller the influence of head nurses. Similar results were also reported by Duxbury, Armstrong, Drew, and Henly (1984) in that staff nurses had lower satisfaction levels when their head nurses had high structure - low consideration.

In developing an instrument for measuring nurses' satisfaction with their work situation, Slavitt, Stamps, Piedmont, and Haase (1978, 1979; Stamps, Piedmont, Slavitt, & Haase, 1978) used pay, autonomy, task requirements, organizational requirements, interaction, and job prestige/status as their representative factors. They found that supervisors were the most satisfied, as were nurses on special care units. By education level, Diploma nurses were

more satisfied than the Licensed Practical nurses or nurses with bachelor's or associate degrees. Nurses with greater than 7 years experience generally were more satisfied, while the satisfaction levels were low for the first year, and then increased after 7 to 10 years. Those less than 20 years old had moderate satisfaction levels, which dropped in the 20 to 29 age group, and then increased. The nurses on the night shift had higher satisfaction scores than the nurses on the day shift, and there was essentially no differences between those who worked full-time or part-time. The findings are similar in Hall, VonEndt, and Parker (1981), who found, in general, the most satisfied employees were those who had been in the organization less than 1 year or more than 5 years. Those employed between 1 and 5 years were especially dissatisfied on the dimension of pay and job prestige.

Dissatisfaction with the job also carried over to the nursing profession. Ginzberg, Patray, Ostow, and Brann, (1982) found that one-third of the respondents they surveyed reported substantial dissatisfaction with their job, and an even higher proportion (one-half) held a negative view of nursing as a career. Only one in five expressed strong satisfaction with both job and career. When asked, 49 percent said that if they had it to do over again, they would not choose nursing; 44 percent would not advise young people to enter nursing. A lack of money was

listed as the number one cause, second was recognition for the quality of care provided, hours and scheduling ranked third, fourth was a combination of the first two causes (too much responsibility for too little monetary return), and last cited was stress.

Larson, Lee, Brown, and Shorr (1984) discussed the relationship between the level of job satisfaction and the respondent's job expectations and importance placed on the work situation. They found that high levels of job satisfaction were related to professional issues such as learning, whereas factors with which employees were least satisfied were related to employment issues such as salary and staffing. Additionally, they found that all satisfaction variables were significantly predicted by respondents' job expectations and the importance they placed on working conditions.

Significant satisfaction studies, conducted in other countries, show many similar results. Kelly (1985) surveyed nurses in England as to their levels of satisfaction. She found that age and tenure were important factors; not only were older nurses were more satisfied, so were nurses who had greater than 10 years tenure. Nurses in the intensive care units were most satisfied, while nurses in psychiatry were the most dissatisfied. Nurses were the most dissatisfied with with pay. Simpson (1985), in a study of nurses from five hospitals in British Columbia, found that

along the hierarchical levels of position, assistant directors were the most satisfied, followed by directors of nursing, head nurses, supervisors, and staff nurses. Simpson also found that all levels are reporting dissatisfaction with their work and work environment. Herzberg's five motivating factors (achievement, recognition, work itself, responsibility, and advancement) were also reported as dissatisfiers. Nurses at all levels reported dissatisfaction with the hygiene factors of company policy, supervision, salary, interpersonal relations, and working conditions.

In summary, numerous studies have been published on nursing satisfaction, the earliest in 1940 (Nahm); however, despite all the work, no one clear causative factor has been identified. In essence, the early studies reported high levels of satisfaction associated with nursing in general, and lower levels associated with some of the extrinsic factors associated with the job.

This trend has continued throughout the years, with those factors leading to satisfaction related to interesting work, authority and responsibility, self-actualization, social, and overall security. Factors leading to dissatisfaction were those related to the working conditions, staffing, pay, working hours, unsafe practices, poor leadership and communications, and the physical conditions. Gender differences have been reported;

however, no definite conclusions were reached. In addition, it has been suggested that nurses do not perceive the factors that influence their satisfaction with the same importance as other categories of workers, and in comparison, score lower on the satisfaction scales.

There have been some differences reported in relation to the hierarchial structures in nursing. New graduates begin highly satisfied with nursing, but then this level drops during the staff nurse years. As the nurse moves up the hierarchial ladder, satisfaction levels increase. Even if the nurse does not move up the ladder, the research has shown that the satisfaction increases with the nurse's age and tenure with the organization.

Job Turnover Studies In Nursing

Reviews of the literature on nursing turnover research prior to 1958, found that two-thirds of the resignations by staff nurses were motivated by personal reasons, such as: marriage, pregnancy, husband's plans, or educational plans. The remaining one-third were motivated by factors relating to the job: salaries, hours of work, workload, general personnel policies, job security, opportunities for advancement, and relationships between supervisors and staff nurses (Diamond & Fox, 1958). Other reviews by Redfern (1978) showed the same findings.

Research during the next twenty years (Wolf, 1981)

found similar results. In general, the primary causes for turnover consisted of problems related to 1) the employee (unrealistic job expectations, additional responsibilities outside of the workplace, and inadequate preparation for the job), 2) the work division and responsibility (unreasonable amounts of pressure on the job because of too much work, an inadequately prepared staff, too little staff, reassignment to unfamiliar units, and a poor match between the worker and the job), 3) supervision and coordination (dissatisfied with supervisors as technically competent, lack of leadership, lack of support, failure to follow through with problems, not available when needed, and abuse of authority), and 4) the administrative system (salary, lack of nursing autonomy and professional recognition, and lack of opportunity for advancement except through administrative positions).

Other factors have also been given for nurse turnover. Levine (1957) found that professional nurses, in comparison to female factory workers, had a turnover rate twice as high. Saleh, Lee, and Prien (1965) found that nurses share with other women the conflict between the role of being a wife or a mother and the role of having a career. They felt that these characteristics may have as much of an impact upon turnover as well as those related to the job. Wright (1967) found that the leavers were more dissatisfied than the stayers; however, not to a high degree. He also found

that pay, the immediate working group, and fatigue were not factors of concern for either the leavers or stayers. Those that did matter were supervision, communication, and training. For all groups, the stayers were favorable to the working conditions, while the leavers were not. Friss (1982) identified the demographic factors that affect the propensity to leave. Those that can affect the decision to stay or leave are age, tenure, retirement benefits, geographic location, family ties, economic factors in the community, and the importance the individual places on these variables.

The length of tenure has been shown to relate to turnover in nurses. Catania (1964) found that 45.7 percent of the nurses in a study, resigned after less than 1 year of employment. However, the main reason given for the resignations was employment elsewhere followed by moving out of the city, pregnancy, and home responsibilities. Dissatisfaction with working conditions was also listed, but not as a reason for turnover. This suggested that although the nurses were dissatisfied, the dissatisfaction was not sufficient to cause turnover. These personal reasons were also a factor found by Behling and Rosmo (1971), Ezrati (1984), Gulack (1983), Lemler and Leach (1986), Moore et al. (1981), Nash (1966), Redfern (1978), Ruffing et al. (1984), and Weisman et al. (1971).

Role clarity was found to be positively related to job

satisfaction and negatively to job tension (if a nurse was clear about the duties and demands of her job, she was more satisfied with her job and felt less tension) (Lyons, 1970a, 1970b). Lyons also found turnover to be related to dissatisfaction with the workplace, dissatisfaction with the job, too much work to do, the amount of work interfering with the quality, unclear rules and regulations, and unclear limits of authority.

In a survey of 94 staff nurses who had resigned their positions, McCloskey (1974) found that the psychological rewards were more important than safety or social rewards in keeping nurses on the job. Younger nurses had the highest turnover, while marriage, spouse's salary, higher pay, and education did not influence turnover. She found that extrinsic factors were important for attracting the nurse to the workplace; however, intrinsic factors kept them employed. In other research (1975) McCloskey outlined the factors that caused nurses to leave jobs as: a move to a new area, a dissatisfying job, an increase of benefits elsewhere, the distance they lived from the hospital, their personal reasons, a pregnancy, an opportunity to travel, to go to school, to gain a promotion, to try other areas of nursing, an illness, to retire, to leave nursing, and because of poor transportation.

Supervisory attributes were used to investigate the relationships of head nurse's leadership behavior and

social power variables with staff member's job tension, performance, and terminations. Inverse relationships were found between leader's behavior and the member's tension and terminations (Sheridan & Vredenburgh, 1978).

Kramer (1974) stated in her book Reality Shock, "If an individual is happy in his work and feels he is making a contribution, he will stay in his job longer than someone who is not" (p. 109). This aspect relates highly to the relationship of turnover to job satisfaction.

In another study, strongly related to satisfaction, Seybolt, Pavett, and Walker (1978) used the expectancy theory as their model to explain turnover. They found that the satisfaction level for leavers was significantly lower than the stayers in terms of overall satisfaction, satisfaction with supervision, satisfaction with the opportunity to use one's abilities, and satisfaction with the freedom from tension and pressure. They also found, in terms of performance, that supervisors indicated that the stayers were better performers than the leavers; however, using specific measures of performance, there was no difference. In terms of motivation, the leavers had a lower level, perceived through a feeling that performing well was not as related to obtaining valued outcomes or rewards. Lowery and Jacobsen (1984) found similar results in regards to performance.

Duxbury and Thiessen (1979) looked at the turnover

patterns in Neonatal Intensive Care Units, and compared them with adult Intensive Care Units and General Infant Care Units. They found that the pattern of turnover was identical for all types of units, and that the rate was generally equal, thus indicating that unit assigned had little impact on actual turnover.

Hallas (1980) found that nurses were leaving because of increased demands resulting in less patient contact; a lack of unity, insecurity, and poor leadership; and low wages. She cited the three major problems to be inadequate staffing, poor communications, and poor administration.

Weisman, Dear, Alexander, and Chase (1981), Weisman, Alexander, and Chase (1981), and Dear, Weisman, Alexander, and Chase (1982) found that turnover could be predicted by both personal attributes and job related attributes at various stages. The job attributes shown to influence turnover were autonomy, job satisfaction, intent to leave, and tenure.

When researchers attempted to find reasons, different from the personal factors (transfer of a spouse or pregnancy), job related factors were identified as the major reasons for turnover. Need for a change, linked to insufficient challenge, was the number one reason. The other factors were unsatisfactory shifts, perceived inability to provide safe patient care, and inability to effect change in policies (Moore, Gatz, & Monsma, 1981).

Bayley (1981) reported similar results.

Price and Mueller (1981a; 1981b), found that intent to stay, a dimension of commitment, had the largest total impact on turnover. Opportunity was the second most important determinant. General training (educational level) was third. Job satisfaction was found to have no significant net influence. The remaining determinants (pay, kinship responsibility, routinization, instrumental communication, promotional opportunity, and participation) had a total effect too small to be meaningful, or had no effects at all (integration, distributive justice, and professionalism). Length of service (tenure), although not a theoretical construct, was found to have a strong significant net influence on intent to stay, but not on turnover or job satisfaction.

Hom, Griffeth, and Sellaro (1984) tested the validity of Mobley's (1977) model of turnover behavior. Although they found some problems in Mobley's model, they did determine that many quitting nurses may leave without having first acquired alternative jobs. They may seek alternatives after resigning, but make this decision prior to their actual exit from the organization, which may explain the direct turnover effect of search intention. Because of the short supply of nurses, they can afford to be temporarily jobless when they quit.

The results of a study by Taylor and Dovalesk. (1985)

failed to support Todor and Dalton's hypothesis concerning the use of internal transfers as a substitute for turnover. They found that nurses who accepted transfers during their research period and those who terminated had no significant differences in job satisfaction from those who stayed on the job.

In summary, like satisfaction, numerous studies on turnover in nursing have been conducted; however, as with satisfaction, no one main causative factor is given. In many of the studies, turnover was motivated by personal reasons, such as marriage, pregnancy, husband's plans, or educational plans. Other studies listed the causes as due to factors relating to the job: salaries, hours of work, general personnel policies, job security, opportunities for advancement, and relationships between supervisors and other staff nurses. Satisfaction has also been linked to turnover; however, it alone has not been shown as a strong causative factor.

The nurse's age and length of tenure, while not a cause, have been shown to relate to turnover. This link to tenure seems to create a vicious cycle in that as nurses turnover, they are replaced with new nurses (many times the younger, new graduates), who are in turn, at a higher risk for turnover (Weisman et al., 1981).

Some studies have attempted to link the gender to the problem of turnover. Since the majority of nurses are

female, it is felt that they share the same problems that other women do in the conflict between the role of being a wife or a mother, and the role of having a career.

Dissatisfaction with the workplace, with the job, and too much work have also been listed as possible correlates to turnover. Kramer (1974) found that if an individual is happy with his or her work and feels he or she is making a contribution, he or she will stay at his or her job longer.

Psychological rewards were more important than safety or social rewards. In addition, the extrinsic factors have been found important in attracting the nurse to the workplace, but had little value in keeping them there. High turnover has been shown to be related to dissatisfaction of the intrinsic factors.

Wolf (1981) concluded that the primary causes of turnover consisted of problems related to 1) the employee, 2) the work division and responsibility, 3) supervision and coordination, and 4) the administrative system. Price and Mueller (1981) found that the intent to stay had the greatest impact on turnover and that job satisfaction had no net influence.

Retention Studies

Recommendations have been made that more research should be done on retention (White, 1980). The feeling is that if more emphasis was placed on why nurses remain, rather than on why they leave, programs could be developed

to keep nurses on the job. There is apparently no significant difference between retention and turnover, other than the factors are used to either determine whether the individual stays or leaves the organization. The variables used for each are the same.

Kramer (1971) feels that the magnitude of the problem of nurses leaving the profession is not fully known. She feels that further study is indicated, not only because of the individual investment (in education) made by the nurse (time and money), but because of the overall expense of replacement. Her suggested cure for the problem deals with an appraisal system which recognizes and rewards the nurse's professional behavior, an accurate placement of the individual in the workplace, and the use of job transfer as a method reducing conflict.

Flowers and Hughes (1973) in their study of Texas Instruments employees, found that even though the employee may be very dissatisfied with his or her job, supervisor, benefits, pay, etc., he or she still may not leave. The reason for this may be due to financial considerations, family responsibilities, lack of outside opportunities, age, and so on. They feel that the reasons people stay may not always be the opposite of why they leave.

Surveying nurses as to why they selected a particular hospital, Hughes (1979) found: 1) the nurse's spouse worked in the area, 2) the nurse had a desire to be assigned to

the service of choice; 3) the level of pay was adequate, and 4) the responsibility was consistent with training. In other words, their family responsibilities were met along with their personal desires.

Nurses seem to stay when their benefits and salaries are competitive and when they perceive an opportunity to practice at the level of responsibility they desire. Any approach to retention must cover: economics, staff nurse involvement in planning and decision making, the physician-nurse relationships, administration-staff nurse relationships, and an improved actual practice potential (Araujo, 1980).

Link and Settle (1980) investigated whether increases in pay would be an incentive for married nurses to remain with the organization. They found that higher wages, instead of providing more of an incentive for retention, actually decreased the number of hours worked (a move from full-time to part-time).

Gulack (1982) believes that in order to fit the job to the nurse, the nurses concerns should be addressed. These concerns are: better patient/nurse staffing ratios, a more responsive administration, less paperwork, more input into daily decisions, better nurse/physician relations, more educational opportunities, more opportunity for promotion, change in shifts and hours, more bedside care, and a different system of nursing care. Crout and Crout (1984)

suggest that more emphasis be placed on assignment of nurses to the workplace. They feel that just "plugging a 'body' into a vacant slot is a stop gap measure which is not cost effective over the long run." Appropriate assignment should only be made after the nurses' intrinsic motivations and needs are identified.

Weisman (1982) indicates it is highly unlikely that hospitals can use single innovations such as salary bonuses or primary nursing to attract or keep nurses. Seebold (1984) feels that some of the other measures, i.e., eliminating shift rotation and providing flex-time, may not be feasible in some settings. Seebold also suggests that creating and maintaining a positive climate and motivation can be accomplished by other means, i.e., staff rounds on all three shifts, an open door policy, and general staff meetings.

In 1982-1983, the American Nurses Association studi 41 "Magnet Hospitals" to determine the conditions of nurse employment (Common factors foster RN retention: Study, 1983). Findings included: a satisfying environment; a hospital administration that showed support for nursing personnel by placing the director of nursing at the executive level in the hospital; a maximized nursing practice accomplished through the intrinsic satisfier autonomy; a primary nursing delivery system; personnel available as a resource or as a consultant, an organiza-

tional structure that decentralizes nursing departments; an employer that gives support for professional growth and development; an extrinsic satisfier, such as a competitive salary and competitive benefits, a flexible scheduling, and the opportunity for promotion; and a positive overall image of nursing within and without the hospital (Common factors foster RN retention: Study, 1983).

Ross and Seybolt (1983) also studied high performers in relation to turnover. When performance was examined through the parameters of work role design, the results indicated that significant relationships existed between the meaningfulness of the job at different performance levels. As far as tenure was concerned, no relationship was seen between performance and tenure. Ross and Seybolt also found a better relationship between intrinsic equity and extrinsic satisfaction with turnover, i.e., if the high performers felt that they were not being treated equitably in terms of pay and other extrinsic benefits, they would move on. The authors concluded that satisfaction was probably not as important as the issue of equity. "If retaining 'valued' employees means retaining high performers, the organizational manager would do well to first realistically determine who are the high performers, and then to ensure that their perceptions are positive".

Job redesign has been suggested as a method to make work more meaningful to people (Guthrie, Mauer, Zawacki, &

Couger, 1985; Levenstein, 1983). These authors feel that the work done by Turner and Lawrence, and expanded upon by Hackman and Oldham, can be adapted to the hospital environment. Seybolt (1983; 1986) expands upon this belief in his study of nursing turnover. He anticipated that the staff members would react differently to their work roles based to some degree on their tenure in the hospital. In addition, Seybolt felt that the employee's career stage would be the moderator between how work role design impacted on the employee's satisfaction and turnover intentions. This study suggests that the turnover intentions of employees at different times are affected by different work role design factors. He feels it is not wise to focus only on the whole organization, but also on different groups of employees.

In summary, more emphasis needs to be placed on retention, rather than on why nurses leave (White, 1980). This idea is furthered by Kramer (1971) who feels that the magnitude of the problem is not known. Flowers and Hughes (1973) feel that the reasons people stay may not always be the opposite of why they leave. In addition, they feel that although personnel may be totally dissatisfied, other reasons may force them to remain with the organization.

Competitive benefits and salaries may keep nurses on the job; however, in some cases, higher pay has caused the full-time worker to change to part-time. Any corrective

actions must consider the economic, decision making, planning, personnel relationships, and improved nursing practice if they are to succeed. In addition, the concerns of the nurse need to be addressed, along with placing more emphasis on nurse assignment.

Job redesign has also been given as a means to make work more meaningful for people. It is believed that the more meaningful the work, the more satisfactions can be derived, and thus, increased retention.

Summary of Literature

Researchers in the behavorial sciences, management, and nursing have offered a vast quantity of knowledge in the field of turnover and job satisfaction.

In the management and behavioral science areas, some causative factors of turnover have been prevalent and consistent in the research. One factor is the somewhat strong inverse relationship between overall job satisfaction and employee turnover. However, just knowing that the employee is dissatisfied and about to leave the organization tell management little about why the employee is dissatisfied.

Thus far, according to Mobley (1982), the one best indicator of imminent turnover is the employee's stated intentions to quit. Other consistent factors which appear in the literature are the employees' pay levels, their age, tenure, satisfaction with job content, and organizational

commitment. Less consistent correlative factors leading to turnover are supervisory style; work-unit size; routinization; autonomy and responsibility; centralization; integration; communication; family responsibilities; interests; aptitude and ability; satisfaction with pay, promotion, coworkers, supervisor, and the overall working conditions; and the expectancy of finding a quality alternative.

Job satisfaction, or the perception that one's job fulfills or allows the fulfillment of important job values, to the degree that those values are congruent with the individual's needs, has also been researched extensively. Basically there are three theories of satisfaction reported in the literature. The traditional theory follows a linear relationship, where a person is satisfied if a variable is met, and if not met, is dissatisfied. Maslow's need theory relates to "levels" of needs, where the lower levels must be met before the individual can move up the hierarchy to fulfill their higher order needs. Herzberg's dual factor motivation-hygiene theory deals with the intrinsic "motivator" factors, which when present are felt to lead to satisfaction. If not present, in contrast to the linear theory, Herzberg feels that the individual is simply "not" satisfied. The hygiene, or extrinsic factors, prevent dissatisfaction, i.e., if not present, the individual becomes dissatisfied, and if present, instead of leading to satisfaction, simply means that the individual is not

dissatisfied. Hulin and Smith were able to prove that gender led to a lower level of job satisfaction in females, which may be important in the study of nursing satisfaction and turnover intent. These authors all found that the work itself and pay seemed to be the best predictors in job satisfaction. Vroom used the expectancy theory in his explanation of job satisfaction, in that the behavior is due not only to preference, but also to the belief that the behavior will be followed by a particular outcome. Other motivational factors relating to satisfaction, reported by Hackman and Lawler relate to responsibility for the job, meaningful work, and job feedback.

According to Hinshaw and Atwood (1983), when one tries to adapt this knowledge to nursing, further testing of the concepts are necessary. Numerous research studies are reported in the nursing literature, and with the vast amounts of work, many differing reports are given naming those factors that lead to satisfaction. Overall, one tends to note higher levels of satisfaction with the intrinsic portions of the work nurses do, and a somewhat corresponding lower level of satisfaction with the extrinsic factors of the job. In other words, nurses tend to like their work, but dislike their job, i.e., their working conditions. Additionally, the research has shown different levels of satisfactions are present, and depend in part, on the nurses position, i.e., supervisors may be

more satisfied than staff nurses. Interestingly, it has been suggested that hospitals need to improve their extrinsic factors in order to attract and recruit more nurses; however, once hired, in order to keep them satisfied, the intrinsic factors are more important.

As with satisfaction, turnover has long been an issue reported in the journals, and is also similar in that no one, easily identified factor prevails as a precursor to turnover. Numerous studies list "personal reasons" as the possible cause of voluntary turnover; however, each author seems to give his or her own definition of "personal," i.e., marriage, pregnancy, husband's plans, family/children responsibilities, education pursuits, etc. Along with these personal reasons is the impression that nothing can be done to avoid them as causes of turnover. It has also been suggested that nursing turnover could be related to the conflict between the role of having a career as a nurse, or being a wife or mother; however, few studies have tackled the issue of gender to a great degree (when studied, males were found to be more apt to remain). Along the same lines of satisfaction, the extrinsic factors (pay, inadequate staffing, the work pace, etc.) are cited as possible correlates of turnover, and, in addition, the demographic factors (age, tenure, and intent to stay) have also been found to have a large impact upon turnover.

Wolf (1981) concluded that the primary causes for

nursing turnover consisted of problems related to the employee (unrealistic job expectations, inadequate preparation for the job, additional responsibilities outside of work, etc.); to the work division (job pressures, inadequately prepared staff, too little staff, reassignment to unfamiliar units, and a poor match between the worker and the job); to supervision (dissatisfaction with technical competency of supervisors, lack of leadership, lack of support, failure to follow through with problems, not being available when needed, and abuse of authority); to the administrative system (salary, lack of autonomy and professional recognition, and lack of career ladder opportunities).

Ironically, as length of tenure has been shown to correlate strongly with turnover, high turnover appears to create a vicious circle, as turnover necessitates hiring new nurses to replace the resigners, who in turn are at a high risk for turnover.

It has been suggested that instead of looking at turnover, more emphasis needs to be placed on looking at why employee's stay, i.e., retention. However, the factors relating to either turnover or retention appear to be the same, i.e., one may leave the organization if dissatisfied, but may remain if satisfied.

A behavioral approach was suggested to minimize turnover. This approach emphasizes a weighted application

blank to increase the possibility that those hired will remain, the use of comprehensive exit interviews to determine specifically why the person left, and an appraisal program that has as its primary function the satisfaction of the nurse.

Other methods mentioned to increase retention included competitive benefits and salaries, opportunities to practice at a level equal to their responsibility, increased involvement in decision making, and bicultural training (to ease the transition from graduate to practicing nurse). Ironically, increased pay levels actually decreased the number of hours worked, instead of increasing retention (mainly due to a shift from full to part-time).

Redesigning the workplace has also been listed as means for retention. Some methods were creative assignment of nurses, i.e., not just plugging a body into a vacant slot, creating a satisfying environment, increasing top level administrative support for nursing, increasing the promotional opportunities, and creating a positive overall image of nurses.

Lately, the emphasis has shifted toward focusing on work role design and the impact of the job on individual employees. According to Seybolt (1983; 1986), the research in this area focuses on the work itself as a cause of satisfaction, motivation, absenteeism, and turnover.

The main findings, thus far in the review of the literature on turnover as it relates to nursing, indicate, that above all, the two factors of 1) satisfaction and 2) the individual's intent to leave have the strongest correlation to turnover; therefore, further study should concentrate on these two areas. In addition to looking at turnover, one should also research methods that focus on the factors of work role design, so that if needed, corrective actions can be identified at the same time.

CHAPTER 3

CONCEPTUAL FRAMEWORK

Models of Turnover

If turnover intent is determined to be a problem, several models in the research literature are available to determine the possible causes. Mobley (1982) feels that for both the research and managerial perspectives, "it is necessary to have adequate conceptual models of the turnover process to: (1) interpret research findings; (2) suggest new avenues of research; (3) call attention to the multiple determinants of turnover; (4) and to guide managers in diagnosing and dealing with turnover (p. 115)".

March and Simon (1958)

The March and Simon (1958) model, according to Mobley, (1982) "was one of the earliest and perhaps most influential integrative models of employee turnover." Their model has two distinct, but interrelated, components when applied to employee participation: (a) perceived desirability of movement from the organization (Figure 1); and (b) perceived ease of movement from the organization (Figure 2) (p. 116). Perceived desirability of movement has two major factors : 1) perceived possibility of intraorganizational transfer, and 2) job satisfaction. The intra-

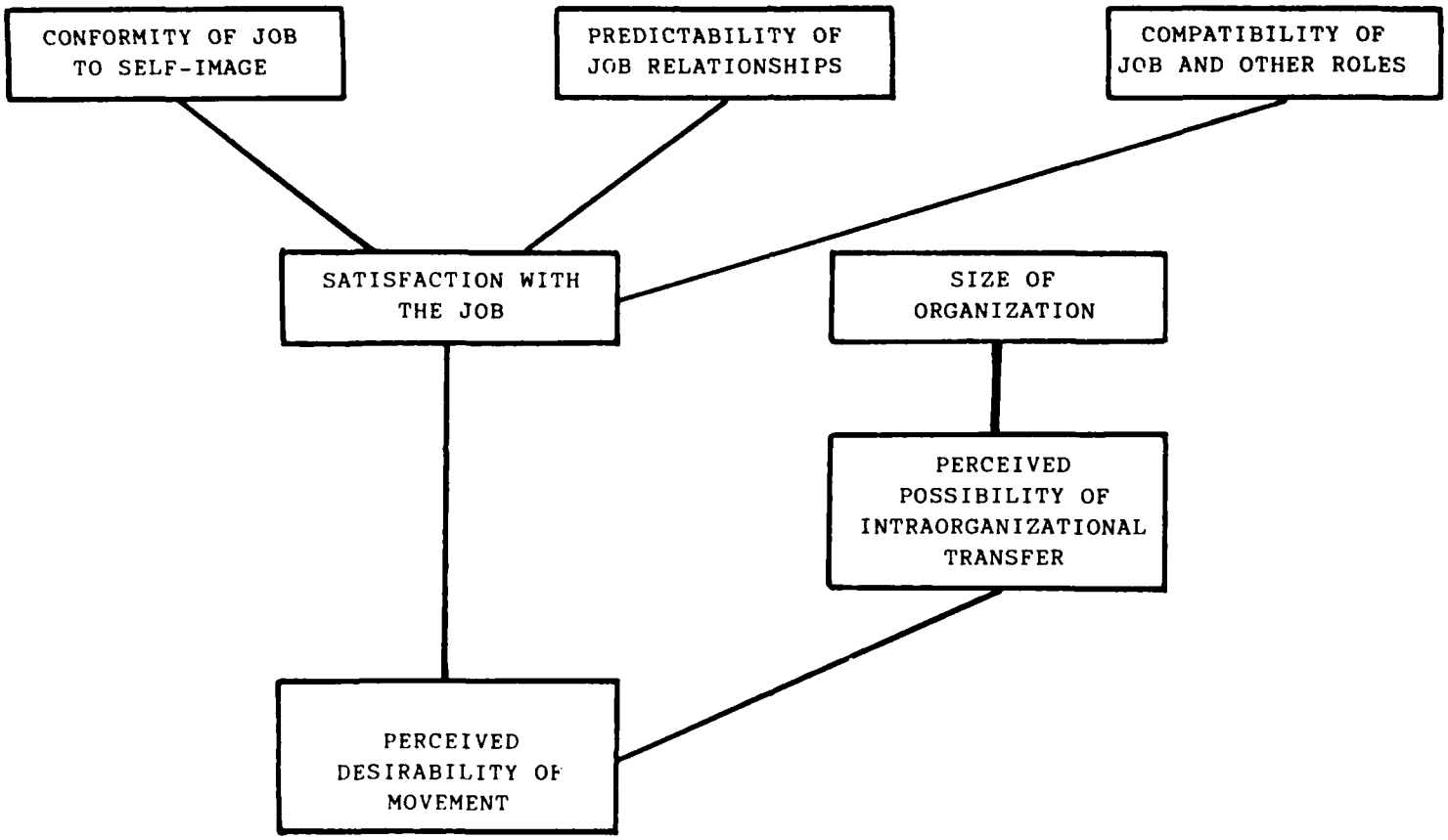

Figure 1. March and Simon (1958), Major Factors Affecting Perceived Desirability of Movement
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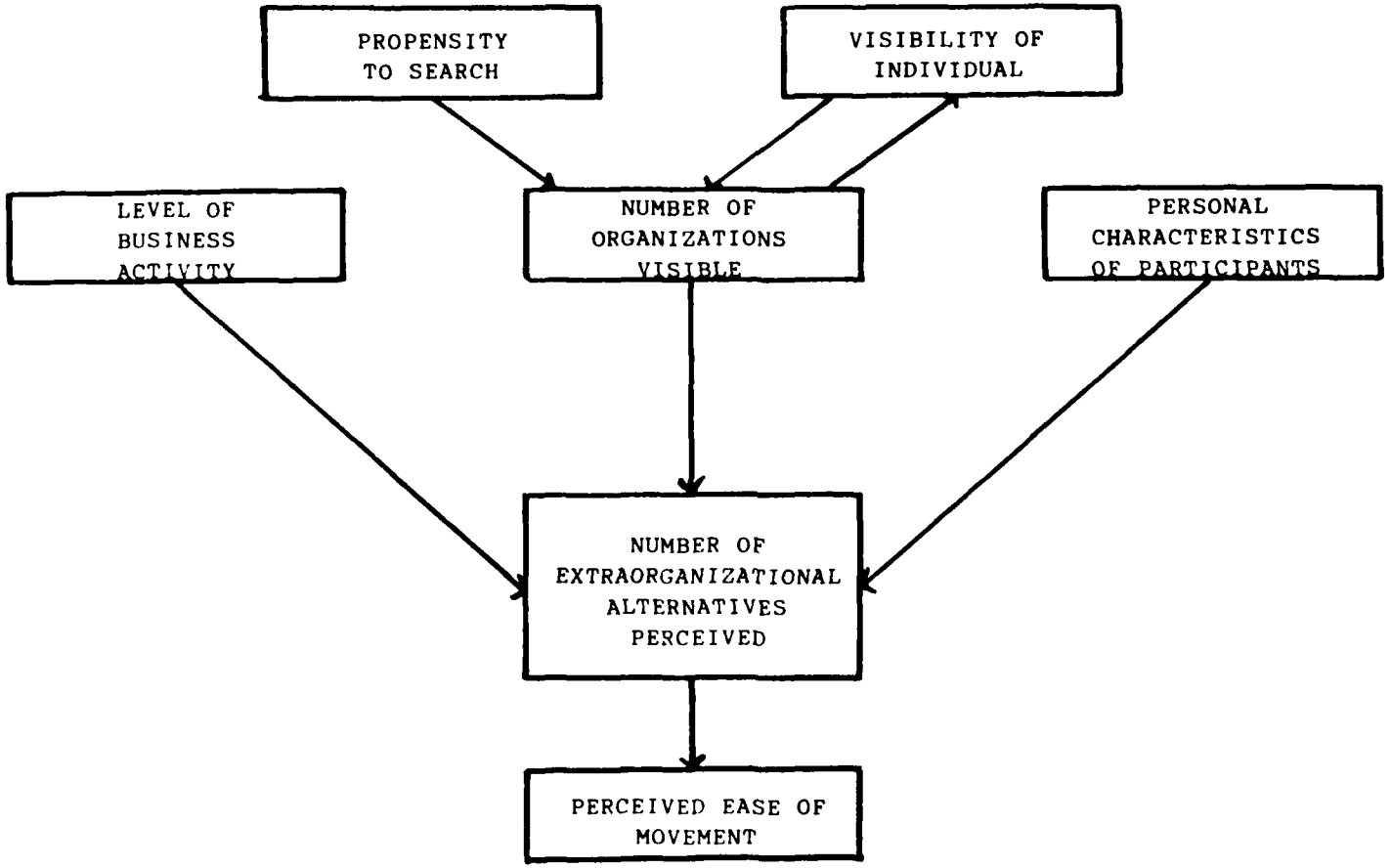

Figure 2. March and Simon (1958), Major Factors Affecting Perceived Ease of Movement ©1958 John Wiley & Sons, Inc. Reprinted from Organizations. New York: Wiley. p. 106. By permission of the publishers.

organizational transfer is contingent upon the size of the organization. Job satisfaction depends upon 1) conformity of job to self image (a function of supervisory practices, amount of rewards, participation in job assignment, education, and rate of change status and/or income); 2) predictability of job relationships, and 3) compatibility of job and other roles. Perceived ease of movement is contingent upon the number of extraorganizational alternatives perceived. The number of alternatives is inturn affected by 1) the level of business activity; 2) the number of organizations visible; and 3) the personal characteristics of participants. The personal characteristics include: sex, age, social status, tenure, and specialization.

In Mobley's (1982) evaluation, he states, "Overall, the March and Simon model provided a solid foundation for much of the later conceptual work on employee turnover (p. 119). The model has contributed to the study of turnover by focusing attention on the need to assess both economic-labor market and behavioral variables in studying the employee process (p. 120)."

Brief (1976)

Brief (1976) presented his model of turnover among hospital nurses (Figure 3). His model is contingent upon: 1) the hospital's organizational practices, 2) the educational experiences of the nurse, 3) the value and

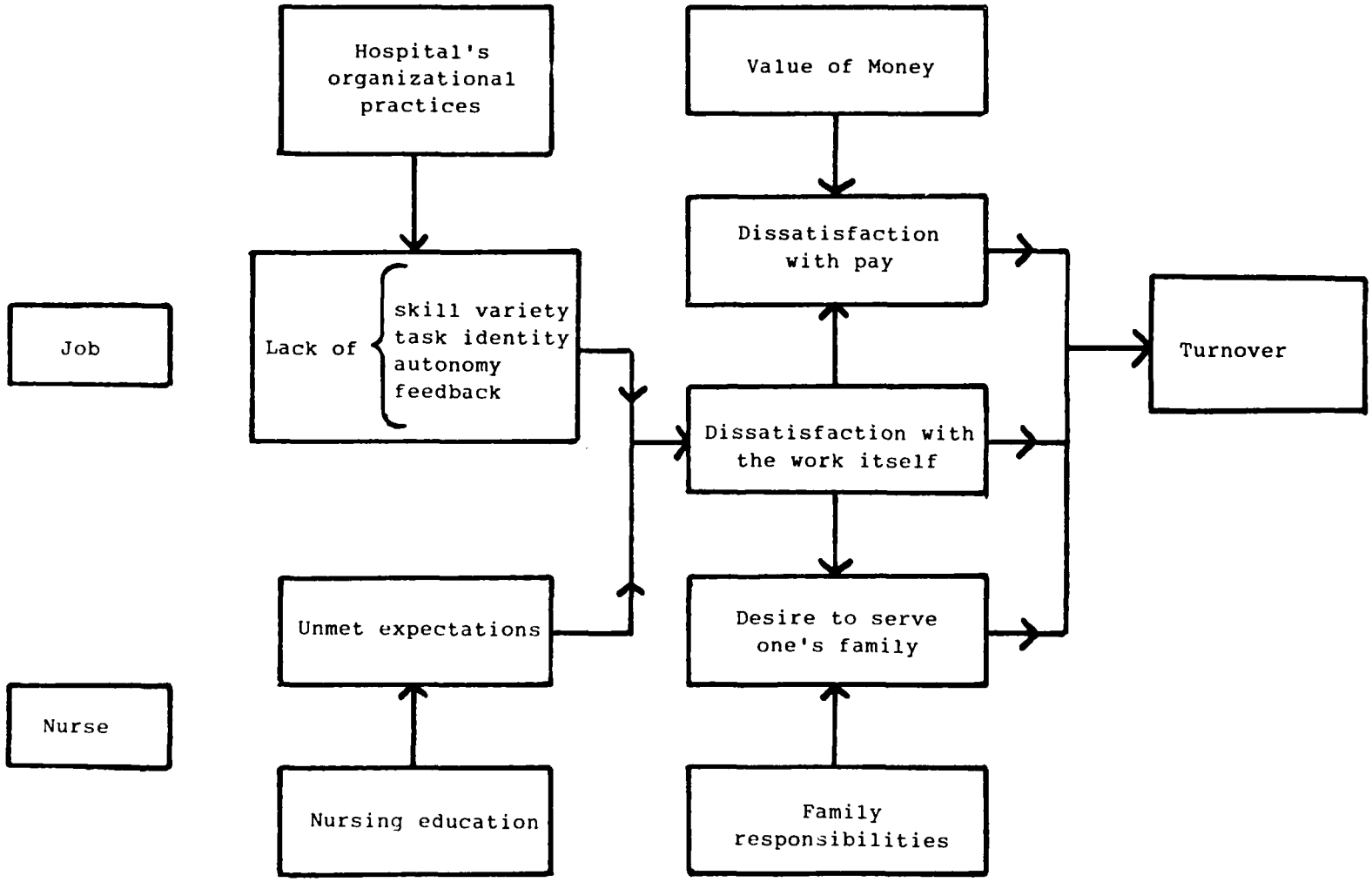

Figure 3. Brief (1976), Turnover Among Hospital Nurses: A Model
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places on money, and 4) the family responsibilities. He feels that the organizational practices of most hospitals lead to the design of nursing jobs lacking in skill variety, task identity, autonomy, and feedback. This in turn leads to job dissatisfaction, which in turn leads to turnover. The educational experiences of most nurses lead them to expect challenging, meaningful, and responsible jobs; if these expectations are not met, this leads to job dissatisfaction with the work itself, and again to turnover. If money is highly valued, and if satisfaction is not derived from the work itself, then dissatisfaction with pay occurs, which in turn can lead to turnover. If the family situation is such that the nurse has increased feelings of responsibility, and if satisfaction is not derived from the work itself, then the nurse desires to serve the family, and this desire leads to turnover.

Brief concluded that his model did not have explicit support in the available literature; however, his intent is that the model serve as a basis for future data collection.

Price and Mueller (1981)

Price and Mueller (1981a, 1981b); (Curry, et al., 1985) studied the determinants of job satisfaction on the intent to stay in an organization. The dependent variable in their causal model is voluntary leaving from the organization. Layoffs, dismissals, retirements, and deaths are excluded because they are types of involuntary leaving. In addition,

transfers and promotions, because they take place within the organizational boundaries, are not considered to be voluntary leaving (Price & Mueller, 1981a, p. 544).

In their model [Figure 4] (Price & Mueller, 1981b, p. 11), turnover is a direct function of the individual's intent to stay, and the opportunity to leave the organization. The intent to stay is affected by the 1) perceived job satisfaction, 2) professionalism, 3) general training, and 4) kinship responsibility. Job satisfaction in turn is linked to 1) routinization, 2) participation, 3) instrumental communication, 4) integration, 5) pay, 6) distributive justice, and 7) promotional opportunity. Overall turnover is related to the intent to stay and contingent upon the opportunity to leave. The definitions of the determinants and intervening variables are contained in Table 3, following the model.

In their evaluation of this model, the authors found that "intent to stay" had the largest total impact on turnover, followed closely by "opportunity." "Job satisfaction" was found to have no significant net influence on turnover; however, it was found to be an important mediator between the other determinants of turnover. The other factors had effects too small to be meaningful.

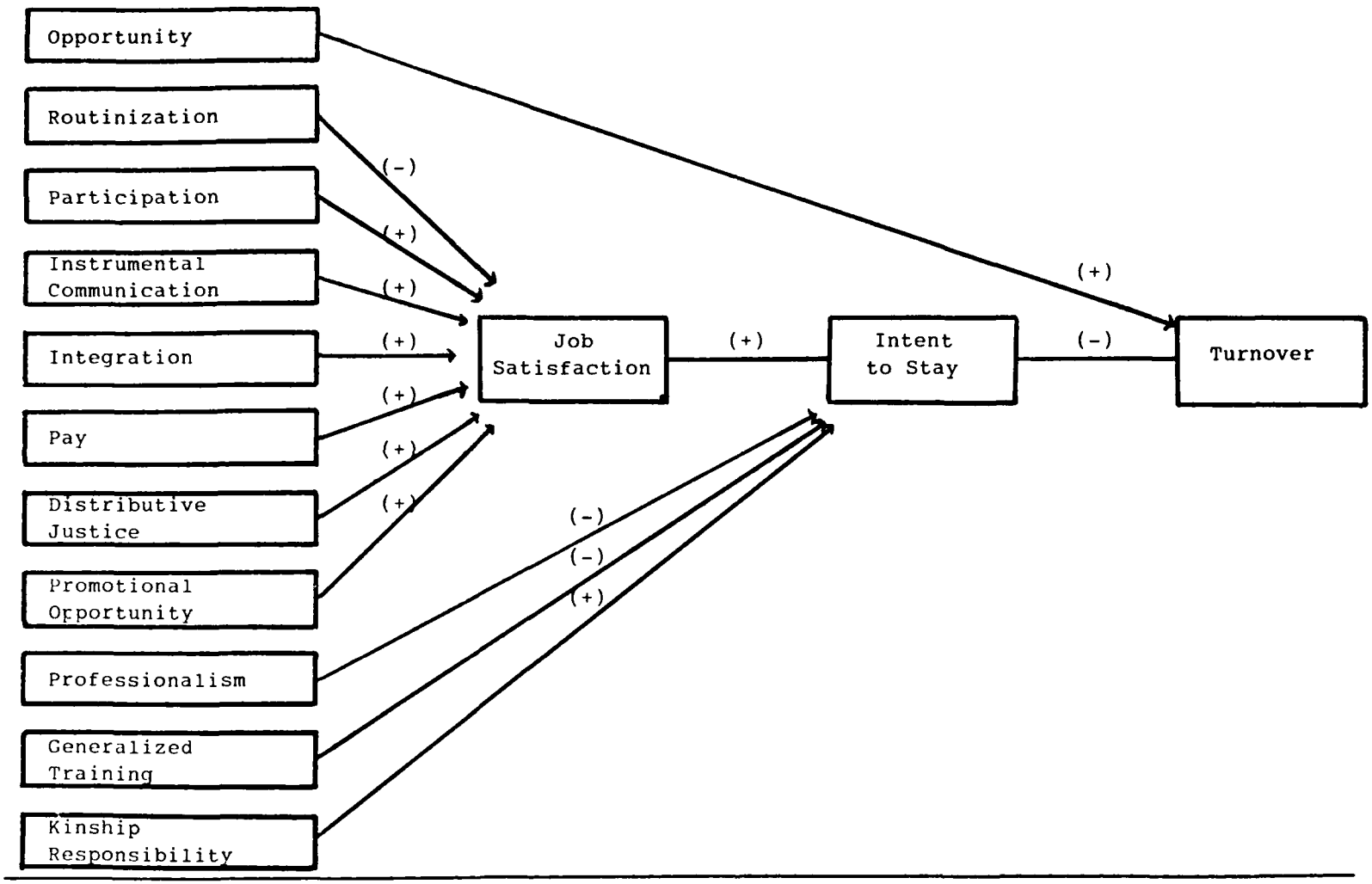

Figure 4. Price & Mueller (1981), The Causal Model of Turnover
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Table 3

Determinants and Intervening Variables: Definitions

Variable	Definition
Opportunity	The availability of alternative jobs in the organization's environment.
Routinization	The degree to which a job is repetitive.
Participation	The degree of power that an individual exercises concerning the job.
Instrumental Communication	The degree to which information about the job is transmitted by an organization to its members
Integration	The degree to which an individual has close friends among organizational members.
Pay	The amount of money, or equivalents, distributed in return for service.
Distributive justice	The degree to which rewards and punishments are related to the amount of input into the organization.
Promotional opportunity	The amount of potential movement from lower to higher strata within an organization.
Professionalism	The degree of dedication to occupational standards of performance.
General training	The degree to which the occupational socialization of an individual results in the ability to increase the productivity of different organizations.
Kinship responsibility	The degree of an individual's obligation to relatives in the community in which the employer is located.
Job satisfaction	The degree to which individuals like their jobs.
Intent to stay	The estimated likelihood of continued membership in an organization.

Source: Price and Mueller (1981). A casual model of turnover for nurses. ©1981 by Academy of Management Publications. Reprinted in part from Academy of Management Journal, Vol. 24, No. 3. p. 546-547. By permission of the publishers.

Mobley (1977)

Mobley (1977) presented a model of the turnover decision process which identified the possible linkages in the satisfaction-turnover relationship. He describes this model as more heuristic than descriptive in nature. The model suggests that dissatisfaction elicits thoughts of quitting, search evaluation and behavior, the evaluation of alternatives, intentions to quit and ultimately turnover. Feedback loops are used to suggest possible courses of actions (Figure 5).

According to Mobley (1982), the research on the model was generally supportive; however, the role of alternatives, ease of movement and opportunity in the turnover decision process remains to be clearly established.

Mobley, et al. (1979)

The Mobley, et al. (1979) model suggests that there are four primary determinants of intentions to quit and to subsequent turnover: 1) job satisfaction-dissatisfaction; 2) expected utility of alternative internal (to the organization) work roles; 3) expected utility of external (to the organization) work roles; and 4) nonwork values and contingencies (Figure 6).

Satisfaction, in turn, has several aspects relating to it: 1) the individual differences in values, 2) the emphasis the employee places on his or her perceptions

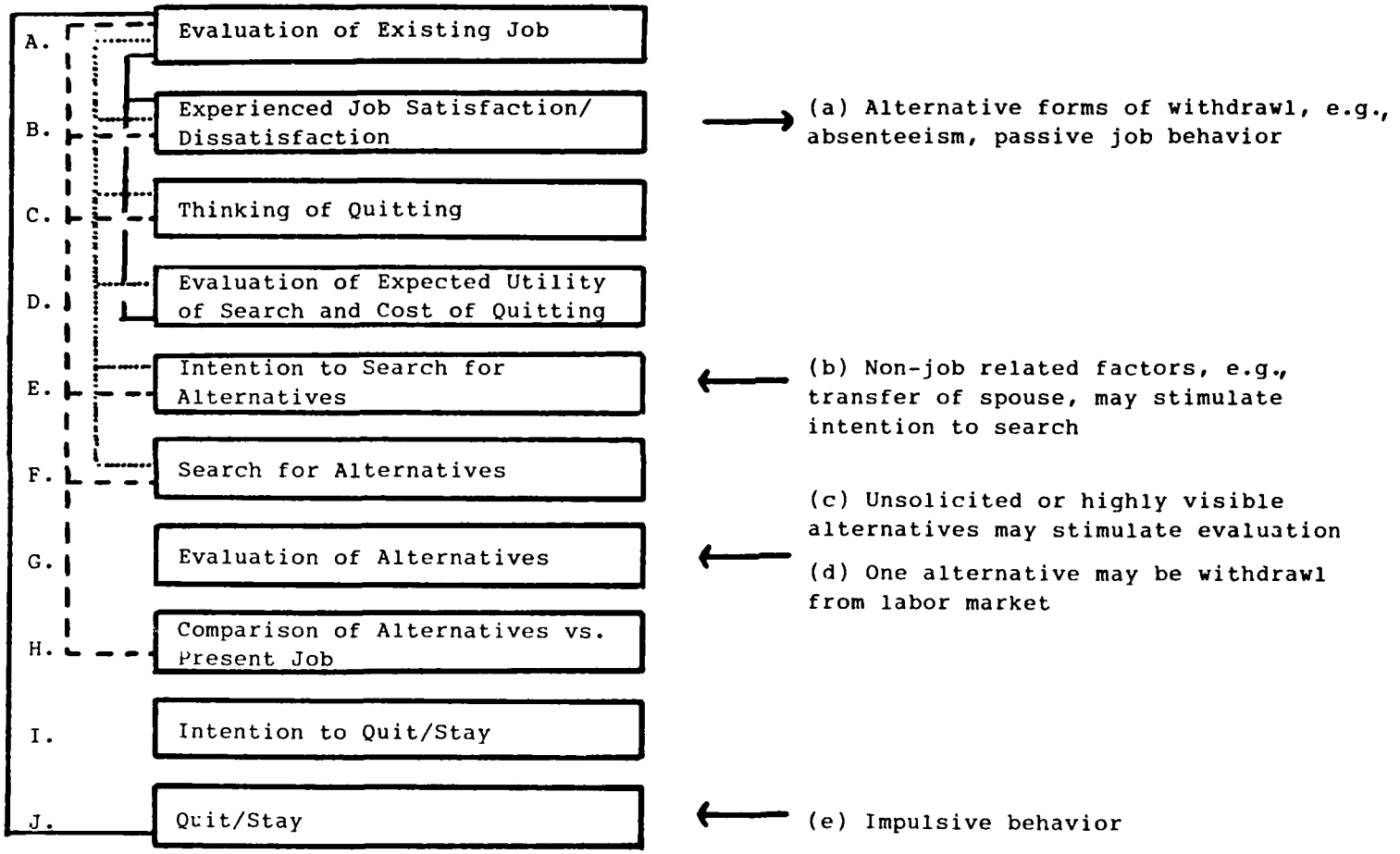

Figure 5. Mobley (1977), The Employee Turnover Decision Process
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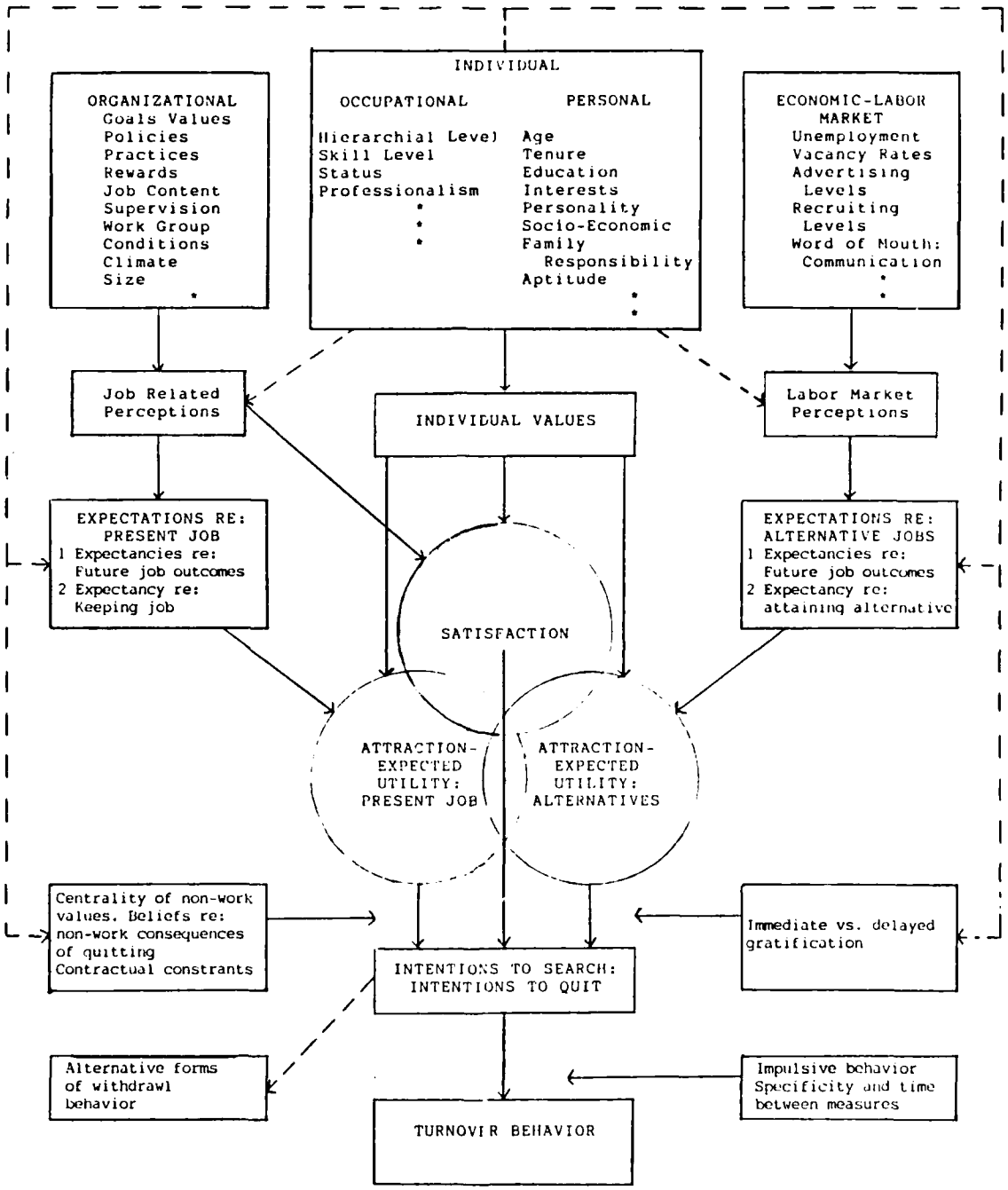

Figure 6. Mobley, et al. (1979), An Expanded Model of the Employee Turnover Process.
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(Satisfaction is a function of what the employee perceives relative to their values), 3) the multiple facets, i.e., it is unlikely that only one value will control satisfaction, and 4) the present orientation of satisfaction.

The expected utility of internal roles refers to future-oriented expectations and evaluations based on: expected changes in the present job; expected transfer possibilities, expected promotions; and expected changes in organizational policies, practices or conditions (such as changes in pay, job content, or management, etc.). In addition, they may be based on the expected transfer, promotion, or turnover among other individuals. The expected utility of external alternative work roles seeks to capture the individual's expectation of finding an attractive alternative job external to the present organization. The dissatisfied employee and/or one with low expectations regarding the internal alternatives may not quit if attractive external jobs are not perceived. Expected utility of external jobs is based on: the employee's important work values; expected attainment of these values from the external jobs; and expectation of being able to attain the alternative job.

The nonwork values and roles refer to family orientation, life-style and geographical preferences, and religious, cultural, altruistic, athletic, and social values. Mobley feels that to understand, predict, and

manage turnover requires the assessment of the importance the employee places on these nonwork values.

Mobley concluded that this model has yet to be empirically evaluated, and feels that due to the complexity of the model, it is unlikely that any one study will adequately evaluate the model.

The conceptual framework for this study uses various factors identified preciously; and follows quite closely, the models presented by Seybolt, et al., (1978), Hackman and Oldham, (1980), and Seybolt (1983; 1986).

Seybolt et al. (1978)

This model (Figure 7) is similar to that used by Brief (1976) and based upon Vroom's (1964) expectancy theory which suggests that the individual behavior is determined by: 1) the motivation of the individual; 2) the level of ability of the individual; and 3) the individual's role perceptions.

Motivation relates to the individual's perceived value of the outcomes offered by both the work itself and the organization. This perceived value, called valence, indicates how much value the individual places upon the outcomes or rewards related to the job. The second variable of motivation is the individual's perception of the linkage between performance and those outcomes. This perceived link is called instrumentality. These two variables combine to form the valence of performance, or how much the individual

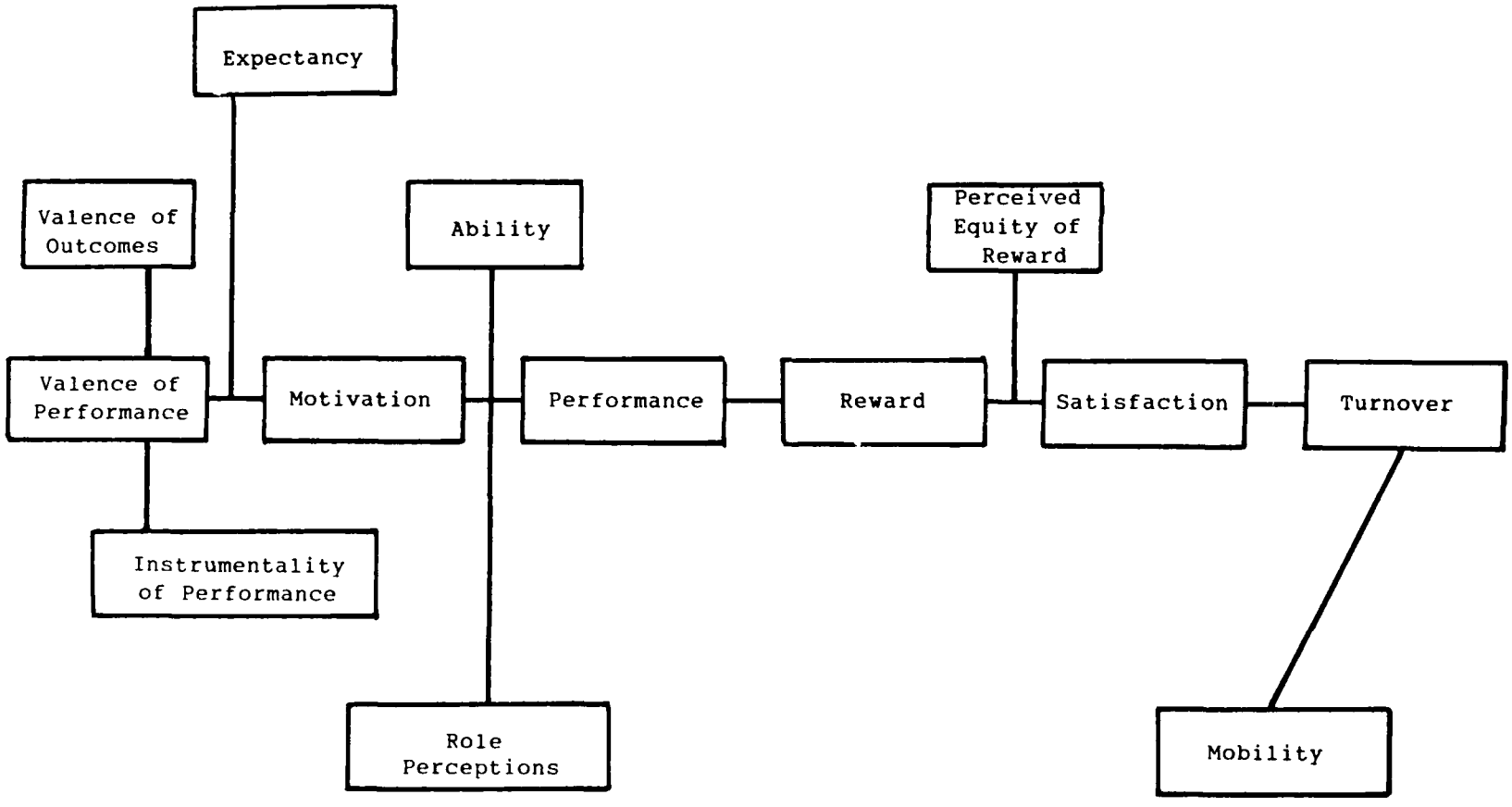

Figure 7. Seybolt, et al. (1978), Expectancy Theory Extended to Predict Turnover. ©1978 by J.B. Lippincott and Company. Reprinted from the Journal of Nursing Administration, Vol. 8, No. 9. p. 8. By permission of the publishers, and author.

actually values performance. The final variable is expectance, or the individual's perception of the link between effort and performance.

Satisfaction itself can be predicted from expectancy theory, relating it to the individual's performance (a factor or their ability, role perceptions, and motivation), the reward received from their performance (whether the reward is intrinsic or extrinsic) which is also dependent upon the employee's perceived equity of this reward.

Turnover, according to this model, is a function of satisfaction, and the individual's mobility. Satisfaction data were determined from pay, promotions, the chance to make full use of one's abilities, the sense of helping the patient and his/her family, the opportunity to learn new things, job security, the opportunity to make independent decisions, a stable work schedule, autonomy, help and recognition from one's supervisor, help and cooperation from coworkers, freedom from tension and pressure, and fringe benefits. Mobility refers to the individual's perception of how desirable and easy it is to leave the organization, and is based on the educational level, length of tenure, age, and marital status of the individual.

Hackman and Oldham, (1980)

It has been found that the intent to quit (or stay) has been the immediate precursor of actual withdrawal behavior (Mobley, et al., 1978). It has also been demonstrated

throughout the literature that intent to stay and/or leave has a negative relationship to job satisfaction. Seybolt (1983; 1986) feels that there is not just one overall satisfaction at work, but many satisfactions with different facets of the work place, and each can be important in determining turnover intentions. In addition, he feels it is wise to look beyond the employee's satisfaction/ dissatisfaction, to the work place which has affected those attitudes (p. 27).

Although job satisfaction is prevalent in the literature, it alone does not answer the questions as to what measures can be initiated to correct the problem. For the last decade, the focus has been on job design and redesign, and the impact of the job on the individual employee, which includes the work itself as a cause of differential levels of satisfaction, motivation, absenteeism, and turnover.

This concept has been broadened to include more of the work environment which the employee faces (labeled work-role design) and includes such factors as the job and work itself, the type of interactions at work, and the nature of the organizational policies and how they impinge on the employee. Additionally, because employees react to their work in different ways, two other facets should be addressed: 1) the levels of satisfactions which include growth needs, work overall, and career; and 2) the

organizational career stage or tenure of the employee (Seybolt 1983; 1986).

Work role design is a idea originally presented by Hackman and Lawler (1971) in which the conceptual framework specified the conditions under which jobs will facilitate the development of internal motivation. Hackman and Oldham (1975; 1980) developed the concept further through the development of the Job Diagnostic Survey. They feel that work can be structured so that it can be performed effectively and at the same time be rewarding to the individual. This is termed "internal motivation."

According to Hackman and Oldham (1980), when someone has high internal work motivation, feelings are closely tied to how well that person performs on the job. Good performance brings self-reward, which is an incentive for continuing to do well. Poor performance brings unhappy feelings, which in turn may cause the person to try harder in the future, in order to prevent a reoccurrence of the unpleasant outcomes. The result is a self-perpetuating cycle of positive work motivation powered by self-generated (rather than external) rewards for good work.

Their theory suggests that in order for a job to be internally motivating, three critical psychological states must be present in the job. These psychological states are: 1) experienced meaningfulness of the work, 2) experienced responsibility for outcomes of the work, and 3) knowledge

of the actual results of the work activities. If the work is meaningful, it means that the work "counts" in one's system of values. For a person to experience responsibility for the work, he or she must believe that he or she is personally accountable for the work outcomes. A knowledge of results is necessary if the individual is to know if he or she is performing satisfactorily or not.

The three psychological states are, by definition, internal, and therefore not manipulable in designing or managing work. However, reasonably objective, measurable, changeable properties of the work itself that foster these states are available as "core job characteristics" (p. 77).

The job characteristics that correspond to experienced meaningfulness of the work are: 1) skill variety, 2) task identity, and 3) task significance. The characteristic that corresponds to experienced responsibility for outcomes of the work is autonomy. For the knowledge of the actual results of the work activities, the characteristic is feedback from the job (p. 77)

Definition of Characteristics: (p. 78-80)

Skill Variety (SV): The degree to which a [illegible] requires a variety of different activities in [illegible] out the work, involving the use of a [illegible] different skills and talents of the person.

Task Identity (TI): The degree [illegible] requires completion of a "whole" and [illegible] of work, that is doing a job from beg[illegible] a visible outcome.

Task Significance (TS): The [illegible] has a substantial impact on [illegible]

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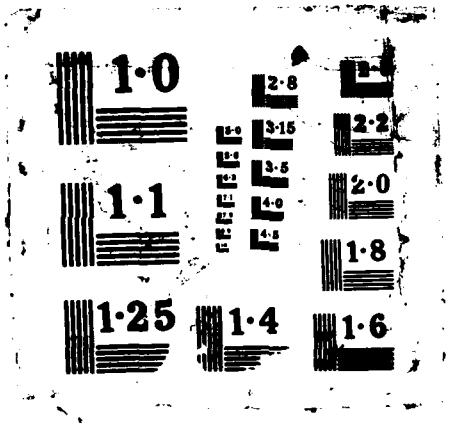
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whether those people are in the immediate organization or in the world at large.

Autonomy (A): The degree to which the job provides substantial freedom, independence, and discretion to the individual in scheduling the work and in determining the procedures to be used in carrying it out.

Job Feedback (JF): The degree to which carrying out the work activities required by the job provides the individual with direct and clear information about the effectiveness of his or her performance. The focus is on feedback obtained directly from the job.

A job can be very high on one or more of the five characteristics, and at the same time, be quite low on the others, so it proves useful to consider the job on each of the job characteristics. It also can be useful to combine the five characteristics into a single index that reflects the overall potential of a job to be internally motivating. This index is called the "motivating potential score (MPS)" (p. 81) To be highly motivating, a job must score high on at least one of the three characteristics that prompt experienced meaningfulness, and high on both autonomy and feedback as well. When numerical scores are available, they are combined using the formula in Figure 8.

To further the concept of work role design, Hackman and Oldham describe three moderators that affect the relationship between the job characteristics and the outcomes. These moderators are: 1) knowledge and skill, 2) growth need strength, and 3) context satisfactions.

Knowledge and skill refer to the individual's internal work motivation through the positive or negative feelings

$$\text{Motivating Potential Score (MPS)} = \left[\frac{\text{Skill variety} + \text{Task identity} + \text{Task significance}}{3}\right] \times \text{Autonomy} \times \text{Job Feedback}$$

Figure 8. Hackman and Oldham (1980), Motivating Potential Formula
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from their performance. For example, if a job requires knowledge and skills that the individual does not possess, failure will cause low motivation; on the other hand, if the job does not require these aspects, a person having these qualities, will not be motivated by doing a good job.

Some people have strong needs for personal accomplishment, for learning, and for developing themselves beyond where they are now. These people are said to have "high growth needs," and are predicted to develop high internal motivation when working on a complex, challenging job. Others, that have less strong needs for growth are less likely to be motivated by these same jobs.

Hackman and Oldham also feel that how satisfied the individual is with the context of his or her work may also affect his or her willingness or ability to take advantage of the opportunities for personal accomplishment provided by motivating jobs. They expect that individuals who are relatively satisfied with pay, job security, coworkers, and supervisors will respond more positively to enriched and challenging jobs than individuals who are dissatisfied with these aspects of the work context. And if the individual also has a high growth need strength, then a very high level of internal work motivation would be expected.

In summary (Figure 9), if a job contains the core characteristics of skill variety, task identity, task significance, autonomy, and feedback; the critical states

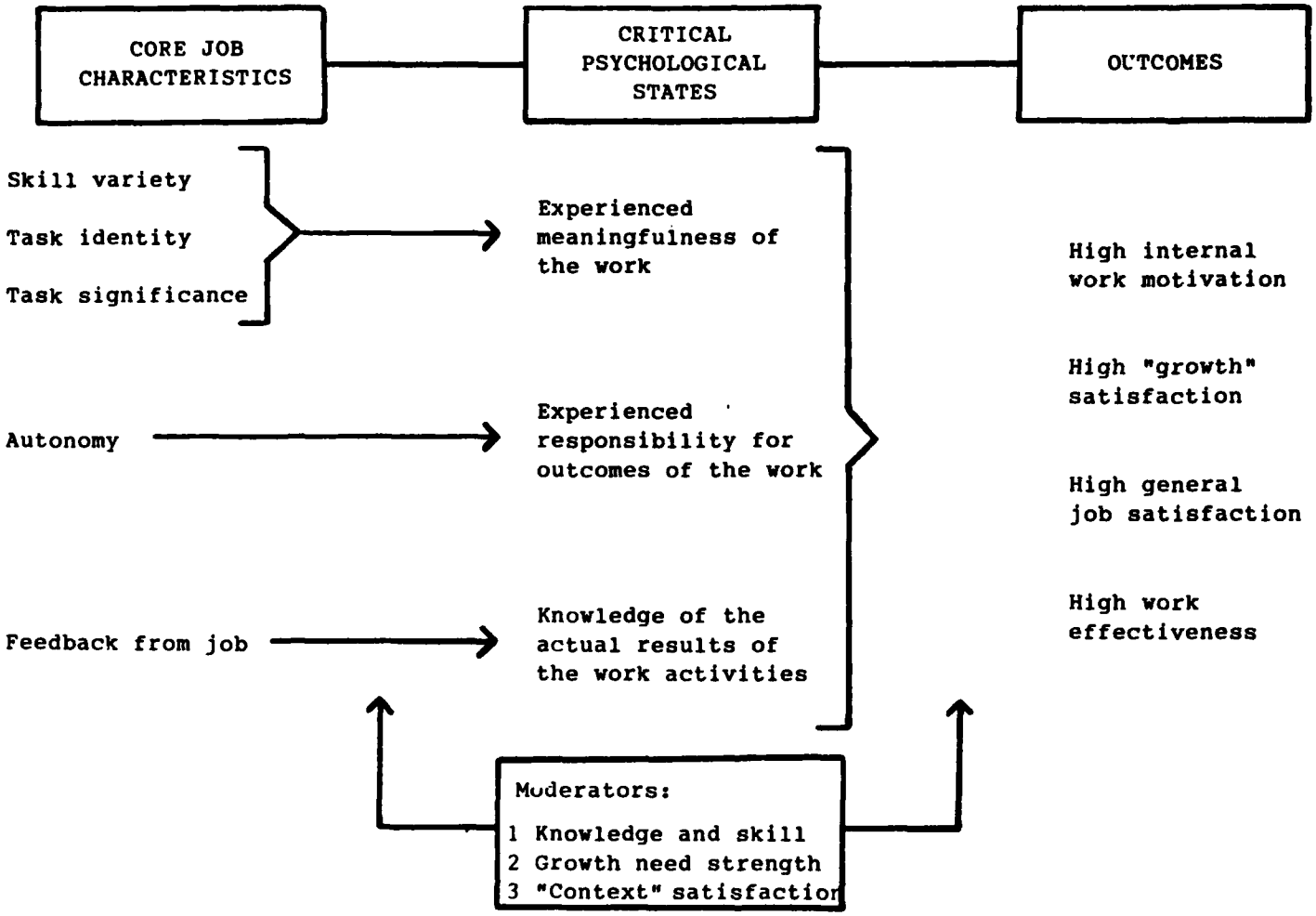

Figure 9. Hackman and Oldham (1980), The complete job characteristics model ©1980 by Addison-Wesley Publishing Company, Inc. Reprinted from Work Redesign. Reading Massachusetts: Addison-Wesley. p. 90. By permission of the publishers.

of experienced meaningfulness, experienced responsibility, and knowledge of the results of the job are possible, resulting in the outcomes of high work motivation, high growth satisfaction, high general satisfaction, and high work effectiveness. However, the outcomes are contingent upon the moderators of knowledge and skill, growth need strength, and satisfactions from work context.

Seybolt (1983; 1986)

According to Mobley (1980), the objective "motivating potential" of a job does not cause employees who work on that job to be internally motivated, to perform well, or to experience job satisfaction. Instead, a job that is high in motivating potential merely creates conditions such that if the job holder performs well he or she is likely to experience a reinforcing state of affairs as a consequence. Job characteristics, therefore, serve only to set the stage for internal motivation (p. 82).

In Seybolt's (1983; 1986) [Figure 10] study, the first step is to define the job in terms of its motivating potential. A second facet of the job which has been found to be important in the prediction of satisfaction, motivation, and turnover is the performance-outcome linkage, derived from the expectancy theory of motivation. Vroom (1964) feels that the effects of performance on a task or work role on satisfaction with that role varies to the degree in which the performance is relevant to the

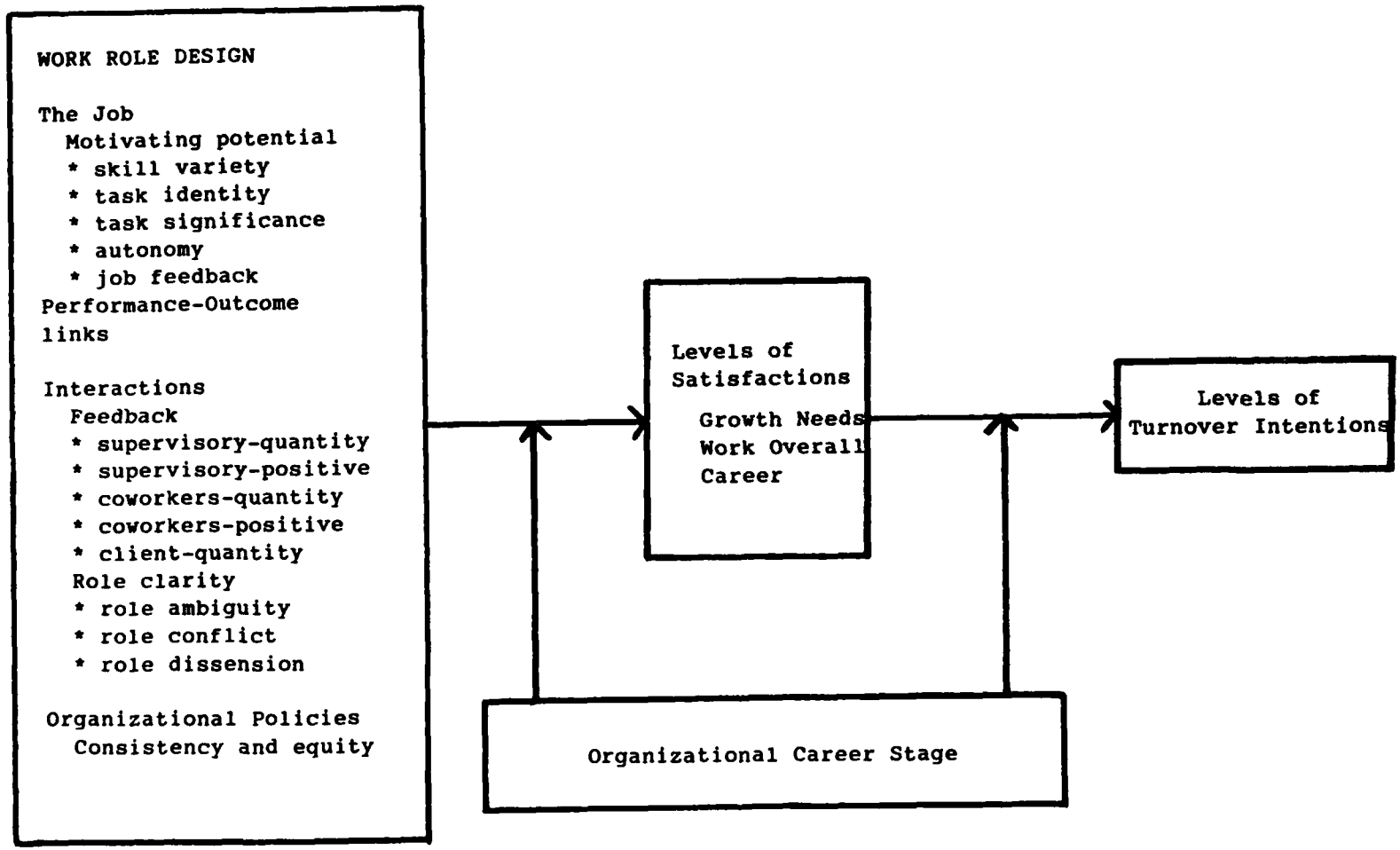

Figure 10. Seybolt (1983), Factors in turnover
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individual's self conception. If a person believes that a certain task requires the abilities he or she values, and the person believes he or she possess those abilities, then success will be equal to his or her self concept and accompanied by satisfaction; therefore, failure will not be equal to one's self concept and followed by dissatisfaction. If on the other hand, a person believes that the task does not require a abilities he or she values and possess, then the level of performance will be irrelevant to his or her self concept (p. 147).

Interactions at work include the factors of feedback and role clarity. Feedback is defined here in terms of supervisory and coworker feedback (quantity in general and the amount of positive feedback) and client feedback (in terms of quantity). Role clarity has been defined in terms of role ambiguity, role conflict, and role dissension. Ambiguity refers to the uncertainty as to what the role entails. Conflict is where the various role requirements are incompatible. Dissension is the lack of agreement with one's supervisor over the work role duties (Seybolt, 1983; 1986).

The last factor important to work role design is organizational policy. The critical issues here appear to be the employee's perception of the level of consistency and equity of the organization's policy across the work groups.

The second major variable identified by Seybolt (1983; 1986) deals with job satisfaction. Generally, the amount of satisfaction the person derives from the job is contingent upon the linkages between the factors of what the person desires at work, what the person experiences from work when he or she does a good job, and his or her overall feeling from the linkages (Mobley, 1982, p. 102). Hackman and Oldham (1980) describe this as either satisfaction of growth needs, or general job satisfaction.

Hackman and Oldham (1980, p. 85) feel that jobs high in motivating potential create opportunities for considerable self-direction, learning, and personal accomplishment at work. Although not all individuals would appreciate jobs such as this, some people have strong growth needs for personal accomplishment, for learning, and for developing themselves beyond where they are now; and have been predicted to develop high internal motivation when working on a complex, challenging job. Growth need strength may affect how individuals react to their jobs, i.e., those with high growth needs may react more favorably to jobs that encourage growth, or have been redesigned to do so.

General job satisfaction includes factors that may be intrinsic, or from within the individual or the job itself; interpersonal, those which fulfill the social needs of the individual; and extrinsic, those external to the work itself.

The intrinsic factors meet the psychological needs of autonomy, esteem, growth, and self-actualization; tension; and the job in general.

The interpersonal factors are the social relationships with peers and others, feedback from them, and the employee's relationship with the immediate supervisor.

The extrinsic factors include those associated with job security, the amount of work involved, promotion opportunities, the work performed, and how the employee feels mentally and physically after work.

A person's perception of how well the job meets these satisfiers combines with their perception of mobility to determine their levels of turnover intentions. Mobility, as defined by March and Simon (1958), is the perceived desirability and perceived ease of movement (Mobley, 1982). Mobley (1982) feels that turnover will only result from dissatisfaction when the opportunity of alternate positions is high.

Another factor that could be included is what Seybolt (1983; 1986) calls the "organizational career stage" or tenure, the length of time the employee has in the organization. Mobley (1982) reports a consistent negative relationship between the length of service and turnover. Accordingly, turnover is significantly higher for shorter-tenure employees.

Research Model

The model (Figure 11) followed in this research is an adaptation of Seybolt et al., (1978) and Seybolt (1983; 1986) models, (Figure 7, Expectancy Theory. . . . ., and Figure 10, Factors in Turnover). Changes to the models were made with his permission. As in Seybolt's original study, work role design is one of the main factors used to define the job in terms of the motivating potential, the interactions, and consistency of organizational policies. The second major factor deals with the individual's motivation; which includes their motivation, performance, role perceptions and perceived equity of rewards.

The levels of satisfactions are not limited to those identified by Seybolt (1983; 1986). The main areas of job satisfactions are: the extrinsic, intrinsic, interpersonal, growth, and profession (Air Force and nursing).

The organizational career stage is broadly altered to include the biographic, demographic, and professional characteristics of the individual. Some of the demographic factors that have affected mobility and/or turnover are age, retirement benefits, geographic location, family ties, economic factors, and the importance the individual places on the factors (Friss, 1982). For the purposes of this study, the biographic factors include: age and sex. The demographic factors include: marital status (with the additional factor of military spouse), number of dependent

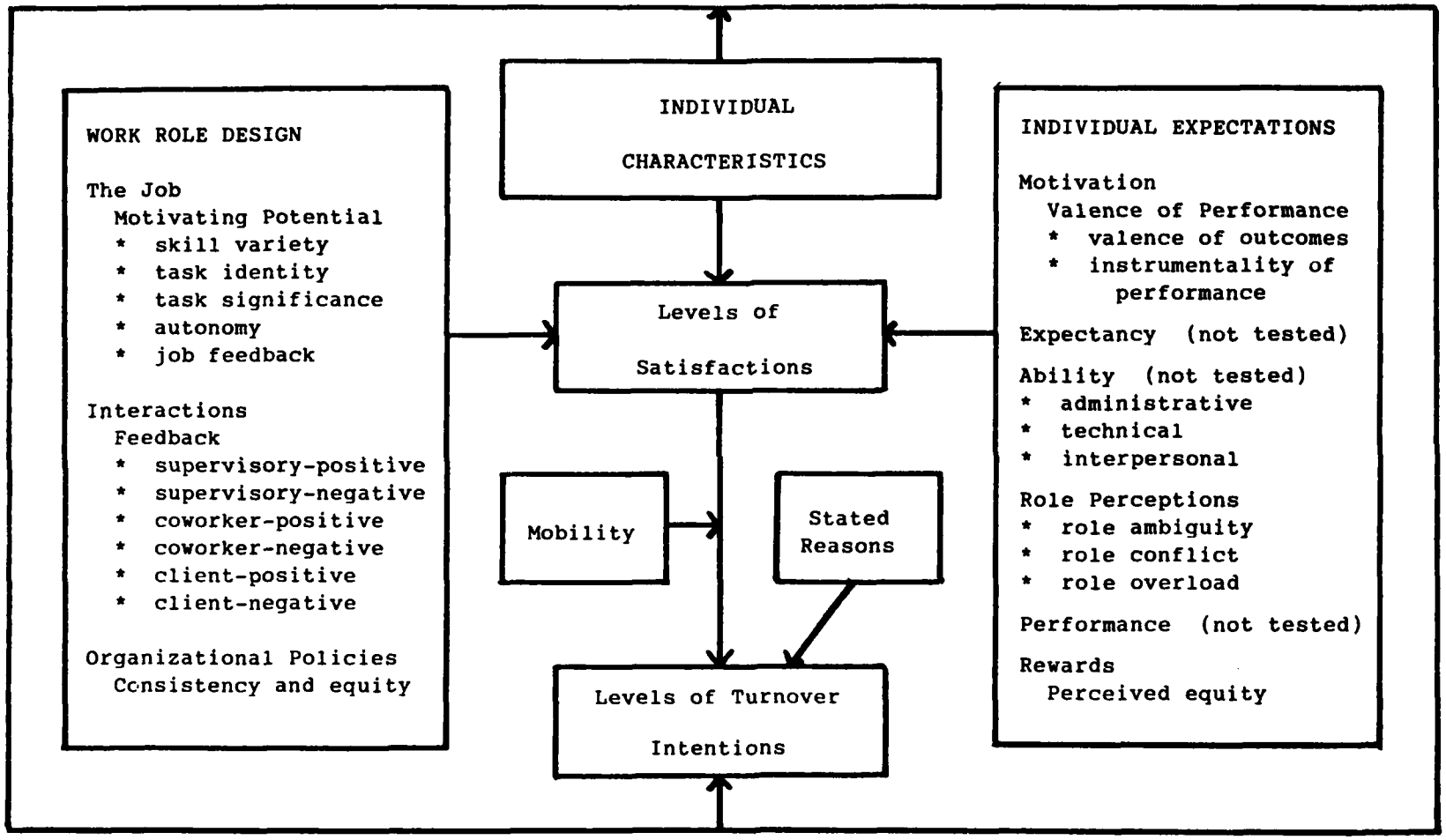

Figure 11. Model of turnover behavior
Adapted from Seybolt, et al. (1978). Turnover among nurses: It can be managed. Journal of Nursing Administration, 8(9), p. 8; and Seybolt, J.W. (1983). Dealing with Premature Employee Turnover. California Management Review, 15(3), p. 109. By permission of the author.

children, primary wage earner status, facility size, and location. Professional factors include: Air Force Speciality Code, rank, position, speciality, education level, and tenure.

The component of mobility is added for clarity, and includes those perceptions of ease and availability of jobs, and that of commitment.

Another major area addressed includes the stated reasons given for turnover and retention.

The levels of turnover include the expressed desire to leave the Air Force Nurse Corps (either through separation or through retirement), which is measured with and without the forced commitment. It does not include intraorganizational transfer from one facility to another.

Conceptual Definitions of Variables

Work Role Design is defined in terms of the job, performance-outcome links, interactions, and organizational policies.

The Job is defined in terms of its motivating potential.

> Motivating Potential is the degree to which a job creates situations where the three critical psychological states of 1) experienced meaningfulness of the work, 2) experienced responsibility for the work, and 3) knowledge of the results of the work are available.
>
> Experienced Meaningfulness refers to how much the work counts in one's system of values; and is measured by 1) skill variety, 2) task identity, and 3) task significance.
>
> > Skill Variety is the degree to which a job requires a variety of different activities in carrying out the work, involving the use of

different skills and talents of the person.

Task Identity is the degree to which a job requires completion of a "whole" and identifiable piece of work, i.e., doing the job from beginning to end with a visible outcome.

Task Significance is the degree to which the job has substantial impact on the lives of other people.

Experienced Responsibility refers to how much the person feels personally accountable for the work outcomes; and is measured by autonomy.

Autonomy is the degree to which the job provides substantial freedom, independence, and discretion to the individual in scheduling the work, and in determining the procedures to be used in carrying it out.

Knowledge of the Results refers to whether or not the person realizes they are performing satisfactorily; and is measured by job feedback.

Job Feedback is the degree to which carrying out the work activities required by the job provides the individual with direct and clear information about the effectiveness of his or her performance. The focus is on feedback obtained directly from the job.

Interactions are measured in terms of the feedback and role clarity.

Feedback is defined in terms of supervisory, coworker, and client feedback; by the amount of positive and negative interactions.

Organizational Policy refers to the person's perception of consistency and equity of the organizational policy across the work groups.

Individual Expectations are defined through the individual's motivation, expectancy, ability, role perceptions, performance, and perceived equity of rewards.

Motivation is measured through the valence of performance, which according to Vroom, is the satisfaction derived from the links of what is desired (valence of outcomes) and what happens if one does a good job (instrumentality of performance).

Expectancy is the individual's perceptions as to the degree they feel their performance will affect the outcome of their actions. (Not tested)

Ability is the perceived capability to perform the administrative, technical, and interpersonal aspects of the job. (Not tested)

Role Perceptions are defined in terms of the individual's perceived role ambiguity, role conflict, and role overload.

Role Ambiguity is the uncertainty as to what the role entails.

Role Conflict is where the various role requirements are incompatible.

Role Overload refers to the quantity of work required, and to the quality, in terms of the work demands, complexity, ability and experience.

Performance is how well the individual performs the different aspects of their jobs. (Not tested)

Perceived Equity of Rewards is how the individual feels about the distribution of the safety (pay, leave, time off, etc.), social (opportunities to interact and to share feelings), and psychological (recognition, responsibility, career advancement, etc.) rewards.

Levels of Satisfactions generally refer to the degree to which the person is satisfied with the linkage between what they desire, and what they actually obtain from the job itself. They are looked at in terms of extrinsic, intrinsic, interpersonal, growth, and profession.

Extrinsic is the degree to which the satisfactions are from factors external to the work itself, i.e., security, tension, amount of work, promotions, pay, etc.

Intrinsic is the degree to which the satisfactions are from factors from within the individual or work itself, i.e., esteem, autonomy, self-actualizations, job in general, and career.

Interpersonal are those factors which fulfill the social needs of the individual.

Growth is the person's need for personal accomplishment, for learning, and for developing

themselves beyond where they are now.

Profession refers to those satisfactions which are derived from both nursing and the organization, in general and as a career.

The Characteristics of the individual are defined in terms of their biographic, demographic, and professional qualities.

Biographic refers to the person's age and sex.

Demographic refers to the person's marital status, family status, wage earner status, facility size, and facility location.

Professional refers to the person's Speciality Code, rank, position, speciality, education level, and length of tenure.

Mobility is the perceived desirability and ease of movement from the organization; which may be affected by satisfactions and/or the person's characteristics.

Stated Reasons are the respondent's reasons for leaving and/or staying with the organization.

Turnover Intentions refer to the individual's expressed desire to voluntarily terminate or to retire from the organization.

Research Questions

1. What are the turnover intentions in the study sample?

2. What are the levels of satisfactions in the study sample?

3. What is the impact of the satisfactions on the levels of turnover; and how does the perceived mobility moderate this impact?

4. What is the impact of Work Role Design on the levels of satisfactions?

5. What is the impact of the Individual Motivations on the levels of satisfactions?

6. What are the individual's stated reasons for either leaving or remaining with the organization?

Justification

Even though the percentage of turnover in the Nurse Corps is reported to be low, nurse managers should not have to wait until a potential problem surfaces before identifying the underlying causes and possible solutions to implement. In light of the current trends in nursing, i.e., the shortage of qualified nurses, high turnover rates, and the high costs associated with replacement, organizational management should use any available means to predict the possible outcomes. This research is one means to identify if a potential problem exists. If a problem does exist, the research should also be able to identify the possible causes of the problem, and in turn to offer possible solutions through work-redesign.

CHAPTER 4

METHODOLOGY

Research Design

A descriptive study design was utilized using a questionnaire for data collection designed by Seybolt (1983; 1986). Some modifications were made to the tool with his permission. The questionnaire was used to gather information pertinent to the research problems.

Setting of the Study, Population and Sample

As of 30 September 1986, there were 5,124 nurses on active duty in the U. S. Air Force (Medical Programming and Analysis Division, September 1986). The Air Force Nurse Corps consists of fully qualified specialists and clinical nurses who have graduated from National League for Nursing (NLN) accredited schools of nursing. Initial commitment is for a period of three years, and in order to remain past that time, i.e., to retirement (from 20 to 30 years total), the nurse must apply for retention. Continued retention is contingent upon the nurse's promotion, i.e., "up or out." Nurses are assigned to positions based upon their qualifications. Progression to increasing levels of responsibility depends on ability, education, experience,

and performance. Each nurse is placed in an Air Force Speciality Code (AFSC). Speciality descriptions taken from Air Force Regulation (AFR) 36-1 briefly are (AFR 36-23, 1985):

> AFSC 9716 -- Nursing Administrator (Major through Colonel). Nurse administrators plan, organize, execute, and direct nursing care practices and activities of medical treatment facilities; serve as staff officers to command surgeon or Surgeon General, USAF; and administer nursing education programs, departments, or schools. Common duty titles include: chief nurse and assistant chief nurse.
>
> AFSC 9726 -- Mental Health Nurse (Second Lieutenant through Colonel). Mental health nurses provide nursing care to patients presenting mental health problems; promote mental health principles through consultation, teaching, supervision, clinical practice; and manage mental health nursing services. Common duty titles include: charge nurse and staff nurse.
>
> AFSC 9726-A -- Mental Health Nurse Specialist (Captain through Colonel). Mental health specialists support, assist, and guide mental health nursing personnel; serve as consultant to nursing personnel and to Surgeon General, USAF; provide supportive counseling services to those who request it; and act as clinical coordinator, mental health nursing service.
>
> AFSC 9736 -- Operating Room Nurse (Second Lieutenant through Colonel). Operating room nurses plan, direct, and coordinate the activities of the operating room department; and maintain optimum standards of nursing practice for continuity of patient care through preoperative assessment and preparation, operative procedures, and postoperative evaluation. Common duty titles include: operating room supervisor and staff nurse.
>
> AFSC 9746 -- Nurse Anesthetist (Second Lieutenant through Colonel). Nurse anesthetists administer anesthetic agents to patients; perform other professional nursing duties of a specialized nature; and manage anesthesia departments under the direction of a medical officer. Certification by the American Association of Nurse Anesthetists as a nurse anesthetist is mandatory.

AFSC 9756 -- Clinical Nurse (Second Lieutenant through Colonel). Clinical nurses plan, implement, and evaluate nursing care for all types of patients; and within scope of ability, provide specialized care, consultation, teaching, and conduct research. Common duty titles include: supervisor, charge nurse, and staff nurse.

AFSC 9756-A -- OB/GYN Nurse Practitioner (Second Lieutenant through Colonel). OB/GYN nurse practitioners provide health care for women by performing physical examinations required to evaluate OB/GYN problems; health screening; cancer detection; family planning; and prenatal and postnatal care under the supervision of a physician.

AFSC 9756-B -- Pediatric Nurse Practitioner (Second Lieutenant through Colonel). Pediatric nurse practitioners provide health care for children (newborn through adolescence) by physical assessment in the well child for maintenance; assess and manage common medical problems and stabilized chronic major illnesses; and interview and counsel parents under the supervision of a physician.

AFSC 9756-C -- Primary Care Nurse Practitioner (Second Lieutenant through Colonel). Primary care nurse practitioners perform physical examinations and assess health care needs of patients; institute treatment within the scope of his or her abilities, and refer complex problems to appropriate members of the Health Care Team; and work under the supervision of a physician.

AFSC 9756-D -- Educational Coordinator (Second Lieutenant through Colonel). Educational coordinators plan, coordinate, and conduct educational programs for nursing service personnel. A bachelor's degree in nursing is mandatory for this speciality.

AFSC 9766 -- Flight Nurse (Second Lieutenant through Colonel). Flight nurses provide comprehensive nursing care for all types of patients on aeromedical evacuation and airlift flights.

AFSC 9776 -- Nurse Midwife (Second Lieutenant through Colonel). Certified nurse midwives are academically and clinically prepared to manage and provide primary health care to women in childbirth, parenting, prenatal education, family planning, and newborn health care. Functions on the health team include antepartum management, intrapartum management,

and delivery and postpartum management. Certification as a nurse midwife by the American College of Nurse Midwives is mandatory for this speciality.

AFSC 9786 -- Environmental Health Nurse (Second Lieutenant through Colonel). Environmental health nurses apply nursing and environmental health knowledge, techniques, and skills for health protection purposes; take part in developing procedures and techniques; and conduct or supervise environmental health nursing functions.

The population studied is 4,298 of the 5,124 (83.88 percent) U.S. Air Force Nurse Corps officers on active duty; in the rank/grade of Second Lieutenant (2LT), First Lieutenant (1Lt), Captain (Cpt), Major (Maj), Lieutenant Colonel (LtC), and Colonel (Col); in Air Force Speciality Codes (AFSCs) 9716 (Nursing Administrator), 9726 (Mental Health Nurse), 9736 (Operating Room Nurse), 9756 (Clinical Nurse), and 9756-D (Education Coordinator); assigned to USAF Medical Treatment Facilities (MTFs), in the Continental United States (CONUS) and Overseas (OS).

The sample consisted of 1,200 nurses chosen from the 4,298 nurses as represented in Table 4.

Sample size was determined in consultation with thesis supervisory committee and the Research Professor/ Statistician, University of Utah, College of Nursing/ College of Medicine. An attempt was made to make the size representative of the sample population.

Currently, there are 124 Medical Treatment Facilities (MTFs) in the Air Force, grouped by bed size, located in the Continental United States (CONUS) (n=82) and Overseas

Table 4

Proposed Sample

Rank / AFSC	n Prop / n Actual	2Lt	1Lt	Cpt	Maj	LtC	Col	Percent
9716	102/287	-/-	-/-	0/4	36/116	36/118	30/46	35.54
9726	92/166	30/44	15/33	30/58	15/28	2/3	-/-	55.42
9736	147/335	30/76	30/55	52/136	30/54	5/12	0/2	43.88
9756	823/3436	246/952	195/923	291/1189	81/343	10/28	0/1	23.95
9756-D	36/74	-/-	1/2	16/29	17/36	2/7	-/-	48.65
Total	1200/4298	306/1072	241/1013	389/1416	179/580	55/168	30/49	27.92
Percent	27.92	28.54	23.79	27.47	30.86	32.74	61.22	

(OS) (n=42); Medical Center, 165 - 1000 beds (n=8) (CONUS n=6, OS n=2); Hospital, 70 - 160 beds (n=12) (CONUS n=10, OS n=2); Hospital, 40 - 65 beds (n=15) (CONUS n=13, OS n=2); Hospital, 30 - 35 beds (n=18) (CONUS n=16, OS n=2); Hospital, 2 - 25 beds (n=29) (CONUS n=21, OS n=8); and Clinic, 0 beds (n=42) (CONUS n=16, OS n=26). Due to the limited availability of some ranks and AFSCs at the MTFs, total random selection of the MTFs was not possible; therefore, all MTFs were utilized in the study.

Approval to conduct this study was obtained through the Air Force Military Personnel Center, Personnel Survey Branch, and assigned a survey control number "USAF SCN 86-99 (expires 30 November 1986)" via the Air Force Institute of Technology, Evaluation and Technology Branch; the University of Utah Review Committee for Research with Human Subjects; and thesis supervisory committee.

Procedure

The method used was a two-stage/convenience sample, using a stratified, quota, random sampling.

Surveys were sent to each MTF in varying numbers, depending upon the MTF size and AFSC availability (range: Clinic, 1 survey; Medical Center, 35 surveys). Because actual numbers of nursing personnel assigned to the MTFs by AFSC and rank was not available, it was assumed that the larger MTFs would have the most staff. It was also assumed that the larger MTFs would have AFSC 9716s with the rank of

Colonel. A worksheet, provided by the Nurse Corps Career Management Branch at the Air Force Military Personnel Center, entitled "AFSCs Utilized at USAF Hospitals, Clinics, and Flying Units" listed the MTFs by size, location (CONUS and OS), and AFSC availability. From this, it could be determined, that by AFSC, of the 124 MTFs, the following numbers were available: 9716, n=123; 9726, n=13; 9736, n=78; 9756, n=114; and 9756-D, n=53. An additional worksheet provided by the Air Force Military Personnel Center, entitled "Worldwide Medical Directory for Command and Chief Nurses" listed names of all MTF chief nurses, and the MTF address and location.

An attempt was made to limit the total number of surveys sent to each MTF, in order not to overburden the MTF chief nurse. In order to insure that the minimum number of subjects in each category desired could be met, each survey participant was preidentified by rank and AFSC (see Appendix A for a complete listing of MTFs and survey breakdown).

The predetermined quantity of preidentified surveys was sent to each MTF chief nurse (SGHN), with the request that they randomly distribute the surveys according to the directions in the cover letter (See Appendix B for SGHN cover letter).

Each survey package consisted of: 1) a cover letter from the Chief, Nurse Corps Career Management Branch,

Office of the Surgeon (HQ AFMPC/SGCN); 2) a cover letter signed by this researcher; 3) the survey, in two parts; and 4) a stamped, preaddressed, sealable return envelope.

The Chief, Nurse Corps Career Management Branch, cover letter (HQ AFMPC/SGCN) explained the concern that nursing managers have with premature nurse turnover, how turnover can be prevented, and asked for participation in this research (see Appendix B for HQ AFMPC/SGCN cover letter).

The cover letter signed by this researcher explained the purpose of the research, explained the uses of the survey information, requested voluntary participation, and instructed the participant in the procedures for filling out the survey and returning it. In addition, the cover letter insured the participants that their anonymity would be protected. In accordance with Air Force Regulations, the following statement was included:

> In accordance with Public Law 93-573, the Privacy Act of 1974, you have been informed of the purposes and uses of the survey information as provided in paragraph 2. Your completion and return of the questionnaire will indicate your consent to participate in the survey. The Survey Control Number (SCN) on the questionnaire is your assurance that the survey has USAF approval and that no names will be used in reported results.

Additionally, a complete Privacy Act Statement was included in the letter (see Appendix B for complete cover letter).

Anonymity of the participants was assured as neither the instructions nor the survey requested the participant's name or social security number.

Assumptions

Certain assumptions were made prior to the distribution of the questionnaire.

It was assumed that the elements involving work-role design, the levels of satisfactions, and the levels of turnover intentions could be measured and that the relative levels could be attained. It was assumed that nurses differ in the level of importance they attach to the different attributes of each. Finally, it was assumed that the participants would answer truthfully, because of the guarantee of confidentiality and anonymity assured for the treatment of their responses.

Measurement Tool

The instrument used was an attitude questionnaire, entitled "Work Role Design," designed and used previously by John W. Seybolt, Ph.D., Professor of Management, College of Business, University of Utah. The questionnaire is designed to study jobs and how people react to them. Minor changes to it were made with Dr. Seybolt's consent.

The survey/questionnaire consists of 2 parts: Part I contains 9 sections: 1) "What is desirable to you at work?," 2) "About your work," 3) "What happens when you do a really good job?," 4) "Your expectations at work," 5) "Feedback at work," 6) "Role issues at work," 7) "Miscellaneous aspects of your work," 8) "Your job satisfaction," and 9) open-ended questions; Part II

requests identifying data.

The first section lists some of the characteristics that could be present on any job, and asks the participant to indicate the degree in which they would like having them present in their current job. The characteristics include those which are extrinsic, intrinsic, interpersonal, and growth needs. These are measured on a Likert type scale of 4 to 10, from "would like having this only a moderate amount (or less)" to "would like having this extremely much" (Appendix B).

The second section lists statements that could describe the job, in terms of skill variety, task identity, task significance, autonomy, and feedback. These statements are measured on a Likert type scale of 1 to 7, from "very inaccurate" to "very accurate" (Appendix B).

The third section lists the same characteristics as in section one, and asks the participants to indicate what will happen, in terms of the characteristics, if he or she perform a good job. As in section one, the characteristics include extrinsic, intrinsic, interpersonal, and growth needs. These are measured on a Likert type scale of 1 to 7, from "it will decrease a lot; I'll get a lot less than now" to "It will increase a lot; I'll get a lot more than now" (Appendix B).

The fourth section deals with the links between effort (little to 100 percent) and performance (minimal to

excellent), both on a 1 to 7 scale. It also asks the participant to rate his or her ability (administrative, interpersonal, and administrative) on a Likert type scale of 1 to 7, from "far below average" to "far above average" (Appendix B).

The fifth section lists the different types of feedback present in the job: Supervisory feedback, which includes quantity of work (positive and negative), quality of work (positive and negative), overall (positive and negative), and suggestions for improvement; coworker feedback (positive and negative); customer/client feedback (positive and negative); and other department's feedback (positive and negative). These are measured on a Likert type scale of 1 to 7, from "never" to "extremely often" (Appendix B).

The sixth section lists aspects of the job that deal with the role issues of: role ambiguity, role conflict, role overload quantitative, and role overload qualitative. These are measured on a Likert type scale of 1 to 7, from "never" to "extremely often" (Appendix B).

The seventh section deals with the miscellaneous aspects of the job: supervisory role expectations, equity of rewards, equity of policies and procedures, career satisfaction (nursing and Air Force), mobility, location, facility size, retirement intentions, and turnover intentions. These are measured on a Likert type scale of 1 to 7, from "I strongly disagree" to "strongly agree"

(Appendix B).

The eighth section lists the same characteristics as in sections one and three, in addition to some of those from section seven, and asks the participant to indicate how satisfied they are. As before, the characteristics involve extrinsic, intrinsic, interpersonal, and growth. These are measured on a Likert type scale of 1 to 7, from "very dissatisfied" to "very satisfied" (Appendix B).

The ninth section asks two open-ended questions as to what the individual nurse would rate as the most important reason(s) for either leaving or staying with the Air Force. This section was added to the original instrument in an attempt to better explain the responses obtained in the previous eight sections.

The extrinsic characteristics of sections one, three, and eight include: security, amount of work, promotions, pay, the work itself, and how the respondents feel after work. The intrinsic characteristics include: esteem, autonomy, self actualization, growth, tension, and the job in general. The interpersonal characteristics include: social, the supervisor, and feedback. Growth involves: accomplishment, challenging work, creativity, independent thought, learning, and personal growth.

The survey is designed to follow the model presented by Seybolt (1986) in that it measures 1) the importance of what the individual desires at work [section 1] compared to

what the individual receives when doing a good job [section 3], which should equate to the overall satisfaction he/she has [section 8]; 2) the motivating potential of the job [section 2]; 3) the perceived link between effort and performance [section 4]; 4) the amount of feedback the individual receives, both positive and negative [section 5]; 5) the role issues of ambiguity, conflict, and overload [section 6]; 6) the miscellaneous aspects of the supervisor's expectations, equity of rewards, equity of policies and procedures, career satisfaction, mobility, turnover intentions, retirement intentions, nursing, the organization, location, and size of the facility [section 7]; and 7) the overall job satisfaction [section 8].

Part II requests identifying data, which consist of the biographic, demographic, and professional data of the individual. These data include the participant's age, sex, marital status, number of dependent children, primary wage earner status, facility size, location, length of assignment, major command of facility, AFSC, position title, speciality, rank, years in nursing, years in Air Force, component of service, and education level.

For a complete listing of how the individual questions are subdivided into variable categories, see Appendix C.

CHAPTER 5

ANALYSIS OF THE DATA

Of the 1,200 surveys sent, 897 were returned for a return rate of 74.75 percent. Of these, 885 were usable, for an adjusted return rate of 73.75 percent.

Originally, 10 weeks were allowed for the surveys to be completed and returned. Three weeks after being sent, a thank you/reminder letter was mailed to each facility chief nurse. This, in turn, brought to light unforseen problems with the postal system; i.e., some chief nurses responded to the letter saying that they had not yet received the surveys. Therefore, the time limit for the return was increased to 14 weeks. All returned surveys were received during this 14 week period.

Comparison to Proposed Sample Plan

The comparison of the surveys received is limited to AFSC, rank, and facility size (Table 5). With AFSC, the return ranged from a low of 60.87 percent for the 9726 career field, to a high of 92.16 percent for the 9716 career field. By rank, the return ranged from a low of 55.56 percent for 2nd Lts to a high of 90.91 percent for Lt Colonels. Taken together, the return ranged from none returned for the 9756-D 1st Lts to a high of 102.78 percent

Table 5

Survey Response by Rank and AFSC

Rank / AFSC	n Ret / n Sent (%)	2Lt	1Lt	Cpt	Maj	LtC	Col	Percent
9716	94/102 (90.16)	-/-	-/-	0/0 (0.00)	34/36 (94.44)	37/36 (102.78)	23/30 (76.67)	(92.16)
9726	56/92 (60.87)	13/30 (43.33)	10/15 (66.67)	25/30 (83.33)	6/15 (40.00)	2/2 (100.00)	-/-	(60.87)
9736	93/147 (63.27)	16/30 (53.33)	15/30 (50.00)	40/52 (76.92)	19/30 (63.33)	3/5 (60.00)	-/-	(63.27)
9756	612/823 (74.36)	141/246 (57.32)	176/195 (90.26)	228/291 (78.35)	61/81 (75.31)	6/10 (60.00)	-/-	(74.36)
9756-D	28/36 (77.78)	-/-	0/1 (0.00)	12/16 (75.00)	14/17 (82.35)	2/2 (100.00)	-/-	(77.78)
Other (9746)	2/0	-/-	-/-	-/-	2/0	-/-	-/-	
Total	885/1200 (73.75)	170/306 (55.56)	201/241 (83.40)	305/389 (78.41)	136/179 (75.98)	50/55 (90.91)	23/30 (76.67)	(73.75)

for the 9716 Lt Colonels (the percentage over 100 is due to one more survey returned than requested in the sample plan). In addition, two unsolicited surveys from 9746 (Nurse Anesthesia) Majors were received and subsequently included in the study.

In relation to the facilities that were sent surveys, overall, 95.16 percent of them participated (Table 6). Furthermore, of those facilities with inpatient capability (hospitals, n=82), participation was 100.00 percent; for those without the inpatient capability (clinics, n=42), the participation was 85.71 percent. One unsolicited survey from a 9716 Colonel, assigned to a Major Command Headquarters, was received and subsequently included. By facility size grouping (in relation to the percentage of surveys returned), participation ranged from a low of 70.69 percent (Medical Center) to a high of 85.71 percent (clinic). By individual facility, excluding the clinics (only one survey was sent to each clinic, which could only result in either 0.00 percent or 100.00 percent participation), the return percentage ranged from a low of 16.67 to a high of 100.00 (both percentages were in the Hospital with less than 30 beds).

Comparison to the Nurse Corps

To determine if generalization to the Air Force Nurse Corps' population might be possible, [illegible] demographic characteristics (where available) were compared

Table 6

Survey Response by Facility Size

Facility Category	Facilities Responding	Percent	Number Sent	Number Returned	Percent	% Range Low	% Range High
Medical Center N = 8	8	100.00	290	205	70.69	57.14	88.24
Hospital 70 - 159 bed N = 11	11	100.00	238	177	74.37	55.56	96.67
Hospital 40 - 69 bed N = 16	16	100.00	227	166	73.13	35.71	93.75
Hospital 30 - 39 bed N = 17	17	100.00	193	139	72.02	33.33	91.67
Hospital < 30 bed N = 30	30	100.00	210	161	76.67	16.67	100.00
Clinic N = 42	36	85.71	42	36	85.71	0.00	100.00
Other	1	-	-	1	-	-	-
Total	125	95.16	1200	885	73.75	-	-

to like characteristics of the respondents. In addition, other general characteristics are also presented. The Nurse Corps' summary characteristics are obtained from the Air Force Military Personnel Center's, Medical Personnel Information Summary, September, 1986. Some problems with the comparisons were encountered in that the demographics are presented to reflect either the total Nurse Corps' population (n=5,124) which includes all the nursing AFSCs, or they can easily be grouped according to those AFSCs represented in the sample (n=4,298) (Table 7).

A summary of the characteristics are:

Age: The respondent's ages range from a low of 21 to 58 years old, with the majority of the sample in the 26 to 30 year group (30.6 percent). The average age is 32.21 years. Comparison ages are not available.

Sex: Of interest here is the apparent exact match of percent population (n=4,298) with the study.

Marital Status: This characteristic is presented as representative to the total population (n=5,124), thus lowering the comparison percentage. In addition, the Nurse Corps only indicates if the individual is married or single (which includes those single, divorced, separated, and widowed). The percentages appear to match closely, with there being more married personnel than single. The study sample has a slightly higher percentage of military spouses, and it appears that the percentage of those

Table 7

Comparison of Summary Characteristics

Characteristics	Actual Air Force (N=5124) N	%	Study Sample (N=885) N	%	Percent Air Force %
Age:					
21 - 25			146	16.5	
26 - 30			271	30.6	
31 - 35			213	24.1	
36 - 40			159	17.9	
41 - 45			66	7.4	
46 - 50			23	2.6	
> 50			7	0.8	
Mean age			32.21		
Sex:					
Male	821	19.1	169	19.1	20.6
Female	3477	80.9	716	80.9	20.6
	(N=4298)				
Marital Status:					
Married	2669	52.1	469	53.0	17.6
Single			328	37.1	
Divorced			76	8.6	
Separated			11	1.2	
Widowed			1	0.1	
(Total Single)	2455	47.9	416	47.0	16.9
Civilian Spouse	1702	63.8	266	56.7	15.6
Military Spouse	967	36.2	203	43.3	20.9
Stationed Together		92.0	175	86.2	
Dependent Children:					
# Families			306	34.58	
# Children					
1			124	40.5	
2			132	43.1	
3			37	12.1	
4			10	3.3	
5			3	1.0	
Single parents	255		41	13.40	16.1
Primary Wage Earner:					
Yes			720	81.4	
No			145	16.4	
Uncertain			20	2.3	
Air Force Speciality Code (AFSC):					
9716	287	6.7	94	10.6	32.7
9726	166	3.9	56	6.3	33.7
9736	335	7.8	93	10.5	27.8
9756	3436	79.9	612	69.2	17.8
9756-D	74	1.7	28	3.2	37.8
Other (9746)			2	0.2	-.-
Rank:					
2nd Lt	1072	24.9	170	19.2	15.9
1st Lt	1013	23.6	201	22.7	19.8
Captain	1416	32.9	305	34.5	21.5
Major	580	13.5	136	15.4	23.5
Lt Colonel	168	3.9	50	5.6	29.8
Colonel	49	1.1	23	2.6	46.9

Table 7 (Continued)

Characteristics	Actual Air Force (N=5124) N	%	Study Sample (N=885) N	%	Percent Air Force %
AFSC and Rank:					
9716:	287		94		
2nd Lt	NA	NA	NA	NA	NA
1st Lt	NA	NA	NA	NA	NA
Captain	4	1.4	0	0.0	0.0
Major	119	41.5	34	36.2	28.6
Lt Colonel	118	41.1	37	39.4	31.4
Colonel	46	16.0	23	24.5	50.0
9726:	166		56		
2nd Lt	44	26.5	13	23.2	29.6
1st Lt	33	19.9	10	17.9	30.3
Captain	58	34.9	25	44.6	43.1
Major	28	16.9	6	10.7	21.4
Lt Colonel	3	1.8	2	3.6	66.7
Colonel	NA	NA	NA	NA	NA
9736:	335		93		
2nd Lt	76	22.7	16	17.2	21.1
1st Lt	55	16.4	15	16.1	27.3
Captain	136	40.6	40	43.0	29.4
Major	54	16.1	19	20.4	35.2
Lt Colonel	12	3.6	3	3.2	25.0
Colonel	2	0.6	0	0.0	0.0
9756:	3436		612		
2nd Lt	952	27.7	141	23.0	14.8
1st Lt	923	26.9	176	28.8	19.1
Captain	1189	34.6	228	37.2	19.2
Major	343	10.0	61	10.0	17.8
Lt Colonel	28	0.8	6	1.0	21.4
Colonel	1	0.0	0	0.0	0.0
9756-D:	74		28		
2nd Lt	NA	NA	NA	NA	NA
1st Lt	2	2.7	0	0.0	0.0
Captain	29	39.2	12	42.9	41.4
Major	36	48.6	14	50.0	38.9
Lt Colonel	7	9.5	2	7.1	28.6
Colonel	NA	NA	NA	NA	NA
Other (9746):			2		
Major	84	29.1	2	100.0	2.4
Facility Assigned (Total Nurse Corps):					
Hospital	3962	77.3	848	95.8	21.4
Clinic	133	2.6	36	4.1	27.1
Other	1029	20.1	1	0.1	0.1
Facility Assigned (by size):					
Med Ctr > 160 bed			205	23.2	
Hosp 70 - 159 bed			177	20.0	
Hosp 40 - 69 bed			166	18.8	
Hosp 30 - 39 bed			139	15.7	
Hosp < 30 bed			161	18.2	
Clinic			36	4.1	
Other			1	0.1	
Location:					
CONUS:			692	78.2	
Overseas:			193	21.8	

Table 7 (Continued)

Characteristics	Actual Air Force (N=5124) N	%	Study Sample (N=885) N	%	Percent Air Force %
Career Status:					
Initial Active Duty:	2171	50.51	293	33.1	13.5
Indef. Reserve Status:	771	17.9	269	30.4	34.9
Regular:	1088	25.31	314	35.5	28.9
Other:	268	6.24	9	1.0	3.4
	(N=4298)				
Education (Highest):					
Assoc Degree:	69	1.4	12	1.4	17.4
Diploma	287	5.6	24	2.7	8.4
Bachelor's	3685	71.9	698	78.9	18.9
Nursing			(659)	74.5	
Other			(39)	4.4	
Master's	679	13.3	150	17.0	22.1
Nursing			(58)	6.6	
Other			(92)	10.4	
PhD	4	0.1	1	0.1	25.0
Unknown	399	7.8	-	-.-	-.-
Time on Station (years):					
0 - 1			332	37.5	
1 - 2			308	34.8	
2 - 3			166	18.8	
3 - 4			63	7.1	
> 4			15	1.7	
Mean			1.61		
Years in Air Force:					
0 - 1	583	13.6	69	7.8	11.8
1.5 - 3	1081	25.2	231	26.1	21.4
3.5 - 5	619	14.4	137	15.5	22.1
6 - 10	1041	24.2	223	25.1	21.4
11 - 15	553	12.9	116	13.0	21.0
16 - 20	319	7.4	85	9.6	26.7
21 - 25	85	2.0	22	2.4	25.9
> 25	17	0.4	2	0.2	11.8
Mean	(N=4298)		7.318		
Years in Nursing:					
0 - 1			22	2.5	
1.5 - 3			179	22.7	
3.5 - 5			138	15.6	
6 - 10			247	27.8	
11 - 15			146	16.4	
16 - 20			87	9.9	
21 - 25			40	4.5	
26 - 30			22	2.5	
> 30			4	0.4	
Mean			9.090		

stationed together is lower; however, this comparison may be in error as the 92 percent is the verbal percent given by the Military Personnel Center.

Dependent Children: There are no comparison data for the number of dependent children. With the sample, 34 percent have children and of these, 13.4 percent are single parents. The only comparison is made with the number of single parents, which results in 16.1 percent of the population.

Primary Wage Earner: In general, the majority of the respondents indicate that they are the primary wage earner. Those uncertain include the "no response" and those that stated "both." No comparison data are available.

Air Force Speciality Code (AFSC): Although the largest portion of the respondents are in AFSC 9756, their comparison percentage is lowest. In comparison, the other percentages are fairly high.

Rank: A significant difference is noted in the number of 2nd Lts responding as compared to the total population. The other ranks show a greater percentage return than the Air Force population.

AFSC and Rank: In general, the comparison percentages appear to be significant in AFSCs 9716, 9726, 9736, and 9756-D. For AFSC 9756, the percentage is lower, and is probably due to the overall number of nurses in this population. Of note are the low *n*'s in the study sample for

some of the subgroups; however, the comparison percentages appear to be high. Due to the low number of the 9746 Majors in the sample, the comparison percentage is low.

Facility Assigned: Comparison can only be made by hospital, clinic and other. In general, the comparison percentages are high, except for the nonexistent other category. By size, a greater return is noted from the Medical Center and Hospital 70 - 159 bed; however, this is probably due to these two subgroups having all the sample AFSCs available (AFSC 9726 is not assigned to the other facilities). The other facility categories are similar. The percent from the clinic is low due to the low number of surveys initially sent.

Location: Although comparison data are not available, in relation to the number of surveys sent to facilities in the CONUS, the return rate equates to 72.31 percent; for those sent overseas, the return rate is 79.42 percent.

Career Status: The "other" category is lowest; however, it may be explained by how the respondents answered. The low percentage for the "Initial Active Duty" is probably due to the low number of 2nd Lts responding in the study. The higher percent of the "indefinite reserve" category may be due to the number of 1st Lts and Captains in the sample, as "regular" is normally given to the older Captains and Majors. Most of the higher ranks are regular.

Education: The comparison percentage indicates that

the "Diploma" category is lowest, followed by the "Associate Degree." The raw data indicate that the majority of the nurses have, at a minimum, a bachelor's degree. This can be explained, as a "Bachelor's Degree" is generally required for entry into the Nurse Corps.

Time on Station: Comparison statistics are not available. The data, however, indicate that over 70 percent of the sample have been on station for less than two years, with the mean time on station of 1.61 years.

Years in Air Force: The comparison percentages for the year groups "0 - 1" and "> 25" are low; and the low percentage for the "0 - 1" is probably due to the low number of 2nd Lts responding. The mean years in the Air Force for the sample is 7.318; however, comparison data for this measure are not available.

Years in Nursing: Summary statistics are not available for comparison. The data, however, indicate that the majority of the respondents (85.00 percent) have less than 15 years experience.

Reliability of the Survey

Factor groupings used in this study were predetermined by Seybolt (1978; 1983). Although the entire measurement tool was administered, only those items significant to this study were analyzed, i.e., section 4, "Expectations" was included; however, since actual performance data were not requested, the measure cannot be used. Reliability testing

was done using Cronbach's Coefficient Alpha, which concludes that the higher the coefficient, the greater the reliability.

Cronbach's Alpha was used to measure the overall reliability of each main section and the subgroupings that made up the section (Table 8). The total alphas for the sections were reasonably high (.74589 to .95381) indicating that, in general, each section consisted of a homogeneous grouping. However, when the subsections were separated from the total section, some decreases in the alpha coefficients were noticed. Even with these decreases, due to the high section alphas, it can be assumed that the instrument was measuring what was intended.

The low measures for Section I, Extrinsic (.44788) and Interpersonal (.53683); Section II, Task Significance (.32298) and Autonomy (.58141); and Section III (Extrinsic (.42388) and Interpersonal (.56612) might be explained due to the variability of the responses to the questions, or to the premise that some of the questions within the subgroups should not have been included.

Turnover

Research Question #1: What are the turnover intentions in the study sample?

Two measures of turnover are used in this study, and are reached by combining 4 questions from Section 7. These

Table 8

Reliability Data

Section I "Desire"

Category Questions	N Cases	N Items	Alpha Coefficients
Overall Q1 to Q19	881	19	.84714
Extrinsic Q3, Q12, Q13, Q14, Q16, Q18	882	6	.44788
Intrinsic Q1, Q4, Q5, Q7, Q10, Q11, Q15, Q17	883	8	.79500
Interpersonal Q9, Q19	884	2	.53683
Growth Q2, Q4, Q6, Q8, Q10, Q15	883	6	.80190

Section II "About Your Work"

Category Questions	N Cases	N Items	Alpha Coefficients
Overall Q1 to Q10	882	10	.74589
Skill Variety Q1, Q3	882	2	.65973
Task Identity Q2, Q5	882	2	.78706
Task Significance Q4, Q6	883	2	.32298
Autonomy Q8, Q10	883	2	.58141
Job Feedback Q7, Q9	883	2	.62532

Section III "What Happens"

Category Questions	N Cases	N Items	Alpha Coefficients
Overall Q1 to Q19	872	19	.86943
Extrinsic Q3, Q12, Q13, Q14, Q16, Q18	874	6	.42388
Intrinsic Q1, Q4, Q5, Q7, Q10, Q11, Q15, Q17	875	8	.85630
Interpersonal Q9, Q19	877	2	.56612
Growth Q2, Q4, Q6, Q8, Q10, Q15	876	6	.84086

Table 8 (Continued)

Section IV "Expectations"

Category Questions	N Cases	N Items	Alpha Coefficients
Measured but not Analyzed			

Section V "Feedback"

Category Questions	N Cases	N Items	Alpha Coefficients
Overall Q1, Q3 to Q7, Q9 to Q16	868	14	.82043
Supervisor Positive Q1, Q6, Q9, Q16	879	4	.93603
Supervisor Negative Q4, Q12, Q13, Q15	876	4	.91808
Co-Worker Positive Q10, Q14	879	2	.89728
Co-Worker Negative Q3, Q7	879	2	.71405
Client Positive Q5	874	1	1.369 S.D. *
Client Negative Q11	872	1	1.483 S.D. *

* Standard deviation used for single item measures.

Section VI "Role Issues"

Category Questions	N Cases	N Items	Alpha Coefficients
Role Ambiguity Q1, Q5, Q9, Q13, Q17	882	5	.75234
Role Conflict Q2, Q6, Q10, Q14, Q18	881	5	.73248
Role Overload Quantity Q3, Q7, Q11, Q15, Q19	881	5	.78258
Role Overload Quality Q4, Q8, Q12, Q16, Q20	883	5	.77468

Table 8 (Continued)

Section VII "Miscellaneous"

Category Questions	N Cases	N Items	Alpha Coefficients
Equity of Rewards Q3, Q13, Q17	882	3	.74893
Equity of Policies Q8, Q22, Q28	882	3	.74893
Mobility Q2, Q11, Q18, Q23	880	4	.61949
Turnover Intentions Q6, Q14	884	2	.79883
Turnover w/o Commitment Q4, Q27	881	2	.83268

Section VIII "Satisfaction"

Category Questions	N Cases	N Items	Alpha Coefficients
Overall Q1 to Q23	870	33	.95381
Extrinsic Q3, Q8, Q14, Q15, Q17, Q19, Q21, Q23, Q25, Q26, Q32, Q33	871	12	.83261
Intrinsic Q1, Q4, Q6, Q9, Q12, Q13, Q18, Q20, Q28, Q29	882	10	.93362
Interpersonal Q11, Q22, Q24, Q27	884	4	.70302
Growth Q2, Q4, Q7, Q10, Q12, Q18	882	6	.91437
Nursing Q16, Q31	884	2	.93411
Air Force Q5, Q30	993	2	.89537

questions measure either the overall intent to leave or remain with the organization. They differ in that two of the questions ask for general intentions, while two ask for intent after the removal of any "forced commitment."

Turnover Measure #1 (TO#1)

This measure combines question #6, "I have serious intentions about leaving this organization (Air Force) within the next year" and question #14, "Not counting retirement, I will be working for this organization (Air Force) one year from now, if I have my way." Question #14 is reverse scored to indicate turnover intentions. Both questions are measured on a Likert type scale from 1 to 7, with 1 "I strongly disagree" and 7 "strongly agree." The average of these two questions is used to determine overall intent. A low response indicates low intent, while a high response indicates high intent. Low intentions for turnover are those responses that are within 1 to 2.5; middle intent are those that are greater than 2.5 but less than 5.5, and high intent are those from 5.5 to 7 (Table 9).

Turnover Measure #2 (TO#2)

The Air Force requires a forced commitment (Active Duty Service Commitment, ADSC) for numerous reasons; i.e., the initial active duty commitment is for 3 years, promotion requires 2 years, moving from station to station is 1 year, etc. This means that at a minimum, before the individual

Table 9

Turnover Intentions
(TO#1)

Intent	Response	Absolute Frequency	(Total)	Percent	(% Total)
	1.0	245		27.7	
Low	1.5	116	(584)	13.1	(66.1)
	2.0	171		19.3	
	2.5	52		5.9	
	3.0	56		6.3	
	3.5	37		4.2	
Mid	4.0	69	(216)	7.8	(24.4)
	4.5	31		3.5	
	5.0	23		2.6	
	5.5	14		1.6	
High	6.0	14	(84)	1.6	(9.5)
	6.5	20		2.8	
	7.0	36		4.1	

N = 884
Mean = 2.559
Standard Deviation = 1.692

can separate or retire, their service commitments must be completed.

The second turnover measure removes this commitment and is reached through combining question 4 "Even if I did not have a service commitment (ADSC) I would remain on active duty" and question 27 "If I did not have a service commitment, i.e., ADSC, I would resign within the next six months." Question 4 was reverse scored to indicate "turnover intent." Both questions were answered on a Likert type scale from 1 to 7 with 1 indicating "I strongly disagree" and 7 indicating "strongly agree." The average of these two questions is used to indicate overall turnover intent. A low response indicates a low intent, and a high response indicates a high intent. As with TO#1, low intentions for turnover are those responses that fall within 1 to 2.5; middle intent are those that are greater than 2.5 but less than 5.5; the high intent are those from 5.5 to 7 (Table 10).

TO#2 indicates a 10 percent high intent for turnover, which is greater than the 9.5 percent for TO#1. In addition, the mean score for this measure is 2.732, which is greater than the mean score of TO#1 (2.559). This leads one to assume that when the "forced commitment" is removed, the turnover intent increases.

Pearson Correlation between the two measures is .73839, which indicates that the measures are close, but are not

Table 10

Turnover Intentions
(TO#2)

Intent	Response	Absolute Frequency	(Total)	Percent	(% Total)
	1.0	166		18.8	
Low	1.5	127	(541)	14.4	(61.4)
	2.0	170		19.3	
	2.5	78		8.9	
	3.0	70		7.9	
	3.5	42		4.8	
Mid	4.0	75	(252)	8.5	(28.6)
	4.5	42		4.8	
	5.0	23		2.6	
	5.5	19		2.2	
High	6.0	24	(88)	2.7	(10.0)
	6.5	18		2.0	
	7.0	27		3.1	

N = 881
Mean = 2.732
Standard Deviation = 1.629

mutually inclusive of each other. This is probably due to the wording of the questions, i.e., TO#1 specifies a period of 1 year, while in TO#2, question #4 does not have a time element, and #27 specifies 6 months.

Demographics of Turnover

The demographic characteristics of the sample, in relation to both measures of turnover are presented in Table 11.

Significant findings from the table follow. In general, these findings will be from the high intentions for turnover:

Age: For TO#1, the percentages indicate that the sample is bimodal, with the youngest and oldest ages at higher risk for turnover. In TO#2 the mean age is lower, and the percentages of the lowest ages are highest, indicating that the younger age groups are most at risk.

Sex: The percentages indicate that the females are at higher risk for turnover.

Marital Status: In both TO#1 and TO#2, the percentages indicate that the single population, followed closely by those divorced are high risk. For those married, a higher risk is noted in those married to another military member, while being stationed together shows little difference. A significant percentage increase is noted in TO#2 for the single parents.

Table 11

Comparison of Turnover Characteristics

			Turnover (TO#1)						Turnover w/o Commitment (TO#2)					
	General Sample		High Intent		Middle Intent		Low Intent		High Intent		Middle Intent		Low Intent	
Characteristics	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Totals:	885	100.0	84	9.6	216	24.4	585	66.0	88	10.0	252	28.6	545	61.4
Age:														
21 - 25	146	16.5	20	13.7	44	30.1	82	56.2	25	17.1	47	32.2	74	50.7
26 - 30	271	30.6	30	11.1	81	29.9	160	59.0	35	12.9	89	32.8	147	54.2
31 - 35	213	24.1	20	9.4	48	22.5	145	68.1	17	8.0	58	27.2	138	64.8
36 - 40	159	17.9	2	1.3	28	17.6	129	81.1	4	2.5	40	25.2	115	72.3
41 - 45	66	7.4	6	9.1	11	16.7	49	74.2	5	7.6	15	22.7	46	69.7
46 - 50	23	2.6	3	13.0	3	13.0	17	73.9	2	8.7	3	13.0	18	78.3
> 50	7	0.8	3	42.9	1	14.3	3	42.9	-	0.0	-	0.0	7	100.0
Mean:	32.210		31.298		30.810		32.872		29.534		31.210		33.119	
Sex:														
Male	169	19.1	9	5.3	42	24.8	118	69.8	12	7.1	43	25.4	114	67.5
Female	716	80.9	75	10.5	174	24.3	467	65.2	76	10.6	209	29.2	431	60.2
Marital Status:														
Married	469	53.0	39	8.3	115	24.5	315	67.2	41	8.7	124	26.4	304	64.8
Single	328	37.1	38	11.6	81	24.7	209	63.7	39	11.9	107	32.6	182	55.5
Divorced	76	8.6	7	9.2	17	22.4	52	68.4	8	10.5	19	25.0	49	64.5
Separated	11	1.2	-	0.0	3	27.3	8	72.7	-	0.0	2	18.2	9	81.8
Widowed	1	0.1	-	0.0	-	0.0	1	100.0	-	0.0	-	0.0	1	100.0
Civilian Spouse	266	56.7	17	6.4	61	22.9	188	70.7	22	8.3	63	23.7	181	68.0
Military Spouse	203	43.3	22	10.8	54	26.6	127	62.6	19	9.4	61	30.0	123	60.6
Assign Together	175	86.2	19	10.9	48	27.4	108	61.7	16	9.1	54	30.9	105	60.0
Assign Apart	28	13.8	3	10.7	6	21.4	19	67.9	3	10.7	7	25.0	18	64.3
Families #	306		19	6.2	75	24.5	212	69.3	25	8.2	83	27.1	198	64.7
Single Parent	41	13.4	3	7.3	13	31.7	25	61.0	6	14.6	12	29.3	23	56.1
Primary Wage Earner:														
Yes	720	81.4	63	8.7	175	24.3	482	66.9	70	9.7	205	28.5	445	61.8
No	145	16.4	20	13.8	36	24.8	89	61.4	17	11.7	41	28.3	87	60.0
Uncertain	20	2.3	1	5.0	5	25	14	70.0	1	5.0	6	30.0	13	65.0
Facility Assigned: (by bed size)														
Med Ctr > 160	205	23.2	20	9.8	42	20.5	143	69.7	18	8.8	59	29.8	128	62.4
Hosp 70 - 159	177	20.0	16	9.0	50	28.2	111	62.7	25	14.1	55	31.1	97	54.8
Hosp 40 - 69	166	18.8	14	8.4	38	22.9	114	68.7	17	10.2	40	24.1	109	65.7
Hosp 30 - 39	139	15.7	18	12.9	41	29.5	80	57.6	14	10.1	47	33.8	78	56.1
Hosp < 30	161	18.2	14	8.7	41	25.5	106	65.8	14	8.7	45	27.9	102	63.4
Clinic	36	4.1	1	2.8	4	11.1	31	86.1	-	0.0	6	16.7	30	83.3
Other	1	.1	1	100.0	-	0.0	-	0.0	-	0.0	-	0.0	1	100.0
Location:														
CONUS	692	78.2	73	10.5	168	24.3	451	65.2	73	10.5	198	28.6	421	60.8
Overseas	193	21.8	11	5.7	48	24.9	134	69.4	15	7.8	54	28.0	124	64.2
AFSC:														
9716	94	10.6	9	9.6	8	8.5	77	81.9	5	5.3	13	13.8	76	80.8
9726	56	6.3	5	8.9	9	16.1	42	75.0	6	10.7	19	33.9	31	55.4
9736	93	10.5	8	8.6	26	29.0	59	63.4	11	11.8	27	29.0	55	59.2
9756	612	69.2	61	10.0	170	27.8	381	62.2	65	10.6	187	30.6	360	58.8
9756-D	28	3.2	1	3.6	3	10.7	24	85.7	1	3.6	4	14.3	23	82.1
Other (9746)	2	0.2	-	0.0	-	0.0	2	100.0	-	0.0	2	100.0	-	0.0

Table 11 (Continued)

			Turnover (TO#1)						Turnover w/o Commitment (TO#2)					
	General Sample		High Intent		Middle Intent		Low Intent		High Intent		Middle Intent		Low Intent	
Characteristics	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Rank:														
2nd Lt	170	19.2	10	5.9	45	26.5	115	67.6	26	15.3	57	33.5	87	51.2
1st Lt	201	22.7	34	16.9	62	30.8	105	52.2	32	15.9	62	30.8	107	53.2
Captain	305	34.5	27	8.8	80	26.2	198	64.9	20	6.6	92	30.2	193	63.3
Major	136	15.4	4	2.9	22	16.2	110	80.9	5	3.7	34	25.0	97	71.3
Lt Colonel	50	5.6	4	8.0	5	10.0	41	82.0	3	6.0	4	8.0	43	86.0
Colonel	23	2.6	5	21.7	2	8.7	16	69.6	2	8.7	3	13.0	18	78.3
AFSC and Rank:														
9716	94	10.6	9	9.6	8	8.5	77	81.9	5	5.3	13	13.8	76	80.8
Major	34	36.2	1	2.9	3	8.8	30	88.2	0	0.0	9	26.5	25	73.5
Lt Colonel	37	39.4	3	8.1	3	8.1	31	83.8	3	8.1	1	2.7	33	89.2
Colonel	23	24.5	5	21.7	2	8.7	16	69.6	2	8.7	3	13.0	18	78.3
9726	56	6.3	5	8.9	9	16.1	42	75.0	6	10.7	19	33.9	31	55.4
2nd Lt	13	23.2	2	15.4	1	7.7	10	76.9	2	15.4	6	46.1	5	38.5
1st Lt	10	17.9	1	10.0	3	30.0	6	60.0	2	20.0	3	30.0	5	50.0
Captain	25	44.6	1	4.0	4	16.0	20	80.0	1	4.0	7	28.0	17	68.0
Major	6	10.7	1	16.7	1	16.7	4	66.7	1	16.7	2	33.3	3	50.0
Lt Colonel	2	3.6	-	0.0	-	0.0	2	100.0	-	0.0	1	50.0	1	50.0
9736	93	10.5	8	8.6	26	28.0	59	63.4	11	11.8	27	29.0	55	59.2
2nd Lt	16	17.2	-	0.0	5	31.2	11	68.8	1	6.2	8	50.0	7	43.8
1st Lt	15	16.1	3	20.0	3	20.0	9	60.0	1	6.7	5	33.3	9	60.0
Captain	40	43.0	3	7.5	17	42.5	20	50.0	7	17.5	12	30.0	21	52.5
Major	19	20.4	2	10.5	1	5.3	16	84.2	2	10.5	1	5.3	16	84.2
Lt Colonel	3	3.2	-	0.0	-	0.0	3	100.0	-	0.0	1	33.3	2	66.7
9756	612	69.2	61	10.0	170	27.8	381	62.2	65	10.6	187	30.6	360	58.8
2nd Lt	141	23.0	8	5.7	39	27.7	94	66.7	23	16.3	43	30.5	75	53.2
1st Lt	176	28.8	30	17.1	56	31.8	90	51.1	29	16.5	54	30.7	93	52.8
Captain	228	37.2	23	10.1	58	25.4	147	64.5	12	5.3	71	31.1	145	63.6
Major	61	10.0	-	0.0	15	24.6	46	75.4	1	1.6	18	29.5	42	68.9
Lt Colonel	6	1.0	-	0.0	2	33.3	4	66.7	-	0.0	1	16.7	5	83.3
9756-D	28	3.2	1	3.6	3	10.7	24	85.7	1	3.6	4	14.3	23	82.1
Captain	12	42.9	-	0.0	1	8.3	11	91.7	-	0.0	2	16.7	10	83.3
Major	14	50.0	-	0.0	2	14.3	12	85.7	1	7.1	2	14.3	11	78.6
Lt Colonel	2	7.1	1	50.0	-	0.0	1	50.0	-	0.0	-	0.0	2	100.0
Other (9746)	2	0.2	-	0.0	-	0.0	2	100.0	-	0.0	2	100.0	-	0.0
Major	2	0.2	-	0.0	-	0.0	2	100.0	-	0.0	2	100.0	-	0.0
Education:														
Associate Degree	12	1.4	1	8.3	4	33.3	7	58.3	-	0.0	5	41.7	7	58.3
Diploma	24	2.7	1	4.2	2	8.3	21	87.5	-	0.0	6	25.0	18	75.0
Bachelor's Degree														
Nursing	659	74.5	70	10.6	177	26.9	412	62.5	73	11.1	202	30.6	384	58.3
Other	39	4.4	3	7.7	4	10.3	32	82.0	2	5.1	8	20.5	29	74.4
Master's Degree														
Nursing	58	6.6	4	6.9	10	17.2	44	75.9	6	10.3	12	20.7	40	69.0
Other	92	10.4	5	5.4	19	20.6	68	73.9	7	7.6	19	20.6	66	71.7
PhD	1	0.1	-	0.0	-	0.0	1	100.0	-	0.0	-	0.0	1	100.0
Career Status:														
Initial Active	293	33.1	34	11.6	83	28.3	176	60.1	50	17.1	99	33.8	144	49.1
Indef Reserve	269	30.4	35	13.0	81	30.1	153	56.9	23	8.5	90	33.5	156	58.0
Regular	314	35.5	14	4.5	51	16.2	249	79.3	13	4.2	62	19.7	239	76.1
Other	9	1.0	1	11.1	1	11.1	7	77.8	2	22.2	1	11.1	6	66.7

Table 11 (Continued)

			Turnover (TO#1)						Turnover w/o Commitment (TO#2)					
	General Sample		High Intent		Middle Intent		Low Intent		High Intent		Middle Intent		Low Intent	
Characteristics	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Time On Station:														
0 - 1	332	37.5	22	6.6	83	25.0	227	68.4	30	9.0	94	28.3	208	62.7
1 - 2	308	34.8	29	9.4	85	27.6	194	63.0	40	13.0	91	29.5	177	57.5
2 - 3	166	18.8	22	13.2	34	20.5	110	66.3	13	7.8	49	29.5	104	62.7
3 - 4	63	7.1	9	14.3	10	15.9	44	69.8	4	6.3	15	23.8	44	69.8
> 4	15	1.6	2	13.3	4	26.7	9	60.0	1	6.7	3	20.0	11	73.3
Means	1.610		1.946		1.542		1.593		1.551		1.599		1.631	
Years in Air Force:														
0 - 1	69	7.8	4	5.8	21	30.4	44	63.8	10	14.5	28	40.6	31	44.9
1.5 - 3	231	26.1	34	14.7	71	30.7	126	54.5	42	18.2	76	32.9	113	48.9
3.5 - 5	137	15.5	12	8.8	35	25.5	90	65.7	11	8.0	40	29.2	86	62.8
6 - 10	223	25.1	22	9.9	52	23.3	149	66.8	18	8.1	56	25.1	149	66.8
11 - 15	116	13.0	1	0.9	19	16.4	96	82.8	2	1.7	31	26.7	83	71.6
16 - 20	85	9.6	5	5.9	15	17.6	65	76.5	2	2.3	18	21.2	65	76.5
21 - 25	22	2.4	5	22.7	3	13.6	14	63.6	2	9.1	3	13.6	17	77.3
> 26	2	0.2	1	50.0	-	0.0	1	50.0	1	50.0	-	0.0	1	50.0
Means	7.318		6.589		6.111		7.868		4.898		6.310		8.174	
Years in Nursing:														
0 - 1	22	2.5	1	4.5	5	22.7	16	72.7	3	13.6	7	31.8	12	54.5
1.5 - 3	179	22.7	23	12.8	52	29.1	104	58.1	32	17.9	53	29.6	94	52.5
3.5 - 5	138	15.6	13	9.4	41	29.7	84	60.9	16	11.6	46	33.3	76	55.1
6 - 10	247	27.8	26	10.5	66	26.7	155	62.8	19	7.7	79	32.0	149	60.3
11 - 15	146	16.4	9	6.2	31	21.2	106	72.6	10	6.8	37	25.3	99	67.8
16 - 20	87	9.9	1	1.1	14	16.1	72	82.8	4	4.6	16	18.4	67	77.0
21 - 25	40	4.5	5	12.5	3	7.5	32	80.0	2	5.0	8	20.0	30	75.0
26 - 30	22	2.5	3	13.6	3	13.6	16	72.7	1	4.5	6	27.3	15	68.2
> 30	4	0.4	3	75.0	1	25.0	-	0.0	1	25.0	-	0.0	3	75.0
Means	9.090		8.917		7.681		9.636		6.750		8.107		9.923	

Primary Wage Earner: Both turnover measures show a higher percentage at risk in the "NO" category.

Facility Assigned: For TO#1, those assigned at the 30-39 bed hospitals have a higher risk, with TO#2, those assigned at the 70-159 bed hospitals have the higher risk.

Location: A higher percentage is seen in those assigned in the United States, versus those overseas.

AFSC: In TO#1, the 9756 AFSC shows a higher risk, while the 9756-D AFSC has little risk. The other AFSCs are closely situated. In TO#2, the 9736 AFSC is the highest risk, followed closely by the 9726 and 9756 AFSCs; the 9716 AFSC shows a significant drop.

Rank: In TO#1, the Colonels have the highest risk, followed by the 1st Lts; while in TO#2, the 1st and 2nd Lts are the highest, and the Colonels drop significantly.

AFSC and Rank:

9716: For both measures, the colonels are the higher risk.

* 9726: In TO#1, Majors and 2nd Lts have the highest risk; while in TO#2, the 1st Lts are the highest, followed closely by Majors and 2nd Lts.

* 9736: In TO#1, 1st Lts have the highest risk, followed closely by Majors; and in TO#2, it is the Captains at higher risk again followed by the Majors.

[* Note: These results may not be significant due to the overall low number of n's within both TO#1 and TO#2.]

9756: In TO#1, the 1st Lts have the highest risk; while in TO#2 it is the 1st and 2nd Lts.

* 9756-D: The percentage indicates that the Lt Colonels have the highest risk.

Education: Both measures indicate a high percentage risk for those having a BSN, and in TO#2, there is a significant increase in those having a MSN.

Career Status: In TO#1, those in Indefinite Reserve Status have a higher intent, followed by the Initial Active Duty and Other categories. In TO#2, the higher risk is in the Other category, followed by Initial Active Duty.

Time on Station: In TO#1, the significance is as the time on station increases, so does the risk for turnover. This is in apparent contrast with TO#2, which suggests that as the time on station goes up, the intent goes down.

Years in Air Force: In TO#1, it is significant in that the highest risk is seen for those over 20 years, followed closely by the 1.5 - 3 year group. In TO#2, the lower groups, 1.5 - 3 and 0 - 1 have the highest risk, and the risk drops off for the later years.

Years in Nursing: In TO#1, it appears that the sample is trimodal with the 1.5 - 3, 6 - 10, and > 20 year groups having the highest risk. In contrast, in TO#2, those under 5 years have the highest risk.

[* Note: These results may not be significant due to the overall low number of n's within both TO#1 and TO#2.]

It is also significant that in Years in Air Force, of the 84 in the sample for TO#1, 72 (85.7 percent) have fewer than 10 years, and of the 88 in TO#2, 81 (92.1 percent) have fewer than 10 years. In comparison to Years in Nursing, the same percentages (85.7 percent for TO#1 and 92 percent for TO#2) equate to the number under 15 years, suggesting that those nurses with intent to leave have more years nursing experience than years in Air Force.

Satisfactions

Research Question #2: What are the levels of satisfactions in the study sample?

Six measures of satisfactions are used in this study, and are reached through combining the 33 questions in Section 8. Although the section Alpha Coefficient is high (.95381), an overall measure was not employed; instead, the factor groupings used by Seybolt (1978; 1983) were used. Instead, two general satisfaction measures were employed: nursing in general and the Air Force. All measures were done on a Likert type scale, from 1 to 7, with 1 indicating strong dissatisfaction, 4 indicating neither dissatisfied or satisfied, and 7 indicating strong satisfaction. The average of the questions within each grouping is meant to determine levels of satisfaction. A low response indicates dissatisfaction, while a high response would indicate satisfaction.

Satisfaction of Air Force: This measure was accomplished by combining questions that looked at the respondents stated satisfactions with the Air Force in general (Q5) and as a career (Q30) (Alpha = .89537).

Satisfaction of Nursing: This measure was accomplished by combining questions that looked at the respondents stated satisfactions with nursing in general (Q31) and also as a career (Q16) (Alpha = .93411).

Intrinsic Satisfactions: This measure combines the specific intrinsic factors: Esteem, questions 6 and 13; Autonomy, questions 1, 4, and 20; Self- Actualization, questions 9, 12, and 18; the job in general, question 28; and the career satisfaction, question 29 (Alpha = .93362).

Extrinsic Satisfactions: This measure was accomplished by combining specific extrinsic factors: Security, questions 3 and 15; Tension, question 17; Amount of work, question 19; Promotions, question 21; Pay, question 14; the work, question 23; How they felt after work, Mentally, question 25, and Physically, question 26; Facility size, question 32; Facility location, question 8; and the Time on station, question 33 (Alpha = .83261).

Interpersonal Satisfactions: This measure combines those factors that contribute to the overall respondents satisfaction with the interpersonal aspects of their job: social, questions 11 and 22; their Supervisor, question 24, and Feedback, question 27 (Alpha = .70302).

Growth Satisfactions: This measure combines questions 2, 4, 7, 10, 12, and 18, which identify the respondent's satisfaction with their opportunities to grow through stimulating and challenging work, using independent thought and action, learning new things, being creative and imaginative, having the opportunity for personal growth and development, and the feeling of overall accomplishment (Alpha = .91437).

Mobility: Although not a general measure of satisfaction, the factor of mobility is included as it relates to the moderation of the impact of satisfactions on turnover. This measure is obtained by combining 4 questions from Section 7. These questions deal with the amount of difficulty in leaving (Q2), how the respondent rates the labor market (Q11), the ease in finding a job (Q18), and the ease in finding a job as good as the one the respondent's have (Q23) (Alpha = .61909).

The importance of each individual question on the general measure is listed in Table 12.

For descriptive purposes, arbitrary low, middle and high satisfaction levels were determined. The low level includes the responses from 1 to 2.5. The middle level (respondents who report they are neither satisfied or dissatisfied) includes the responses over 2.5 but less than 5.5. The high level are the responses from 5.5 to seven. These measures are given in Table 13.

Table 12

Importance of Individual Variables on Satisfactions

Satisfaction with Air Force

Q#	Variable	Correlation
30	Air Force as a Career	.95527
5	Air Force in General	.94817

Satisfaction with Nursing

Q#	Variable	Correlation
16	Nursing as a Career	.96884
31	Nursing in General	.96824

Intrinsic Satisfactions

Q#	Variable	Correlation
13	Self Esteem	.86582
18	Worthwhile Accomplishments	.84695
28	Job in General	.84252
9	Self Fulfillment	.82738
12	Growth and Development	.81035
29	Way Career is Going	.78146
4	Use Independent Thought & Action	.77631
20	Opportunity to Set Goals	.74467
1	Determining Methods & Procedures	.71151
6	Prestige in the Organization	.70909

Extrinsic Satisfactions

Q#	Variable	Correlation
25	Feel After Work - Mentally	.74517
26	Feel After Work - Physically	.70715
19	Amount of Work	.69937
23	Work in General	.64838
17	Tension and Pressure	.62472
32	Facility Size	.60849
33	Length of Time on Station	.59289
21	Promotions	.56890
8	Geographic Area of Assignment	.53491
3	Feeling of Security	.52441
14	Level of Pay	.48845
15	Threat of Change	.34529

Table 12 (Continued)

Interpersonal Satisfactions

Q#	Variable	Correlation
27	Feedback	.81817
24	Immediate Supervisor	.79901
11	Conversation with Others	.69496
22	Give Help to Others	.59016

Growth Satisfactions

Q#	Variable	Correlation
12	Opportunity for Growth & Development	.86041
2	Amount of Stimulating & Challenging Work	.85004
7	Opportunity to Learn New Things	.84717
10	Opportunity to be Creative	.84616
18	Worthwhile Accomplishments	.81406
4	Opportunity for Indepentent Thought	.81189

Mobility

Q#	Variable	Correlation
23	Ease in finding a job as good	.76675
2	Difficulty in leaving the organization	.70473
11	Rating of Labor Market	.65902
18	Ease in finding a job	.64432

Table 13

General Levels of Satisfactions

Satisfaction	N	High	%	Middle	%	Low	%	Mean
Air Force	883	502	56.9	298	33.7	83	9.4	5.066
Nursing	884	441	49.9	329	37.2	114	12.9	4.829
Intrinsic	882	297	33.7	541	61.3	44	5.0	4.766
Extrinsic	871	142	16.3	709	81.4	20	2.3	4.480
Interpersonal	884	344	38.9	512	57.9	28	3.2	4.906
Growth	882	335	38.0	494	56.0	53	6.0	4.826
Mobility	880	392	44.5	476	54.1	12	1.4	5.166

In general, the respondents appear to be satisfied, although not highly satisfied. The mean scores indicate that satisfaction with Air Force is highest, followed by interpersonal, nursing, growth, intrinsic, and last, the extrinsic satisfactions. Comparison of the satisfaction level percent scores indicate that with Air Force satisfaction, most are highly satisfied; however, some are also highly dissatisfied. With nursing satisfaction, one half are highly satisfied; however, this satisfaction also has the highest percentage of dissatisfied nurses. The other measures, intrinsic, extrinsic, interpersonal, and growth seem to have more of a shift toward the middle level, indicating that the majority of the nurses are neither satisfied or dissatisfied with these measures (those not in the middle level report more satisfaction than dissatisfaction).

Turnover and Satisfaction

When the mean scores for the turnover measures and the six satisfactions are compared, by AFSC, it appears that AFSC 9756-D has the lowest intent for turnover, and corresponding high levels of satisfaction. With AFSC 9716, the same is apparent, and in addition, it also appears that the levels of satisfactions are the highest. The other AFSCs are close in their levels of turnover; however, their levels of satisfaction vary (Table 14).

Table 14

Turnover and Satisfaction
AFSC and Rank
Mean Scores

Characteristic	Turnover Intent	Turnover w/o Commit	Satisfactions Air Force	Satisfactions Nursing	Satisfactions Intrinsic	Satisfactions Extrinsic	Satisfactions Interpersonal	Satisfactions Growth	Other Mobility
General	2.56	2.73	5.07	4.83	4.76	4.48	4.91	4.83	5.16
AFSC:									
9716	2.06	2.05	5.96	5.28	5.68	4.99	5.46	5.69	4.66
9726	2.36	2.80	5.15	4.69	4.80	4.67	5.21	4.94	5.30
9736	2.58	2.78	4.92	4.69	4.79	4.53	4.69	4.80	5.52
9756	2.68	2.85	4.92	4.80	4.60	4.37	4.81	4.66	5.20
9756-D	1.91	2.07	5.48	4.51	5.12	4.62	5.06	5.32	4.56
Other (9746)	1.75	3.50	5.00	4.50	4.90	4.25	4.62	4.50	6.25
Rank:									
2nd Lt	2.50	3.14	4.89	5.26	4.67	4.39	4.89	4.78	5.44
1st Lt	3.07	3.13	4.70	4.81	4.51	4.42	4.78	4.54	5.37
Captain	2.59	2.61	4.95	4.56	4.65	4.41	4.81	4.70	5.12
Major	1.94	2.24	5.50	4.56	4.89	4.48	4.91	4.97	4.84
Lt Colonel	2.02	1.95	6.03	5.38	5.84	5.10	5.64	5.92	4.78
Colonel	2.82	2.15	6.28	5.54	5.90	5.25	5.66	5.92	4.57
AFSC and Rank:									
9716									
Major	1.73	2.07	5.61	4.92	5.11	4.65	4.96	5.09	4.80
Lt Colonel	1.89	1.95	6.09	5.44	6.04	5.14	5.80	6.09	4.57
Colonel	2.82	2.15	6.28	5.54	5.93	5.25	5.66	5.92	4.57
9726									
2nd Lt	2.57	3.19	5.07	5.53	5.04	4.72	5.38	5.16	5.44
1st Lt	2.60	3.15	5.00	4.20	4.82	4.68	5.42	4.95	5.38
Captain	2.06	2.46	5.18	4.68	4.90	4.78	5.23	5.04	5.30
Major	2.83	2.91	5.25	3.16	3.38	3.98	4.58	4.02	4.87
Lt Colonel	2.00	2.50	5.75	6.25	4.50	4.75	4.75	4.91	5.37
9736									
2nd Lt	2.34	3.03	4.93	5.12	4.80	4.62	4.84	4.88	5.78
1st Lt	2.93	2.66	4.66	5.03	4.72	4.62	4.76	4.84	5.63
Captain	2.96	3.08	4.73	4.36	4.66	4.41	4.60	4.57	5.70
Major	1.92	2.18	5.28	4.65	4.96	4.52	4.60	4.99	4.84
Lt Colonel	1.16	1.80	6.33	5.50	5.86	5.36	5.41	5.88	5.41
9756									
2nd Lt	2.52	3.15	4.87	5.25	4.62	4.34	4.85	4.73	5.41
1st Lt	3.11	3.17	4.68	4.83	4.48	4.39	4.74	4.49	5.35
Captain	2.64	2.59	4.92	4.57	4.60	4.37	4.78	4.65	5.03
Major	1.99	2.24	5.59	4.49	4.78	4.33	5.00	4.93	4.90
Lt Colonel	2.41	1.83	5.75	5.41	5.38	4.98	5.16	5.44	5.16
9756-D									
Captain	1.58	1.91	5.66	4.79	5.15	4.40	5.04	5.40	4.47
Major	1.82	2.21	5.32	4.50	5.12	4.85	5.03	5.26	4.42
Lt Colonel	4.50	2.00	5.50	3.00	4.95	4.00	5.37	5.33	6.00
Other (9746)									
Major	1.75	3.50	5.00	4.50	4.90	4.25	4.62	4.50	6.25

For the lower ranks, it appears that a relationship exists between the mean scores and turnover intent, in that when the level of turnover goes up or down, a corresponding inverse is seen in the satisfaction; however, with the senior ranks, this does not appear to be the case. It is also apparent that with the satisfactions, the levels start out high with the 2nd Lts, drop with the 1st Lts and Captains, and then begin to rise with Majors, Lt Colonels, and Colonels.

With AFSC and rank the 9716 AFSC shows that as the turnover increases with rank, so does the corresponding level of satisfaction. The other AFSCs show what appears to be a weak inverse relationship between turnover and satisfaction.

This relationship is seen again in Table 15 when the levels of turnover are compared to the levels of satisfactions. In general, it appears that the turnover intent is high, and the satisfaction levels have a high "low" percentage. This is also the case for the low intent, except that the satisfaction levels have a high "high" percentage.

This same inverse relationship between turnover and satisfaction, over years in Air Force, is seen when the satisfaction mean scores are graphed, with the turnover measures (TO#1 and TO#2) mean scores.

Table 15

Comparison of Turnover to Satisfactions

			Turnover (TO#1)								Turnover w/o Commitment (TO#2)					
	General Sample		High Intent		Middle Intent		Low Intent		High Intent		Middle Intent		Low Intent	
Satisfactions	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Totals:	885	100.0	84	9.6	216	24.4	585	66.0	88	10.0	252	28.6	545	61.4
Air Force:														
Low	83	9.4	37	44.6	34	41.0	12	14.4	49	59.0	29	34.9	5	6.1
Mid	298	33.7	32	10.7	129	43.3	137	46.0	29	9.7	158	53.0	111	37.3
High	502	56.9	15	3.0	531	10.6	434	86.4	10	2.0	65	12.9	427	85.1
Mean	5.066		3.315		4.178		5.647		2.841		4.339		5.763	
Nursing:														
Low	114	12.9	22	19.3	45	39.5	47	41.2	23	20.2	56	49.1	35	30.7
Mid	329	37.2	29	8.8	88	26.8	212	64.4	29	8.8	110	33.4	190	57.8
High	441	49.9	33	7.5	83	18.8	325	73.7	36	8.2	86	19.5	319	72.3
Mean	4.829		4.381		4.301		5.088		4.222		4.264		5.188	
Intrinsic:														
Low	44	5.0	14	31.8	18	40.9	12	27.3	17	38.6	18	40.9	9	20.5
Mid	541	61.3	59	10.9	161	29.8	321	59.3	67	12.4	189	34.9	285	52.7
High	297	33.7	11	3.7	37	12.5	249	83.8	4	1.4	44	14.8	249	83.8
Mean	4.766		3.900		4.229		5.090		3.620		4.294		5.170	
Extrinsic:														
Low	20	2.3	6	30.0	7	35.0	7	35.0	7	35.0	9	45.0	4	20.0
Mid	709	81.4	70	9.9	192	27.1	447	63.0	76	10.7	224	31.6	409	57.7
High	142	16.3	7	4.9	12	8.5	123	86.6	2	1.4	12	8.5	128	90.1
Mean	4.480		4.040		4.047		4.707		3.795		4.088		4.771	
Interpersonal:														
Low	28	3.2	6	21.4	12	42.9	10	35.7	9	32.1	13	46.4	6	21.4
Mid	512	57.9	62	12.1	147	28.7	303	59.2	64	12.5	175	34.2	273	53.3
High	344	38.9	16	4.6	57	16.6	271	78.8	15	4.4	64	18.6	265	77.0
Mean	4.906		4.330		4.539		5.124		4.122		4.578		5.184	
Growth:														
Low	53	6.0	13	24.5	25	47.2	15	28.3	18	34.0	21	39.6	14	26.4
Mid	494	56.0	57	11.5	147	29.8	290	58.7	62	12.6	172	34.8	260	52.6
High	335	38.0	14	14.2	44	13.1	277	82.7	8	2.4	58	17.3	269	80.3
Mean	4.826		3.992		4.307		5.139		3.754		4.376		5.207	
Mobility:														
Low	12	1.4	0	0.0	0	0.0	12	100.0	0	0.0	0	0.0	12	100.0
Mid	476	54.1	26	5.5	83	17.4	367	77.1	18	3.8	105	22.1	353	74.2
High	392	44.5	56	14.3	132	33.7	204	52.0	70	17.9	144	36.7	178	45.4
Mean	5.166		5.796		5.541		4.939		6.134		5.484		4.863	

Air Force Satisfaction: Pearson Correlation shows a fairly strong negative relationship between the level of satisfaction and both turnover measures (TO#1 = -.64525; TO#2 = -.71871). In general, throughout the years, the graph gives the appearance of an upward slope for the satisfaction, and downward slopes for the turnovers. The turnover measures show a higher level for TO#2 throughout the first 20 years, and is replaced by TO#1 for the later years, suggesting that the commitment has more effect in the earlier years. Rises/falls in the satisfaction mean, with corresponding falls/rises in the turnovers are seen. An exception to this is seen in the later years, where satisfaction and turnover both rise. In addition, certain high risk year groups can be identified, i.e., the 1 - 3, 4, 5, 9, 12, and over 21 (Figure 12).

Nursing Satisfaction: Pearson Correlation shows a weak negative relationship between the level of satisfaction and both turnover measures (TO#1 = -.23745; TO#2 = -.28812). In general, throughout the years, the graph shows the mean satisfaction starting high, dropping to a leveling plateau through the middle years, and rising in the later years. Some relating peaks and valleys are seen in the early years and again in the later years, however, the relationship does not appear to be as strong (Figure 13).

Intrinsic Satisfaction: Pearson Correlation shows a fair negative relationship between this satisfaction and

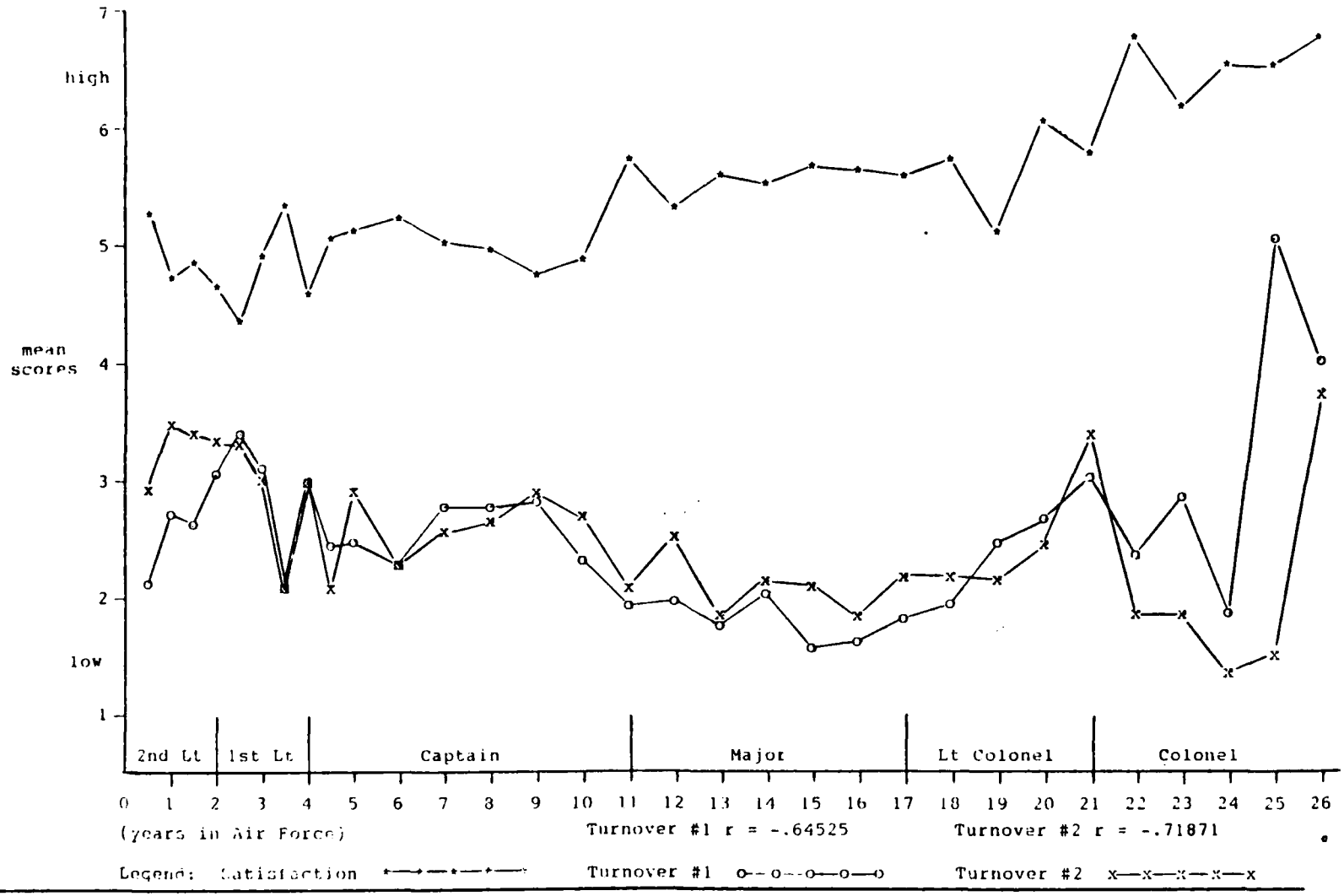

Figure 12. Visual comparison of Air Force Satisfaction mean scores to Turnover Intentions; by years in Air Force.

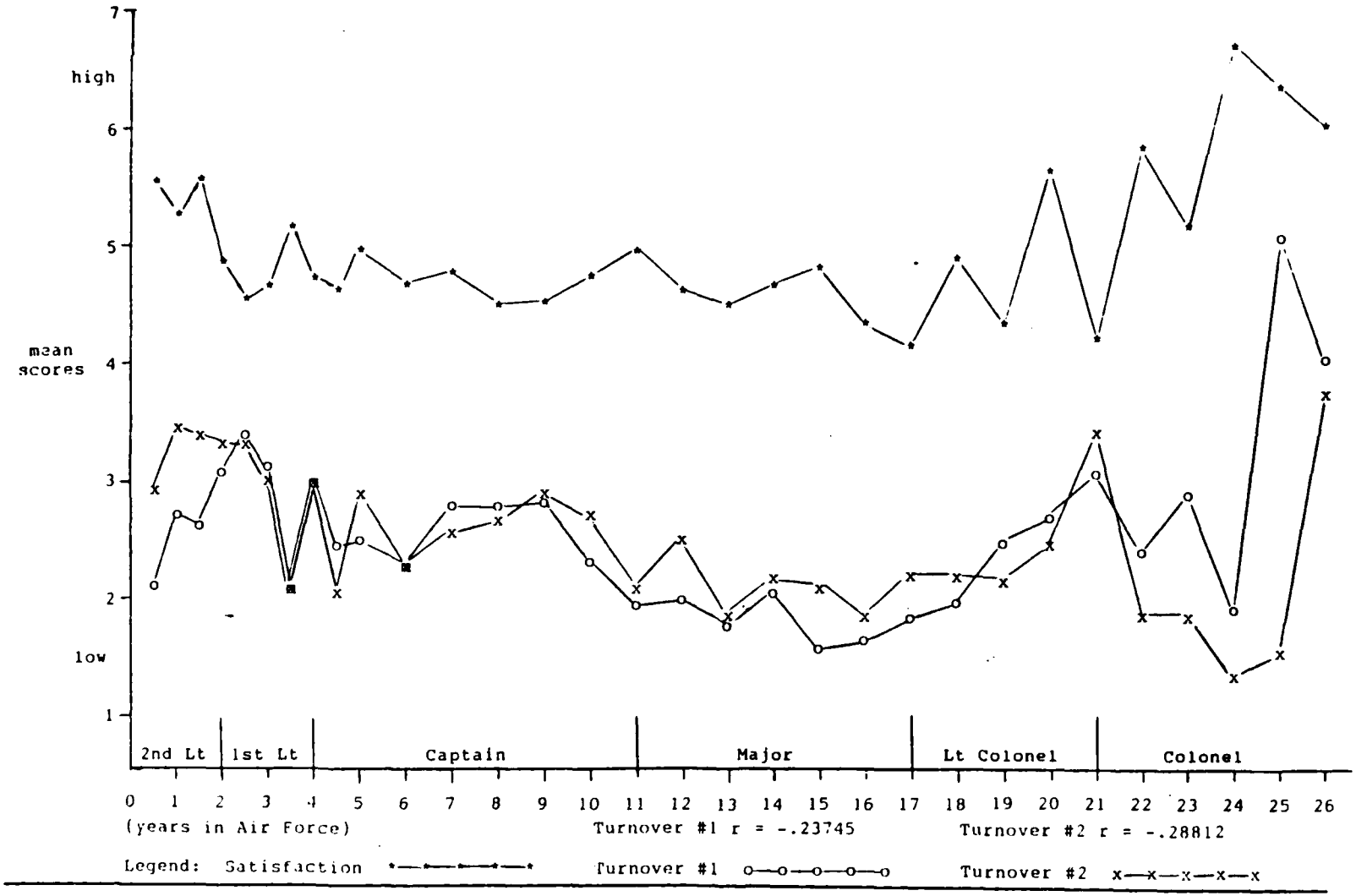

Figure 13. Visual comparison of Nursing Satisfaction mean scores to Turnover Intentions; by years in Air Force.

both turnover measures (TO#1 = -.43404; TO#2 = -.50293). In general, the level of satisfaction shows a slight upward slope throughout the years. Fewer related rises and falls in the means were apparent, except in the later years (Figure 14).

Extrinsic Satisfaction: Pearson Correlation shows a weak negative relationship between this satisfaction and both turnover measures (TO#1 = -.35025; TO#2 = -.42899). In general, the level of satisfaction shows a flat plateau until the later years, where it fluctuates, with a slight rise. Little relating peaks and valleys are seen except at the 4 year point, and again in the later years (Figure 15).

Interpersonal Satisfaction: Pearson Correlation shows a fairly weak negative relationship between this satisfaction and both turnover measures (TO#1 = -.32149; TO#2 = -.37935). In general, the level of satisfaction shows a slight upward slope, with few relating peaks and valleys. Some of this relationship follows the pattern of when one rises or falls, the other follows in the same directions (Figure 16).

Growth Satisfaction: Pearson Correlation shows a fair negative relationship between this satisfaction and both turnover measures (TO#1 = -.40265; TO#2 = -.45316). In general, throughout the years, the level of satisfaction shows a slight upward slope, and has some relating peaks and valleys in the early years and again in the later

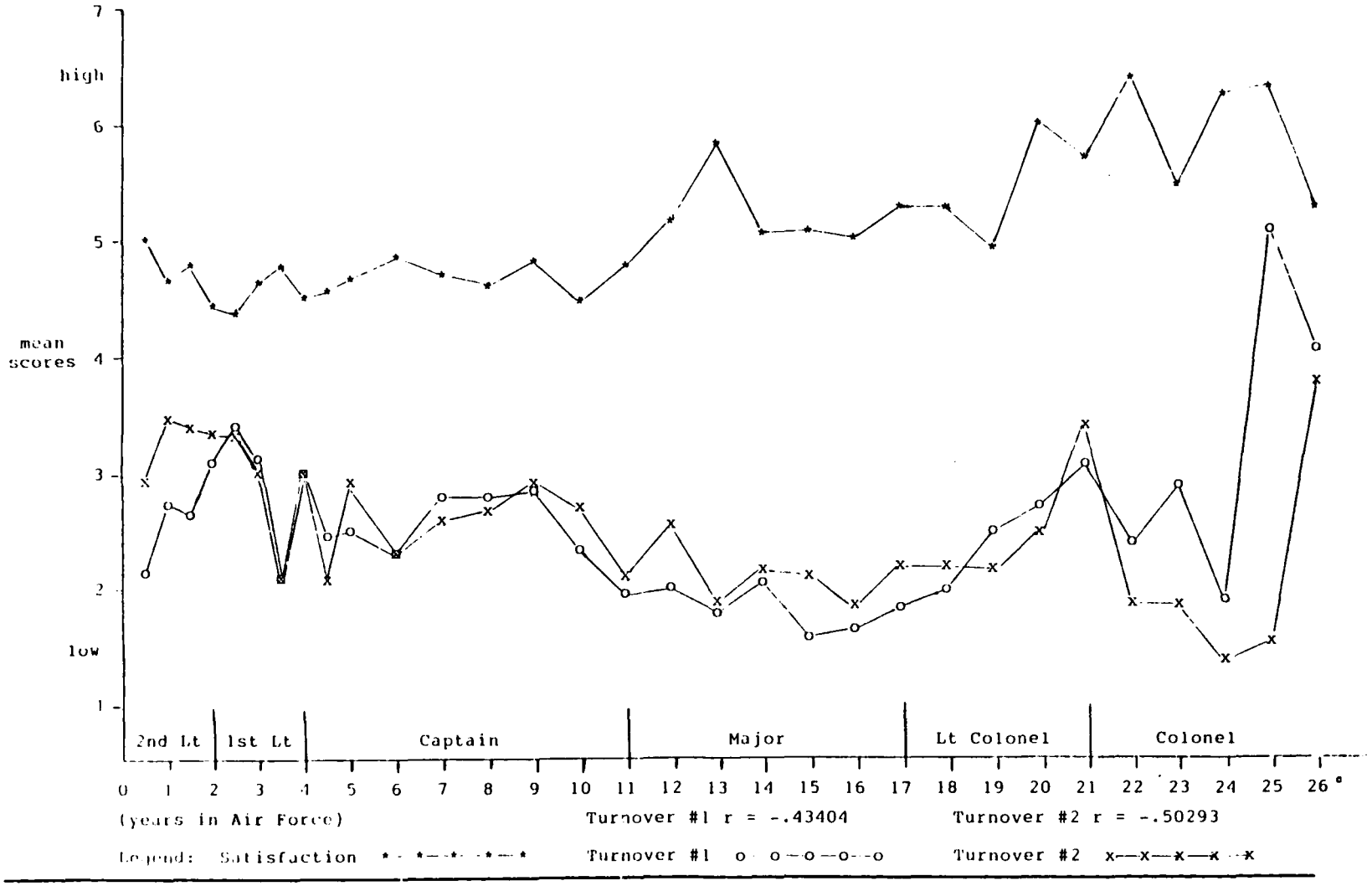

Figure 14. Visual comparison of Intrinsic Satisfaction mean scores to Turnover Intentions; by years in Air Force.

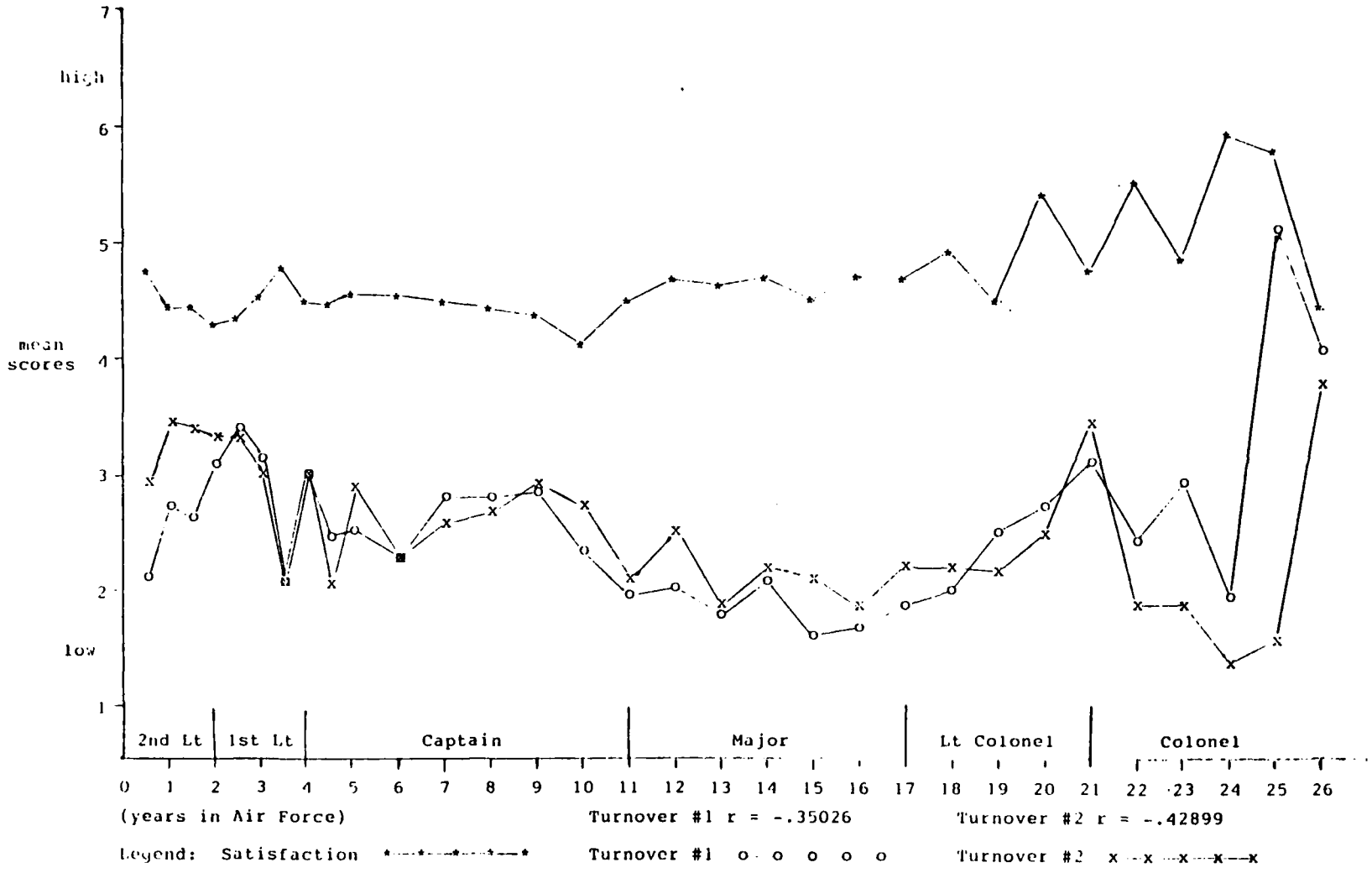

Figure 15. Visual comparison of Extrinsic Satisfaction mean scores to Turnover Intentions; by years in Air Force.

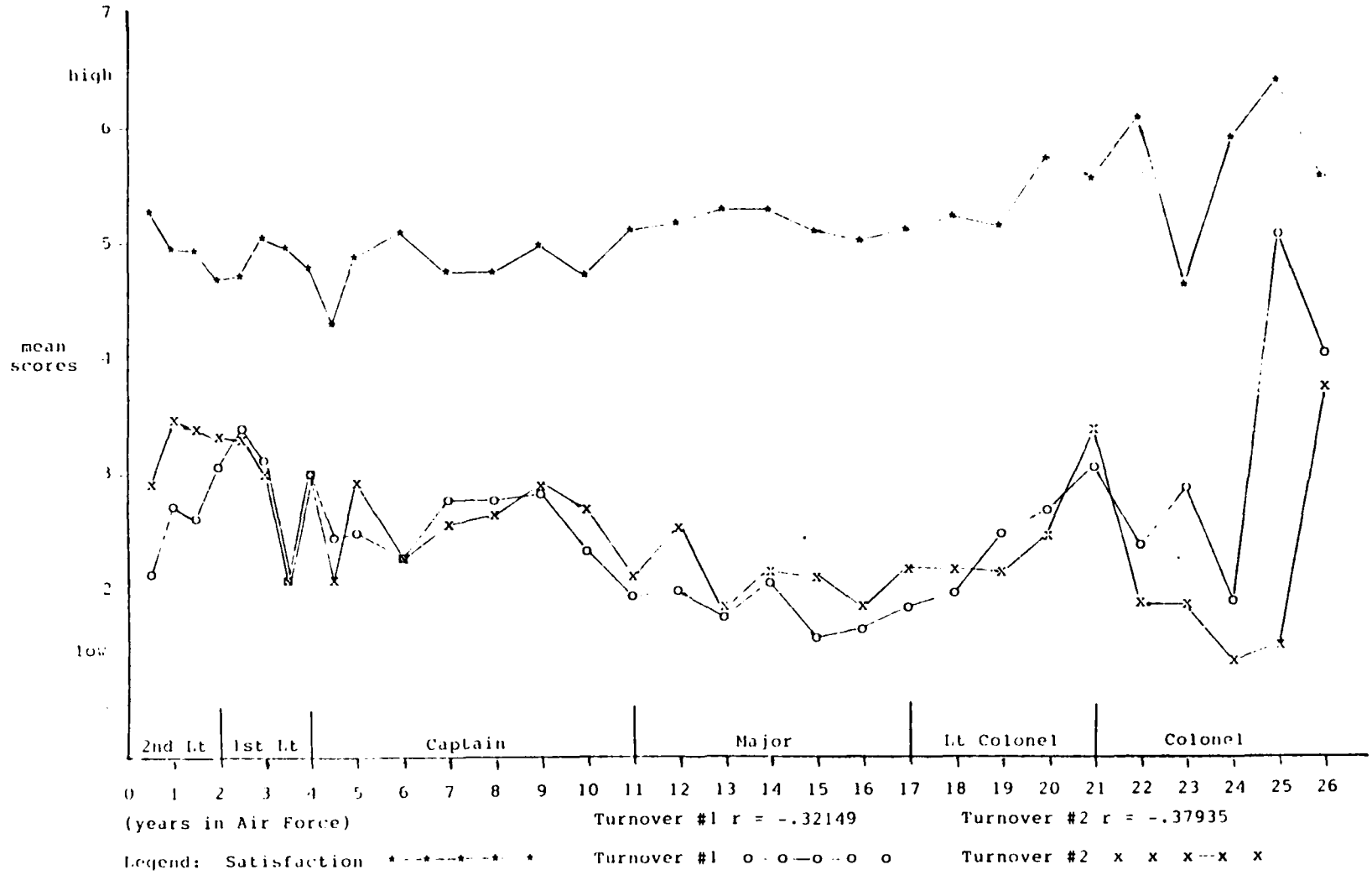

Figure 16. Visual comparison of Interpersonal Satisfaction mean scores to Turnover Intentions; by years in Air Force.

years. These relationships appear more with TO#1 than TO#2 (Figure 17).

Mobility: Pearson Correlation shows a fair relationship between mobility and both turnover measures (TO#1 = .33525; TO#2 = .40074). In general, throughout the years, a slight downward slope is seen, suggesting that as one progresses in their career, the perceptions of mobility decrease. In addition, some relationship is noted between the peaks and valleys, in that when one goes up or down, the other follows in the same direction (Figure 18).

Impact of Satisfaction on Turnover

Research Question #3: What is the impact of the satisfactions on the levels of turnover; and how does the perceived mobility moderate this impact?

Multiple regression was used to determine the impact of the different measures of satisfaction on each turnover measure. When the measures are combined, they serve to explain 42 percent of the variance between the satisfactions and TO#1. Close examination of the regression shows that satisfaction with Air Force carries 41.5 percent of the weight of the satisfactions, and that the other measures offer little if any additional weight (Table 16).

When the same six satisfaction measures are regressed on TO#2, they explain close to 52 percent of the variance. As above, Satisfaction with Air Force carries almost all of

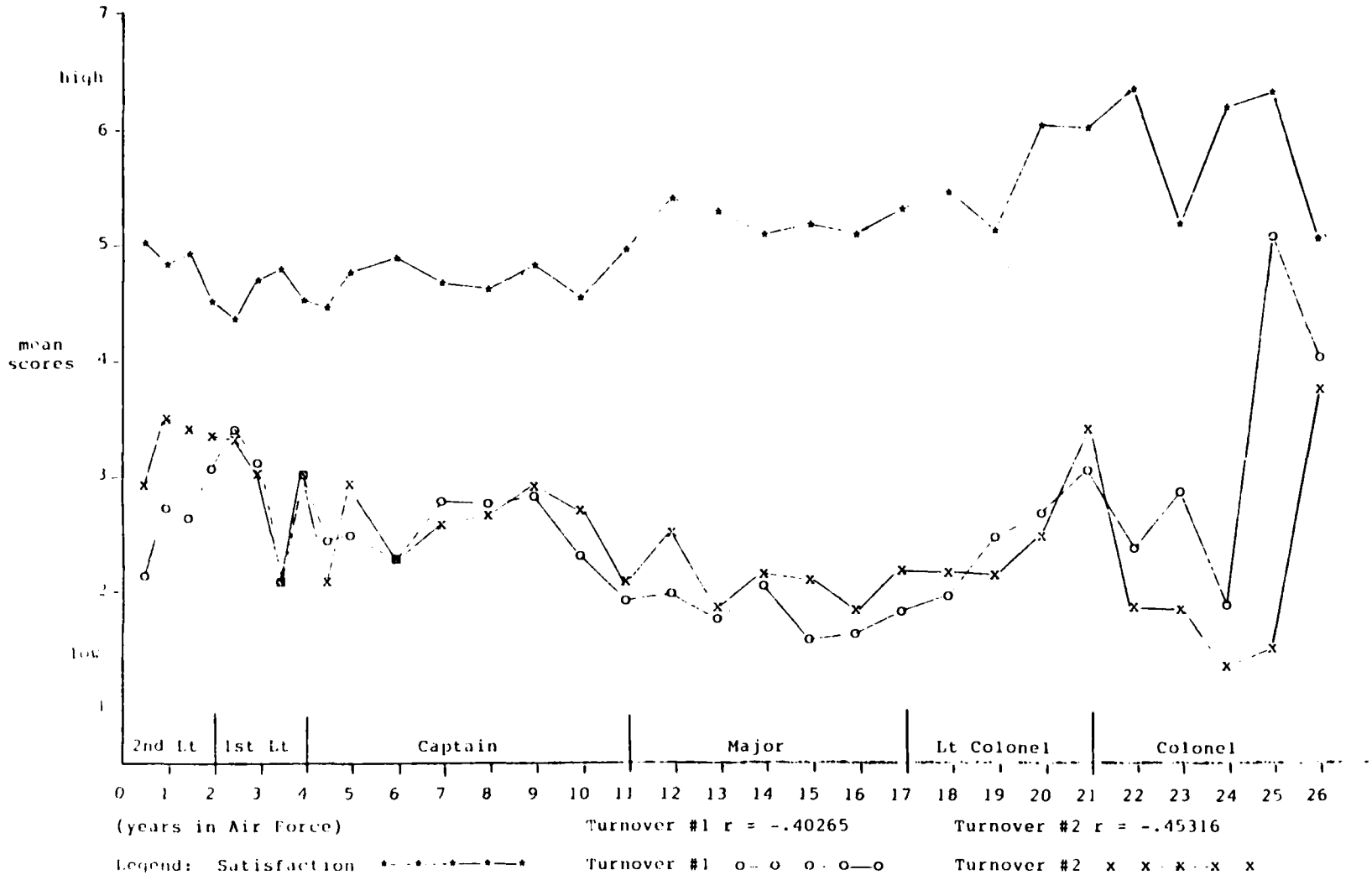

Figure 17. Visual comparison of Growth Satisfaction mean scores to Turnover Intentions; by years in Air Force.

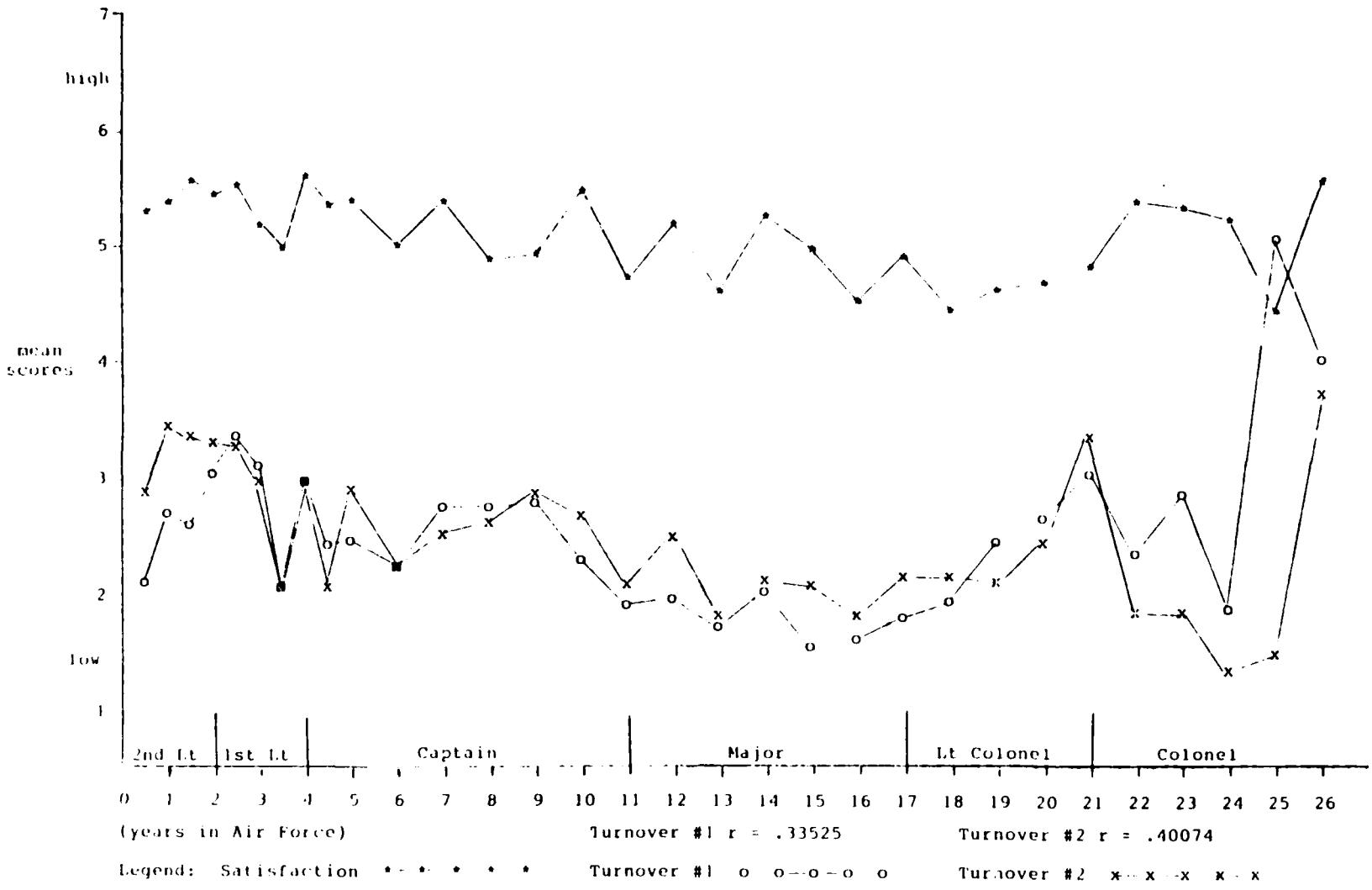

Figure 18. Visual comparison of Perceived Mobility mean scores to Turnover Intentions; by years in Air Force.

Table 16

Multiple Regressions, Satisfactions on Turnover

TO#1

	Multiple R	R Square	RSQ Change	Simple R	BETA	
Air Force	.64525	.41635	.41635	-.64525	-.64975	
Growth	.64576	.41700	.00065	-.40265	-.08732	*
Extrinsic	.64741	.41914	.00213	-.35026	.05785	*
Nursing	.64793	.41981	.00067	-.23745	.02875	*
Intrinsic	.64795	.41984	.00003	-.43404	.01863	*
Interpersonal	.64795	.41984	.00000	-.32149	-.00189	*

* Not Significant at .01
Order indicates weighting

TO#2

	Multiple R	R Square	RSQ Change	Simple R	BETA	
Air Force	.71871	.51654	.51654	-.71871	-.69008	
Intrinsic	.71966	.51792	.00138	-.50293	-.04898	*
Nursing	.71986	.51820	.00028	-.28812	.01891	*
Interpersonal	.71990	.51826	.00006	-.37935	-.01327	*
Extrinsic	.71991	.51827	.00001	-.42899	.00596	*
Growth	.71991	.51827	.00000	-.45316	-.00142	*

* Not Significant at .01
Order indicates weighting

the weight (51.6 percent) and the other measures offer little if any additional weight (Table 16).

Because of the overly strong impact of Satisfaction with Air Force, additional regressions were applied, excluding it and Satisfaction with Nursing. When the four remaining measures were combined, regression with TO#1 indicated that Intrinsic Satisfaction carried the most weight and served to explain only 18.8 percent of the variance between the variables. The other three measures offered little if any weight to the equation (Table 17).

When the same satisfactions were applied to TO#2, regression again indicated that Intrinsic Satisfaction carried the most weight (25.3 percent), and although the order of the other measures changes, they offer little additional weight to the equation (Table 17).

With the addition of Mobility to the equation, regressions of the satisfactions on TO#1 indicate that it only adds a little more than 1 percent to the explanation of variance. When the same is applied to TO#2, mobility only serves to explain 2.3 percent of the variance between satisfactions and turnover, indicating a slightly larger impact than on TO#1. This suggests that the aspects of mobility have little impact on the individual's intent to leave (Table 18).

Table 17

Multiple Regressions, Satisfactions on Turnover, With More Specific Measures

TO#1

	Multiple R	R Square	RSQ Change	Simple R	BETA	
Intrinsic	.43404	.18839	.18839	-.43404	-.45724	
Interpersonal	.43541	.18958	.00118	-.32149	.05830	*
Extrinsic	.43580	.18992	.00034	-.35026	-.02980	*
Growth	.43580	.18992	.00000	-.40265	.00059	*

* Not Significant at .01
Order indicates weighting

TO#2

	Multiple R	R Square	RSQ Change	Simple R	BETA	
Intrinsic	.50293	.25294	.25294	-.50293	-.56131	
Growth	.50458	.25460	.00166	-.45316	.09456	*
Extrinsic	.50729	.25735	.00275	-.42899	-.08888	
Growth	.50824	.25831	.00096	-.37925	-.05079	*

* Not Significant at .01
Order indicates weighting

Table 18

Multiple Regressions, Satisfactions on Turnover, With Mobility

TO#1

	Multiple R	R Square	RSQ Change	Simple R	BETA	
Air Force	.64525	.41635	.41635	-.64525	-.64975	
Mobility	.65465	.42857	.01222	.33525	.11860	
Growth	.65477	.42873	.00016	-.40265	-.07508	*
Extrinsic	.65688	.43149	.00276	-.35026	.07103	
Intrinsic	.65692	.43154	.00005	-.43404	.01781	*
Nursing	.65698	.43163	.00008	-.23745	.01075	*
Interpersonal	.65698	.43163	.00000	-.32149	-.00118	*

* Not Significant at .01
Order indicates weighting

TO#2

	Multiple R	R Square	RSQ Change	Simple R	BETA	
Air Force	.71871	.51654	.51654	-.71871	-.69008	
Mobility	.73469	.53977	.02323	.40074	.16275	
Intrinsic	.73499	.54021	.00044	-.50293	-.05011	*
Extrinsic	.73511	.54039	.00018	-.42899	.02406	*
Growth	.73513	.54042	.00003	-.45316	.01537	*
Interpersonal	.73515	.54045	.00003	-.37935	-.00905	*
Nursing	.73517	.54047	.00002	-.28812	-.00580	*

* Not Significant at .01
Order indicates weighting

Work Role Design on the Satisfactions

Research Question #4: What is the impact of Work Role Design on the levels of Satisfactions?

The major components of Work Role Design were regressed on each of the measures of satisfaction to determine the various impacts. These components were from the job, i.e., the motivating potential score (MPS) which consists of skill variety, task identity, task significance, autonomy, and job feedback; from the different feedbacks, supervisor positive and negative, coworker positive and negative, and client positive and negative; and from the consistency and equity of the organizational policies. Also, the separate components of Work Role Design were regressed on the satisfactions they closely represented. The mean scores of the variables are also given (Table 19).

Air Force Satisfaction: The regression indicates that the consistency and equity of organizational policies can explain 14.7 percent of the variance in this satisfaction, and the MPS explains an additional 7.5 percent. Combined, these two variables explain 22.3 percent. The feedbacks combined only explain 1.9 percent of the variance. All variables combined serve to explain 24.2 percent of the total variance.

This Job Satisfaction: The regression, [illegible], indicates that organizational policies can explain [illegible] percent of the variance and the MPS adds 4.6 to the

Table 19

Multiple Regressions, Work Role Design on Satisfactions

Air Force

	Multiple R	R Square	RSQ Change	Simple R	BETA	
Organizational Policies	.38396	.14742	.14742	.38396	.26423	
Motivating Potential Score	.47219	.22296	.07554	.38933	.25209	
Feedback CoWorker Positive	.48666	.23684	.01387	.21106	.11169	
Feedback Supervisor Positive	.49051	.24060	.00376	.23963	.06875	
Feedback Client Negative	.49121	.24128	.00069	-.06983	-.02449	*
Feedback Client Positive	.49151	.24159	.00030	.04074	-.01826	*
Feedback Supervisor Negative	.49158	.24165	.00007	-.08830	-.01181	*
Feedback CoWorker Negative	.49162	.24169	.00004	.00482	.00798	*

* Not Significant at .01
Order indicates weighting, by BETA score

Nursing

	Multiple R	R Square	RSQ Change	Simple R	BETA	
Organizational Policies	.33071	.10937	.10937	.33071	.22952	
Motivating Potential Score	.39412	.15533	.04596	.31433	.18712	
Feedback Client Positive	.41773	.17450	.01917	.15077	.10455	
Feedback CoWorker Positive	.43006	.18495	.01045	.22180	.09544	
Feedback Client Negative	.43665	.19067	.00572	-.10282	-.08349	
Feedback Supervisor Positive	.43946	.19313	.00246	.20685	.05493	
Feedback CoWorker Negative	.43998	.19358	.00046	.01821	.03262	*
Feedback Supervisor Negative	.44038	.19393	.00035	-.07928	.02192	*

* Not Significant at .01
Order indicates weighting, by BETA score

Intrinsic

	Multiple R	R Square	RSQ Change	Simple R	BETA	
Motivating Potential Score	.64280	.41319	.41309	.64280	.47432	
Organizational Policies	.70941	.50326	.09007	.50137	.27815	
Feedback Supervisor Positive	.73158	.53521	.03195	.40034	.16941	
Feedback CoWorker Positive	.73634	.54220	.00699	.27596	.10053	
Feedback Client Negative	.73793	.54455	.00235	-.11179	-.04402	
Feedback Client Positive	.73830	.54509	.00054	.04257	-.02448	*
Feedback Supervisor Negative	.73836	.54518	.00009	-.12937	-.01078	*
Feedback CoWorker Negative	.73836	.54518	.00000	-.00539	.00069	*

* Not Significant at .01
Order indicates weighting, by BETA score

Table 19 (Continued)

Extrinsic

	Multiple R	R Square	RSQ Change	Simple R	BETA	
Motivating Potential Score	.49647	.24648	.24648	.49647	.34041	
Organizational Policies	.59438	.35329	.10681	.47656	.32170	
Feedback Supervisor Positive	.60134	.36161	.00832	.28246	.08675	
Feedback Client Negative	.60430	.36518	.00357	-.12116	-.06120	
Feedback CoWorker Positive	.60720	.36869	.00351	.19739	.05535	
Feedback Supervisor Negative	.60758	.36915	.00046	-.13390	-.03040	*
Feedback CoWorker Negative	.60774	.36935	.00020	-.01991	.01679	*
Feedback Client Positive	.60782	.36945	.00010	.05031	.01108	*

* Not Significant at .01
Order indicates weighting, by BETA score

Interpersonal

	Multiple R	R Square	RSQ Change	Simple R	BETA	
Feedback Supervisor Positive	.62314	.38830	.38830	.62314	.47640	
Motivating Potential Score	.73538	.54078	.15248	.54655	.32443	
Organizational Policies	.76178	.58031	.03953	.45828	.20525	
Feedback Supervisor Negative	.76527	.58563	.00532	-.11586	-.06341	
Feedback Client Negative	.76626	.58715	.00152	-.10773	-.04300	
Feedback CoWorker Positive	.76668	.58780	.00065	.26053	.03297	*
Feedback Client Positive	.76687	.58808	.00028	.04062	-.01825	*
Feedback CoWorker Negative	.76688	.58811	.00002	.00583	.00584	*

* Not Significant at .01
Order indicates weighting, by BETA score

Growth

	Multiple R	R Square	RSQ Change	Simple R	BETA	
Motivating Potential Score	.64522	.41631	.41631	.64522	.52141	
Organizational Policies	.68458	.46865	.05235	.43515	.21712	
Feedback Supervisor Positive	.69872	.48821	.01956	.35118	.12642	
Feedback CoWorker Positive	.70188	.49263	.00442	.24833	.08561	
Feedback Client Positive	.70277	.49388	.00125	.02434	-.03960	*
Feedback Supervisor Negative	.70299	.49419	.00031	-.09269	.01993	*
Feedback Client Negative	.70302	.49423	.00004	-.06449	-.00725	*
Feedback CoWorker Negative	.70302	.49423	.00000	.01524	.00134	*

* Not Significant at .01
Order indicates weighting, by BETA score

Motivating Potential Score

	Multiple R	R Square	RSQ Change	Simple R	BETA
Job Feedback	.82057	.67334	.67334	.82057	.52444
Autonomy	.94074	.88499	.21165	.76417	.40333
Task Identity	.95524	.91248	.02749	.47182	.19748
Skill Variety	.96556	.93230	.01982	.49428	.12425
Task Significance	.96987	.94064	.00835	.45903	.10348

* Not Significant at .01
Order indicates weighting, by BETA score

Table 19 (Continued)

Intrinsic

	Multiple R	R Square	RSQ Change	Simple R	BETA	
Autonomy	.59573	.35489	.35489	.59573	.38311	
Job Feedback	.64899	.42119	.06630	.48546	.21338	
Skill Variety	.66553	.44292	.02173	.40113	.15574	
Task Identity	.67764	.45920	.01627	.32499	.13980	
Task Significance	.68049	.46307	.00387	.33114	.07051	

* Not Significant at .01
Order indicates weighting, by BETA score

Growth

	Multiple R	R Square	RSQ Change	Simple R	BETA	
Autonomy	.60867	.37048	.37048	.60867	.38796	
Skill Variety	.67087	.45006	.07958	.48585	.24536	
Job Feedback	.69886	.48840	.03834	.48277	.19355	
Task Identity	.70243	.49340	.00500	.26538	.07931	
Task Significance	.70571	.49802	.00462	.36605	.07701	

* Not Significant at .01
Order indicates weighting, by BETA score

Extrinsic

	Multiple R	R Square	RSQ Change	Simple R	BETA	
Feedback Supervisor Positive	.28246	.07978	.07978	.28246	.25680	
Feedback Supervisor Negative	.32484	.10552	.02574	-.13390	-.14020	
Feedback CoWorker Positive	.34538	.11929	.01377	.19739	.12198	
Feedback Client Negative	.35432	.12554	.00625	-.12116	-.08876	
Feedback CoWorker Negative	.35469	.12580	.00027	-.01991	.01973	*
Feedback Client Positive	.35469	.12581	.00000	.05031	.00114	*

* Not Significant at .01
Order indicates weighting, by BETA score

Interpersonal

	Multiple R	R Square	RSQ Change	Simple R	BETA	
Feedback Supervisor Positive	.62314	.38830	.38830	.62314	.61119	
Feedback Supervisor Negative	.64687	.41845	.03014	-.11586	-.15485	
Feedback CoWorker Positive	.65153	.42450	.00605	.26053	.09295	
Feedback Client Negative	.65421	.42799	.00349	-.10773	-.06351	
Feedback Client Positive	.65474	.42868	.00069	.04062	-.02867	*
Feedback CoWorker Negative	.65479	.42875	.00007	.00583	.01025	*

* Not Significant at .01
Order indicates weighting, by BETA score

Table 19 (Continued)

Extrinsic

	Multiple R	R Square	RSQ Change	Simple R	BETA
Organizational Policies	.47656	.22711	------	.47565	------

Work Role Design Variables
Mean Scores

Variable	Mean	Standard Deviation
Air Force Satisfaction	5.0670	1.4510
Nursing Satisfaction	4.8267	1.6109
Intrinsic Satisfaction	4.7605	1.1880
Extrinsic Satisfaction	4.4803	.9372
Interpersonal Satisfaction	4.8951	1.1088
Growth Satisfaction	4.8192	1.2395
Motivation Potential Score	141.0659	77.1352
Supervisor Feedback Positive	3.7112	1.4645
Supervisor Feedback Negative	2.4821	1.3082
CoWorker Feedback Positive	3.9336	1.3178
CoWorker Feedback Negative	2.9448	1.2875
Client Feedback Positive	5.0317	1.3669
Client Feedback Negative	2.4395	1.4751
Equity Organizational Policies	3.7728	1.3964
Skill Variety	5.4589	1.4117
Task Identity	4.6257	1.7078
Task Significance	6.0006	1.0886
Autonomy	5.1557	1.3443
Job Feedback	4.7309	1.4588

N = 851

equation. Combined, they explain 15.5 percent. The feedbacks combined only add 3.8 percent to the equation. All variables combined serve to explain 19.4 percent.

Intrinsic Satisfaction: As above, the regression indicates that the top two variables are the same, except the order of importance is reversed. The MPS can explain 41.3 percent of the variance of this satisfaction, and the organizational policies add an additional 9.0 percent to the equation. Combined, they explain 50.3 percent of the variance. The feedbacks combined only total 4.2 percent of the equation. All variables combined serve to explain 54.5 percent of the variance of this satisfaction.

Extrinsic Satisfaction: This regression, as with intrinsic, indicates that the MPS contributes 24.6 percent of the total variance to this satisfaction, and the organizational policies add an additional 10.7 percent. Combined, these two variables explain 35.3 percent. The feedbacks combined only add 1.6 percent to the equation. All variables combined serve to explain 36.9 percent of the variance with extrinsic satisfaction.

Interpersonal Satisfaction: Positive Supervisor feedback contributes 38.8 percent of the variance to this satisfaction; and as above, the MPS add to the total equation. These three variables combined serve to explain 58.0 percent of the variance, while the other feedbacks add little (.78 percent) to the total equation (58.8 percent).

Growth Satisfaction: The regression indicates that the MPS contributes 41.6 percent to this equation, followed by the organizational policies (5.2 percent) and positive supervisor feedback (1.9 percent). Combined, these three variables serve to explain 48.8 percent. The other feedbacks only offer .6 percent.

Motivating Potential Score: Due to the equation used to figure this score, the regression indicates that the combination of the variables explain 94.0 percent of the score. Job Feedback is the highest at 67.3 percent, followed by Autonomy at 21.6 percent. The other three appear to only offer 5.6 percent; however, this is probably misleading due to the MPS equation.

Intrinsic Satisfaction: When the variables that make up the MPS are regressed, combined they serve to explain 46.3 percent of the variance, as compared to the 41.3 percent as before. The regression indicates that Autonomy is highest, followed by Job Feedback, while the other three explain little of the total equation.

Growth Satisfaction: As above, when the variables making up the MPS are regressed on this satisfaction, combined they explain 49.8 percent of the variance, as compared to 41.6 percent before. The regression indicates Autonomy is again highest, this time followed by Skill Variety and Job Feedback. The other two variables offer little to the equation.

Extrinsic Satisfaction: For this satisfaction, the feedbacks were regressed, indicating that when combined, they only offer 12.5 percent to the total equation. Supervisory (positive and negative) and coworker positive are the only variables that appear to offer anything to the equation.

Interpersonal Satisfaction: As above, the feedbacks are regressed, and indicate that they explain 42.8 percent of the variance. The supervisory feedbacks are the only variables that add significantly to the equation.

Extrinsic Satisfaction: When organizational policies, alone, are regressed against this satisfaction, they serve to explain 22.7 percent of the variance, as compared to the 10.7 percent in the multiple regression above.

Individual Motivations on the Satisfactions

Research Question #5: What is the impact of the Individual Motivations on the levels of Satisfactions?

The major components of the Individual Motivations were regressed on each of the measures of satisfaction to determine the various impacts. These components were from motivation, i.e., the valence of outcomes or what the individual desires, and the instrumentality of performance or what happens when the individual does a good job; the role perceptions or role ambiguity, role conflict, and role overload (quantity and quality); and the perceived equity

of rewards. In addition, the individual valence and instrumentality of the corresponding satisfaction were also regressed. The mean scores used in the regressions are also given (Table 20).

Air Force Satisfaction: This regression indicates that 32.1 percent of the variance is provided by the equity of rewards. Although not adding much, the instrumentality of growth (what happens) is next and offers 2.5 percent, followed by role ambiguity 1.3 percent. The other variables offer very little to the rest of the equation.

Nursing Satisfaction: This regression indicates that 15.0 percent of the variance is provided by the equity of rewards, and as above, though they don't add much, is followed by the valence of interpersonal (what is desired), offering 2.1 percent; the intrinsic instrumentality (what happens), offering 1.9 percent; and role conflict, offering 1.7 percent. The other variables offer very little to the regression equation.

Intrinsic Satisfaction: This regression also indicates that the equity of rewards offers the most to the equation (47.1 percent). The intrinsic instrumentality measures is next, offering 10.6 percent followed by role ambiguity at 3.3 percent. The other variables offer very little to this equation.

Extrinsic Satisfaction: This regression indicates that the equity of rewards again offers the most explanation to

Table 20

Multiple Regressions, Individual Motivations on Satisfactions

Air Force

	Multiple R	R Square	RSQ Change	Simple R	BETA	
Equity Reward	.56696	.32144	.32144	.56696	.47186	
Role Ambiguity	.57833	.33466	.01302	-.28664	-.11446	
Happen Growth	.59927	.35912	.02466	.38455	.10492	
Happen Intrinsic	.60011	.36013	.00101	.38750	.07344	*
Role Overload Quantity	.60167	.36200	.00188	-.16167	.05247	*
Happen Extrinsic	.60185	.36222	.00022	.22455	.01833	*
Desire Intrinsic	.60248	.36298	.00075	.07274	.01631	*
Role Conflict	.60256	.36308	.00010	-.22835	.01340	*
Desire Growth	.60260	.36313	.00005	.07403	.01320	*
Role Overload Quality	.60264	.36318	.00005	-.19285	-.01032	*
Happen Interpersonal	.60269	.36323	.00005	.25211	-.00961	*
Desire Interpersonal	.60269	.36323	.00000	.08492	-.00228	*
Desire Extrinsic	.60269	.36323	.00000	.04593	-.00025	*

* Not Significant at .01
Order indicates weighting, by BETA score

Nursing

	Multiple R	R Square	RSQ Change	Simple R	BETA	
Equity Reward	.38880	.15116	.15006	.38880	.27314	
Desire Intrinsic	.39121	.15305	.00188	.04974	-.19967	
Desire Interpersonal	.41767	.17445	.02141	.16610	.15012	
Desire Growth	.42525	.18084	.00639	.10206	.12604	
Role Conflict	.44475	.19780	.01696	-.25496	-.11551	
Happen Intrinsic	.46622	.21737	.01956	.31649	.11204	
Role Overload Quality	.46855	.21954	.00218	-.20837	-.10598	
Role Overload Quantity	.47271	.22345	.00391	-.16065	.09425	
Happen Interpersonal	.47459	.22523	.00178	.24529	.05387	*
Happen Growth	.47461	.22525	.00002	.30366	.01114	*
Desire Extrinsic	.47470	.22534	.00008	.06415	.01050	*
Happen Extrinsic	.47476	.22539	.00006	.18795	.00866	*
Role Ambiguity	.47476	.22540	.00000	-.23331	.00250	*

* Not Significant at .01
Order indicates weighting, by BETA score

Intrinsic

	Multiple R	R Square	RSQ Change	Simple R	BETA	
Equity Reward	.68665	.47149	.47149	.68665	.47897	
Happen Intrinsic	.76048	.57833	.10684	.58064	.18538	
Happen Growth	.76342	.58281	.00449	.57020	.16512	
Role Ambiguity	.78529	.61667	.03386	-.43425	-.14255	
Role Conflict	.78902	.62255	.00588	-.41681	-.12509	
Role Overload Quantity	.79044	.62480	.00225	-.25861	.05785	
Desire Growth	.79053	.62494	.00014	.08959	-.04749	*
Desire Interpersonal	.79164	.62670	.00176	.14273	.04643	
Happen Interpersonal	.79202	.62730	.00060	.37302	-.03424	*
Desire Extrinsic	.79254	.62812	.00082	.09692	.02934	*
Desire Intrinsic	.79262	.62825	.00013	.09528	.02310	*
Happen Extrinsic	.79282	.62857	.00032	.32696	.02039	*
Role Overload Quality	.79284	.62860	.00004	-.27249	.00905	*

* Not Significant at .01
Order indicates weighting, by BETA score

Table 20 (Continued)

Extrinsic

	Multiple R	R Square	RSQ Change	Simple R	BETA	
Equity Reward	.65448	.42834	.42834	.65448	.47004	
Role Overload Quantity	.69282	.48000	.05166	-.40939	-.14234	
Happen Intrinsic	.71900	.51696	.03695	.45242	.09125	
Happen Growth	.72004	.51845	.00150	.43452	.08851	
Role Conflict	.72553	.52639	.00793	-.40866	-.07715	
Happen Extrinsic	.72857	.53082	.00443	.35651	.07547	
Desire Intrinsic	.72927	.53183	.00101	.06762	.04101	*
Role Overload Quality	.73030	.53334	.00152	-.36504	-.04090	*
Role Ambiguity	.73083	.53411	.00077	-.38022	-.03809	*
Desire Growth	.73090	.53421	.00010	.07380	-.02127	*
Desire Extrinsic	.73091	.53424	.00002	.07516	-.00661	*
Desire Interpersonal	.73093	.53426	.00002	.09539	.00645	*
Happen Interpersonal	.73093	.53426	.00000	.29981	-.00183	*

* Not Significant at .01
Order indicates weighting, by BETA score

Interpersonal

	Multiple R	R Square	RSQ Change	Simple R	BETA	
Equity Reward	.55999	.31359	.31359	.55999	.33292	
Role Ambiguity	.63651	.40515	.09156	-.46337	-.22274	
Happen Intrinsic	.69325	.48059	.07544	.52079	.17386	
Role Conflict	.70057	.49080	.01021	-.43307	-.13480	
Happen Growth	.70252	.49354	.00274	.50326	.07914	*
Desire Growth	.70254	.49356	.00003	.07311	-.07169	*
Happen Interpersonal	.70442	.49621	.00265	.37972	.06330	
Desire Interpersonal	.70638	.49898	.00277	.13963	.05281	
Role Overload Quality	.70743	.50046	.00148	-.26767	.04432	*
Desire Intrinsic	.70779	.50096	.00051	.08221	.03196	*
Desire Extrinsic	.70827	.50165	.00069	.09604	.03111	*
Happen Extrinsic	.70862	.50214	.00049	.30912	.02597	*
Role Overload Quantity	.70869	.50224	.00010	-.27304	.01503	*

* Not Significant at .01
Order indicates weighting, by BETA score

Growth

	Multiple R	R Square	RSQ Change	Simple R	BETA	
Equity Reward	.61258	.37526	.37526	.61258	.40760	
Happen Growth	.71304	.50843	.13318	.58174	.30355	
Role Conflict	.72810	.53013	.02170	-.37428	-.13580	
Role Ambiguity	.73296	.53724	.00710	-.37892	-.12754	
Desire Growth	.73459	.53962	.00238	.05950	-.09774	
Happen Intrinsic	.73527	.54062	.00100	.56547	.09055	
Role Overload Quantity	.73982	.54733	.00671	-.19014	.07622	
Desire Intrinsic	.73983	.54735	.00002	.08000	.06857	*
Role Overload Quality	.74049	.54832	.00097	-.19722	.03984	*
Happen Interpersonal	.74075	.54871	.00039	.37972	.02883	*
Desire Interpersonal	.74083	.54883	.00012	.11123	.02764	*
Desire Extrinsic	.74091	.54895	.00012	.06966	.01217	*
Happen Extrinsic	.74094	.54899	.00004	.28778	.00716	*

* Not Significant at .01
Order indicates weighting, by BETA score

Table 20 (Continued)

Intrinsic

	Multiple R	R Square	RSQ Change	Simple R	BETA	
Happen Intrinsic	.58064	.33714	.33714	.58064	.57955	
Desire Intrinsic	.58068	.33719	.00005	.09528	.00715	*

* Not Significant at .01
Order indicates weighting, by BETA score

Extrinsic

	Multiple R	R Square	RSQ Change	Simple R	BETA	
Happen Extrinsic	.35651	.12710	.12710	.35651	.35316	
Desire Extrinsic	.36067	.12987	.00277	.07516	.05270	*

* Not Significant at .01
Order indicates weighting, by BETA score

Interpersonal

	Multiple R	R Square	RSQ Change	Simple R	BETA
Happen Interpersonal	.37972	.14418	. 14418	.37972	.36679
Desire Interpersonal	.38812	.15064	. 00645	.13963	.08136

Order indicates weighting, by BETA score

Growth

	Multiple R	R Square	RSQ Change	Simple R	BETA	
Happen Extrinsic	.58174	.33843	.33843	.58174	.58884	
Desire Extrinsic	.58317	.34009	.00166	.05950	-.04141	*

* Not Significant at .01
Order indicates weighting, by BETA score

Table 20 (Continued)

Individual Motivation Variables
Mean Scores

Variable	Mean	Standard Deviation
Air Force Satisfaction	5.0638	1.4522
Nursing Satisfaction	4.8247	1.6191
Intrinsic Satisfaction	4.7556	1.1937
Extrinsic Satisfaction	4.4805	.9308
Interpersonal Satisfaction	4.8917	1.1165
Growth Satisfaction	4.8095	1.2455
Desire Intrinsic	6.0131	.7781
Desire Extrinsic	4.3859	.7679
Desire Interpersonal	6.0218	.9999
Desire Growth	6.1934	.7831
Happen Intrinsic	5.3309	.6844
Happen Extrinsic	4.0952	.5046
Happen Interpersonal	5.0213	.8398
Happen Growth	5.1610	.7268
Role Ambiguity	2.2194	.8847
Role Conflict	3.0040	1.0249
Role Overload Quantity	3.6344	1.2338
Role Overload Quality	2.6744	.9844
Equity of Rewards	4.2342	1.4458

N = 847

the equation (42.8 percent). This is followed by role overload quantity (5.2 percent) and the intrinsic instrumentality (what happens) measures (3.7 percent). The other variables offer very little to the equation.

Interpersonal Satisfaction: This regression also indicates that the equity of rewards offers the most explanation (31.3 percent). Role ambiguity offers 9.1 percent which is close to the 7.5 percent offered by the instrumentality (happens) of the intrinsic measure. Role conflict offers 1.0 percent and the other variables offer little.

Growth Satisfactions: Equity of rewards again offers the most explanation of the variance (37.5 percent). The instrumentality (happens) of growth offers 13.3 percent, followed by role conflict. As above, the other variables offer little to the equation.

Regressions of the valence of outcomes (what the individual desires) factors and the instrumentality of performance (what happens at work) factors on its specific satisfaction was accomplished in order to determine which factor impacted more (or seemed the most important). In each of the regressions what happens in the job seems more important than what is desired. What the person desires, in reality, seemed to offer very little to any of the satisfactions.

Stated Reasons for Turnover

Research Question #6: What are the individual's stated reasons for either leaving or remaining with the organization?

To better understand why the nurses would leave or remain with the organization, two open ended questions were asked: 1) If you were to leave the Air Force Nurse Corps, what would be the most important reason? and 2) If you were to remain in the Air Force Nurse Corps, what would be the most important reason? In addition, the respondents were asked to explain their answers.

Although only a single response was asked for, many gave more than one reason, while some refused to answer. For the first question, 855 gave at least one response; of these, 503 gave two responses, and 227 gave more than two. For question two, 839 gave at least one response, and of these, 546 gave two responses, and 234 gave more than two. In an attempt not to discriminate against the the number of responses, or to place any value on them, the first three responses to each question were coded.

Each of the responses were coded into general categories (question one had 61 categories, question two had 51 categories). The general categories were then placed into like groups (question one had 11 groups, question two had 10 groups).

Reasons for leaving: The stated reasons for leaving are listed by groups, for the general sample, and for those identified as being at high risk for turnover for both TO#1 and TO#2 (Table 21).

For the general sample, by individual response, family responsibilities was given most often (n=183), followed by join spouse assignment (n=115), extra duties (n=109), disparity within the Nurse Corps (n=87), and supervision (n=76). By groups, working conditions was given most often (n=323), followed by family responsibilities (n=298), job related responses (n=176), politics (n=156), and supervision (n=117).

With TO#1, by individual response, supervision was given most often (n=17), followed by extra duties (n=16), disparity (n=16), shift rotations (n=15), and staffing (n=14). By groups, working conditions was again the reason most often given (n=56), followed by politics (n=25), job related reasons (n=23), family related reasons (n=20), and supervision (n=18).

For TO#2, as above, individually, extra duties was given most often (n=22), followed by supervision (n=18), disparity (n=13), staffing and shift rotations (n=11), and dissatisfaction with nursing (n=10). By groups, working conditions was highest (n=57), followed by job related reasons (n=17), politics (n=14), [illegible] (n=12), and policies (n=14).

Table 21

Stated Reasons For Leaving

RESPONSE	General	TO#1	TO#2
1. Working Conditions			
Extra duties	109	16	22
Staffing	67	14	11
Shift rotations	52	15	11
Shift hours	36	8	9
Unit assigned	35	2	4
No compensation for extra duties	20	1	-
Hospital size	2	-	-
Being pulled	2	-	-
	323	56	57
2. Family			
Family responsibilities	183	12	9
Join spouse	115	8	2
	298	20	11
3. Job related			
Decreased career advancement	47	4	3
Decreased job satisfaction	34	5	4
Freedom to choose	29	6	8
No career ladder	15	3	4
No challenge	11	2	3
Increased stress	11	1	1
Decrease job specialization	10	1	1
No credit for prior experience	6	1	2
Decreased autonomy	5	-	-
Decreased security	4	-	-
Constant change	2	-	-
Decreased professionalism	2	-	1
	176	23	27
4. Politics			
Disparity	87	16	13
Dissatisfaction with nursing/Nurse Corps	56	9	10
Prejudice	6	-	1
Forced out	5	-	-
Officer/Enlisted	2	-	-
	156	25	24
5. Supervision			
Supervision/Leadership	76	17	18
Decreased positive feedback	29	1	4
Decreased support	10	-	-
Decreased discipline	2	-	-
	117	18	22
6. Personal Reasons			
Personal	21	3	4
To leave nursing	19	-	2
Burnout	18	2	1
Goal change	17	1	1
Personal failure	10	-	-
Better opportunity elsewhere	7	1	2
Poor health	6	-	-
Mental health	1	-	1
	[illegible]	[illegible]	[illegible]
7. Education			
Lack of education opportunity	40	4	5
To pursue outside education	26	4	4
Lack of retraining opportunity	[illegible]	[illegible]	[illegible]
Lack of administrative training	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]

Table 21 (Continued)

RESPONSE	General	TO#1	TO#2
8. Assignments			
Assignment policies	29	-	4
Geographic location	24	2	3
Frequent moves	17	1	-
Assignment overseas	10	1	-
MAJCOM assigned	2	-	-
No travel	1	-	-
For interservice transfer	1	-	-
Remote assignment	1	-	-
	85	4	7
9. Promotion			
Promotion failure	66	3	1
Promotion policies	16	2	3
	82	5	4
10. Benefits			
Retirement	30	3	-
Pay	30	2	1
Benefit loss	18	-	-
	78	5	1
11. Policies			
Air Force policies	29	6	8
O E R system	19	3	2
Hospital policies	18	3	4
Weight program	10	-	-
Decreased emphasis of wartime mission	1	-	-
	77	12	14

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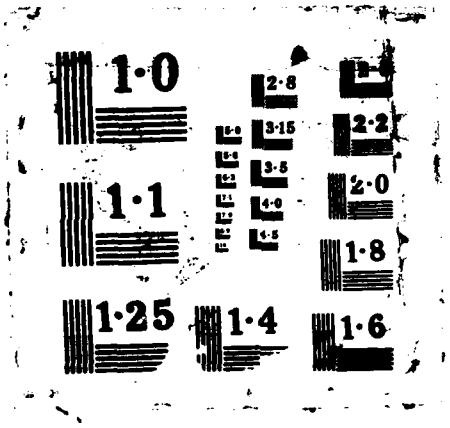
1·0
2·8
2·2
3·15
3·5
2·0
4·0
1·1
4·5
1·8
1·25
1·4
1·6

Reasons for staying: The stated reasons for staying are listed by groups, for the general sample, and for those identified as being at high risk for turnover for TO#1 and TO#2 (Table 22).

For the general sample, the reason for staying given most often is opportunity for career advancement (n=200), which is followed by pay (n=161), retirement benefits (n=138), education opportunities (n=105), job security (n=94), job satisfaction and promotion opportunity (n=78). By group, job related reasons were highest (n=561), and were followed by benefits (n=358), education (n=178), assignments (n=123), and personal reasons (n=105).

For TO#1, individually, the reason given most often for staying is pay (n=23), followed by job security (n=14), and then the career advancement, retirement, and the people/ peers (n=7). By groups, the reasons most often given are for benefits (n=36), followed by the job related reasons (n=36), politics (n=16), education (n=14), and the personal reasons (n=11).

For TO#2, individually, the reason most often given for staying is also pay (n=22), education (n=14), job security (n=12), and career advancement (n=8). By groups, job related is first (n=38, followed by benefits (n=36), education (n=18), and the personal reasons (n=12).

Table 22

Stated Reasons For Staying

RESPONSE	General	TO#1	TO#2
1. Job related			
Career advancement/career progression	200	7	8
Job security	94	14	12
Job satisfaction	78	2	3
Job challenge	53	3	2
Job variety	38	-	1
Move without loss of seniority	37	2	6
Like job	25	2	2
Job responsibility	17	1	4
To remain at bedside	10	3	-
Job independence	9	1	-
	561	35	38
2. Benefits			
Pay	161	23	22
Retirement	138	7	7
Benefits in general	55	5	7
Increased rewards	2	-	-
Child care	2	1	-
	358	36	36
3. Education			
Education opportunities	105	6	14
Retraining, change AFSC	60	6	3
Pass on attitudes/to teach	13	2	1
	178	14	18
4. Assignments			
Travel	67	2	6
Assignment satisfaction	29	1	5
If PCS'd (moved)	10	-	1
If assigned at large hospital	5	1	2
If assigned overseas	5	-	1
If assigned at small hospital	4	1	-
Decrease frequent moves	2	-	-
If returned to CONUS	1	-	1
	123	5	6
5. Personal reasons			
Personal satisfaction	38	3	4
Patriotism	30	2	1
Time in service (invested)	16	2	2
If felt needed	8	3	1
Choice to stay	6	-	2
Nothing better to do	4	1	2
Want to	2	-	-
To repay obligation	1	-	-
	105	11	12
6. Politics/Policies/Air Force			
Air Force in general	50	4	1
People/peers	34	7	3
If overall change	6	1	1
By force	3	3	2
If OER system changed	2	1	1
	95	16	8
7. Promotion			
Promotion opportunities	78	5	1
	78	5	1

Table 22 (Continued)

RESPONSE	General	TO#1	TO#2
8. Supervision			
Fair treatment	19	5	4
Increased respect	16	2	3
Increased support	11	1	-
Supervisor	5	-	-
Equal treatment	3	-	-
Increased feedback	1	-	1
	55	8	8
9. Family			
Assignment with spouse	29	1	2
Assignment close to family	4	-	-
	33	1	2
10. Working conditions			
Change in working hours	18	4	2
Increased staffing	8	1	2
Decrease paperwork/extra duties	4	1	-
	30	6	4

This chapter has presented the data obtained from the 1,200 surveys sent to U. S. Air Force, Nurse Corps Officers, worldwide. The return of 885 surveys gives a good representative sample of the population studied. A discussion of the results follows in the next chapter.

CHAPTER 6

DISCUSSION

From the previous chapter, it is easy to realize that by using a survey methodology of this magnitude, along with having a sample population with numerous characteristics, one can generate a copious, if not overwhelming, amount of data. This chapter is intended to sort some of the data and offer an explanation about it.

The return of 885 usable surveys resulted in an adjusted return rate of 73.75 percent. When compared to the sample plan, by AFSC, the return resulted in a low of 60.8 percent for AFSC 9726, and a high of 92.2 percent for AFSC 9716; by rank, the return netted a low of 55.6 percent for the 2nd Lts, and a high of 90.9 percent for the Colonels. In addition, most of the facilities participated.

When the survey response was compared to the Nurse Corps population, the percentages indicate that the return should be fairly representative. The demographics compared showed fairly high comparison percentages. In most cases, in raw numbers, the sample provided sufficient quantities to generate a relatively high percentage comparison; however, in some of the subgroups, although the percentage is fairly high, the actual number may not be indicative of

the total population. In general though, this sample should be considered representative, and allow for generalization to the Nurse Corps' population.

The high reliability of the survey instrument main sections indicates that the questions were were homogenous and measured what was intended.

Turnover

Research Question #1: What are the turnover intentions in the study sample?

Two different turnover measures were employed in this research. Both measured turnover intentions; however, they differed in that one removed the component of "forced commitment." The first measure of intent (TO#1) previously used by Seybolt et al. (1978) and Seybolt (1983; 1986), showed a 9.5 percent response in the high range, which equated to 84 of the respondents. The second measure (TO#2) was slightly higher, giving a 10.0 percent response in the high range, equating to 88 of the respondents.

According to Mobley (1982), the intention to quit immediately precedes the act of turnover. Previous research has also shown that these intentions are the strongest predictors of turnover (Porter & Steers, 1973; Mobley et al., 1979), and therefore, may be equal to the actual turnover rates of the organization. If so, a comparison of the intentions to the actual turnover rates of the

organization should be close, if not equal.

The adjusted voluntary turnover rate (which includes retirements) for the Nurse Corps during 1986 was 8.96 percent. This figure is fairly close to the percent equated for the first turnover measure, which gives some validity to the finding. The differences between the two may be explained by the time frames in the questions (one year), in that the individual may be thinking about it now, but may not actually carry through with the decision.

Although TO#2 is slightly higher, and a different measure, because of the closeness of TO#1 and the actual turnover rate, the use of the same scale for determining high intentions is probably safe. This finding is similar to Nichols (1971), in that Army nurses, with a commitment, were more likely to stay, and those without it, were more likely to leave.

Characteristics

Age: The findings suggest that the younger and older nurses are those more prone to turnover, as opposed to the middle age groups. For the young nurses, this finding is consistent with the literature, in that the younger employees have a higher probability of leaving (Mobley et al., 1979; Muchinsky & Tuttle, 1979; Porter & Steers, 1973; Price, 1981). There is no support in the literature for the older nurses leaving, except that, in general, they are the ones more likely to remain (Seybolt, 1983; 1986). Their

reason for leaving is more likely due to the 20 year retirement afforded them by the military.

Sex: The findings suggest that the females are more prone to turnover. However, the literature is not consistent in regards to whether or not gender does or does not influence turnover. Saleh et al. (1965) suggest that the female may have a conflict between the role of a career woman or the role of housekeeper and mother. The increase in their turnover potential may just be due to the large number of females in the sample.

Marital Status: The single nurses seem to have a higher intent for turnover than their married counterparts. Marital status is an area that is not really addressed in the literature, and what findings there are show little correlation to turnover (Weisman et al., 1981). In contrast, Nichols (1971) found that the married nurses were more prone to leaving. Family size and responsibility, on the other hand, has been shown to influence the extent of turnover (Porter & Steers, 1973); however, this characteristic is not readily apparent in this study.

Primary Wage Earner: Those nurses who said that they were not the primary wage earners also had high intentions for turnover. Muchinsky and Tuttle (1979) support this finding, reporting that as a moderator of turnover, the secondary wage earner has a negative relationship with turnover.

Facility Assigned: By size, the findings indicate a slight increase in TO#1 intent for the 30 - 39 bed hospitals and TO#2 intent for the 70 - 159 bed hospitals. This is in contrast to Levine (1957) in which the larger hospital had more turnover. By location, the CONUS hospitals seem to have a larger intent; however, this may be due to the number of facilities in the CONUS versus overseas. A search of the literature failed to support or reject this.

Air Force Speciality Code: With TO#1, the nurses in AFSC 9756 (clinical nurse) and 9716 (administration) had the highest intent for turnover. For TO#2, nurses with AFSC 9736 (operating room), 9726 (mental health), and 9756 (clinical nurse) had the higher intentions. The current research deals almost exclusively with the staff nurse, which would include the general duty, psychiatric and operating room nurses, supporting their intentions. The only comparative study is Levine (1958) which showed almost three times as much turnover for the staff nurse, as compared to administrative nurses. The high administrative turnover in the Nurse Corps is probably due to voluntary retirement. In contrast, Campbell (1985) reports that those least career oriented were the mental health nurses followed by the operating room nurses and clinical nurses. The nurse administrators had the highest career orientation.

Rank: Turnover intentions for TO#1 are highest for the 1st Lts and the Colonels. This is probably best explained with two reasons which follow the actual Nurse Corps' turnover statistics. The majority of those who separate, do so at the end of their initial commitment (3 years), a year group that consists primarily of 1st Lts. This is consistent with Campbell (1985) where only 44 percent of the 1st Lts reported they would stay in the Air Force for at least 20 years. The second largest portion of nurses who leave, do so with retirement (after 20 years), a year group that contains almost all of the colonels. With TO#2, almost all the turnover intent is in the 2nd and 1st Lt ranks, which follows suit with tenure.

Rank and AFSC: As above, the high turnover intentions are either in the lowest ranks or the highest.

Education: The highest intentions for turnover are seen in those nurses having a Bachelor's Degree in Nursing (BSN); however, this could possibly be due to their overall numbers. This finding does not support Gulack (1983) in which he reports that the diploma graduate, when compared to the BSN, is more likely to leave.

Career Status: For TO#1, the highest intentions are seen in the Indefinite Reserve and Initial Active Duty nurses; with TO#2, it is just the Initial Active. This finding is consistent with those findings by rank, i.e., the Initial Active Duty nurses are all of the 2nd Lts, and

most of the 1st Lts.

Time on Station: This finding suggests that, with TO#1, the longer an individual stays on station, the more likely he or she are to turnover; this is almost the opposite for TO#2. This characteristic is not addressed in the literature and it differs from tenure in that it only involves the length of time spent at any one duty station and not a total length of time in the Air Force. However, since the majority of those with high turnover intentions are also Lieutenants, this suggests that they may still be at their first duty location, explaining the 2 to 3 year time frame.

Years in Air Force: Mobley (1982) reports that tenure, like age, has a consistent negative relationship with turnover. Due to the individual's commitment, the earliest they can voluntarily separate is at the end of their Initial Active Duty tour (3 years). This probably explains the low percentage for the 0 - 1 year group, followed by the sudden increase in the 1.5 - 3 year group, seen in TO#1. Removing the commitment as in TO#2, results in an increase in both groups. The sharp increase in the 20 - 21 year group is probably due to retirement, and is the opposite of Mobley (1982). By comparison, this characteristic can also explain the high percentages seen in the AFSC, rank, and time on stations categories, in which they correspond to the high percentages in the early

and late year groups.

Years in Nursing: This characteristic is not addressed in the literature as readily as tenure. With TO#1, the high intents are seen at the 1.5 - 3, the 6 - 10, and over 21 year groups. In TO#2, the high percentages are in the under 5 years groups. When compared to years in Air Force, this suggests that those nurses who leave early in their Air Force career are taking with them a high number of years nursing experience.

Satisfactions

Research Question #2: What are the levels of satisfactions in the study sample?

The satisfaction mean scores indicate that the nurses are generally satisfied, but not to any great degree. Satisfaction with the Air Force is highest at 5.1 (on a Likert type 1 to 7 scale with 1 as high dissatisfaction, 4 as neither dissatisfied or satisfied, and 7 as highly satisfied). Using a high, middle, and low breakdown, over half of the respondents report high satisfaction. Although an overall satisfaction was not obtained, this finding is consistent with Campbell (1985), where the overall satisfaction for the Nurse Corps was reported as high (score was 20.88 on a 4 - 28 scale).

Interpersonal satisfaction is next with a mean score of 4.9. Although a different measure, due to the supervision

component contributing to the score, it can be considered fairly consistent with Campbell's report of high satisfaction with supervision.

Satisfaction with nursing is next with a mean score of 4.8, with half of the respondents reporting high satisfaction. However, it is interesting to note that 13 percent of the sample report dissatisfaction with nursing. Despite all the research on job satisfaction, nursing satisfaction has apparently not been addressed.

Growth satisfaction follows with a mean score of 4.8 indicating that the respondents are fairly satisfied with their opportunities to grow, learn new things, and use independent thought. This finding is somewhat consistent with Godfrey's (1978) national sample of 17,000 nurses.

Intrinsic satisfactions, or the degree to which the satisfactions are from within the individual or work itself, is next with a mean score of 4.7. This measure is slightly low as compared to some of the other studies (Godfrey, 1978; Munro, 1982).

Extrinsic satisfactions, or the the degree to which the satisfaction is derived from those items external to the work is last with a mean score of 4.4. In general, this low mean is consistent with most of the literature in which nurses report either low satisfaction or dissatisfaction with their working conditions (Beyers, et al., 1983; Burton & Burton, 1982; Cronin-Stubbs, 1977; Ginzberg, et al.,

1982; Godfrey, 1975; Larson, et al., 1984).

Comparison of the different satisfaction mean scores in relation to the respondents' AFSC indicates that the nursing administrators (9716) are the most satisfied. Next are the education coordinators (9756-D), then the mental health nurses (9726), the operating room nurses (9736), and the clinical nurses (9756). Campbell (1985) found a slightly different order with the nursing administrators highest, followed by the clinical nurse, operating room nurse, and last the mental health nurses. Additional support is from Simpson (1985) who reported that the nursing administrators were generally more satisfied than the staff nurses. When rank is added to the comparison, it appears that nurses begin their Air Force careers as 2nd Lts with a fairly high satisfaction, which drops when they become 1st Lts, and then slowly rises throughout their careers. This finding is consistent with Kelly's (1985) study of British nurses. This is also consistent with Hulin and Smith's (1965) feeling that workers begin their careers with high morale, which drops during the first year of service, remaining low for a number of years, only to rise again as the length of service increases.

This same relationship can be visualized graphically when the mean scores for the satisfactions are presented throughout the years of service. Although the slopes are gradual, and numerous variations are noted in each measure,

they all show similar characteristics. They all start fairly high, have an immediate drop followed by a plateau and gentle rise. In all the satisfactions, a sharp increase is seen during the later years.

When one looks at the same relationships between the mean scores for the turnovers and the years in the Air Force, the findings are also consistent with the literature. Mobley (1982) states that there is a consistent negative relationship between turnover and the employee's tenure with the organization. This can been seen in the graph as the turnover is high in the early years, and although some drastic fluctuations are noted in the early years, a consistent downslope is noted during the first 20 years of employment. Although not explained in the literature, the turnover rises again at the 20 year point and again with the fluctuations, continues to rise. What is different here, and not addressed in the literature, is that instead of looking at a specific year grouping, or a specific category of nurse, an entire nursing career span, from start to finish is pictured. In general, this career picture resembles a shallow "U" shape.

Further examination of the graphs yields some interesting observations. Using the graph for Air Force Satisfaction (r=-.64525 for TO#1; r=-.71371 for TO#2) as an example (Figure 12), some of these observations will be addressed.

These observations are given by specific year groups. Initially the turnover intent (TO#1) is highest at the 2.5 year point, about the same time the initial commitment is over and the decision must be made whether to stay in the service or not (to apply for Indefinite Reserve Status). During this same time frame, TO#2 is at the same level; however it reached its peak at the 1 year point, indicating that the decision is more than likely made at this time. In addition, the level of satisfaction is also dropping, until the 2 year point, when 1st Lt rank is made. This slight increase (which may be due to the substantial increase in pay) is short lived as the satisfaction continues to drop afterwards, reaching its low point at the same time TO#1 is highest. This suggests the negative relationship between turnover and satisfaction.

After the decision is made, and Indefinite Reserve Status is achieved, the turnover measures drop along with a corresponding rise in satisfaction. Then comes the 4 year point, the time period when the rank of Captain is awarded. Approximately 95 percent of the 1st Lts make Captain, so promotion failure is probably not causing the subsequent rise of turnover and the fall of satisfaction. In addition, the changes at the 4.5 and 5 year points cannot be adequately explained, except that during these years, the nurse is given more responsibility, is normally on a second assignment, and may be applying for some of the career

broadening assignments.

During the next few years, the turnovers gradually rise, while the satisfaction gradually drops. This time period corresponds with normal career progression of the nurse from staff nursing to assistant charge nurse, to charge nurse, i.e., assuming additional responsibility. It is also the time when the nurses are encouraged, to complete their initial Professional Military Education, to begin an advanced degree, or to specialize; in order to make themselves more competitive for making the rank of Major.

The 11 year point is about the time that the nurse may be selected for Major. This could explain the sudden drop in the turnover and rise in satisfaction. Approximately 60 percent of the Captains eligible for promotion to Major are promoted. If not selected the first time, the nurse is given a second chance the following year (chances of making promotion the next year, in reality, are really not that good). If not selected at that time, the nurse may be continued as a Captain for another chance, or is discharged from the Air Force, i.e., it's "up or out." This may explain the increase in turnover at the 12 year point.

Promotion to Lt Colonel is next at the 16 - 17 year point, and the first time selection is approximately 40 percent. Similar to failure of promotion to Major, the nurse is given two opportunities before being discharged or

continued. This may explain the drop in turnover at the 16 year point (those who made Lt Colonel) and the subsequent gradual rise afterwards (those who didn't). Also during this time, more responsibility is given, along with more administrative duties (moving into AFSC 9716).

Retirement from the Air Force is possible at the 20 year point with retirement pay of one half of the person's base pay. For each year past 20 (to a maximum of 30 years), the retirement pay goes up to a maximum of 75 percent of the base pay. This retirement at 20 years, may explain the increase in turnover at the 20 to 21 year point. In addition, promotion to Colonel becomes a possibility about the same time. The overall chance for making Colonel is quite low as there can only be 2 percent of the total Corps in this grade. If the nurse does not make Colonel, he/she must retire at the 26 year point. As depicted on the graph (Figure 12), turnover rises drastically at the 21 year point, indicating multiple retirements, and then drops until the 26 year point.

Of interest here is that although the inverse relationships are still seen during the 19 to 26 year group, in general, the satisfaction rises more than it falls, indicating that satisfied nurses are turning over.

The other graphs show these similarities; however, the variances do not appear to be as strong as satisfaction with Air Force.

With mobility in general, the Nurse Corps is seen as being highly mobile (mean 5.2 on a 1 to 7 scale), or in other words they perceive that other jobs are available, and that they can easily obtain them. This finding is consistent with Price (1981). According to Mobley (1982), mobility is significantly, although not strongly, related to turnover. This relationship is apparent in the graph in that when turnover goes up or down, so does the level of mobility.

Impact of Satisfaction on Turnover

Research Question # 3: What is the impact of the satisfactions on the levels of turnover; and how does the perceived mobility moderate this impact?

The Statistical Package for the Social Sciences (Nie et al., 1975) was chosen as the method of computer programming for the statistical analysis. Multiple regression was chosen because it is a general statistic with which one can examine the relationship between a dependent variable and a set of independent variables at the same time. In addition, a ranking of the independent variables is accomplished to determine which of the variables within the set have the greatest impact.

When the set of satisfactions were regressed on the levels of turnover intentions, a strong negative relationship was seen. With TO#1, all satisfactions

combined generated a multiple R (negative) of .64795, and when squared, equalled .41984. This means that close to 42 percent of the intentions of turnover can be explained by satisfaction. This finding is consistent with the literature, except that the r=-.6 is higher than expected by Mobley (1982).

Closer examination of the regression reveals that Air Force satisfaction provides almost all of the explanation (41.6 percent). The other satisfactions added to the equation provide less than .3 percent, even though the simple r's may alone be significant. Indeed, satisfaction of Air Force may well be an "overall measure," making the other measures subparts of it.

Similar findings are also apparent when the set of satisfactions are regressed on TO#2. Multiple R indicates a strong (negative) correlation to the turnover (r=.71991), and squared equals .51827. Therefore, over half of this turnover intent may be due to the satisfactions. However, closer examination again reveals that Air Force satisfaction provides almost all the explanation of this equation, and the other satisfactions (although significant by simple r) provide little.

According to Mobley, overall satisfaction measures tell little as to what aspects of the job are contributing to the turnover. So, to determine the impact of the work, the satisfactions derived from the job were also regressed on

the turnover.

With TO#1, regression of the four work satisfactions resulted in a multiple R of .43580 and when squared served to provide 18.9 percent of the explanation for turnover. As before, closer examination of the regression reveals that most of the weight is provided by just one variable, intrinsic satisfaction. The other three variables only provided less than .2 percent of the variance.

With TO#2, similar findings are also seen, except that the regression provided 25.8 percent of the explanation for the turnover. Intrinsic satisfaction again provided almost all of the weight in the equation, as the other three variables provided less than .5 percent.

Both these findings are consistent with with Mobley, et al., (1979) where they conclude that satisfaction with job content is consistently the strongest of the satisfaction correlates to turnover.

The aspect of mobility was then added to the first regression equation of the six satisfactions. As a result, only a small increase was noted: 1.2 percent with TO#1, and 2.3 percent with TO#2, indicating that the moderating affect of mobility is not that apparent. Mobley (1982) states that this low relationship may be due to inaccurate or unrealistic expectations if the employee is not actively seeking a job, which is probably the case in this study.

Even though the overall impact of the satisfactions is

low, indicating that turnover is due to some reason(s), other than satisfaction, additional regressions were performed to determine if a cause for the satisfaction could be found.

Work Role Design on the Satisfactions

Research Question #4: What is the impact of Work Role Design on the levels of satisfactions.

Each of the major components of Work Role Design were regressed on the measures of satisfaction to determine their impact. For the general measures of satisfaction, i.e., Air Force and Nursing, similar results were seen. With Air Force Satisfaction, 24 percent can be explained by the job. Closer examination reveals that close to two-thirds of this explanation is due to the equity and consistency of the organizational policies, and the one-third is due to the motivating potential score. All of the feedbacks combined offered little. This is probably due to the Air Force being a highly structured bureaucratic organization, that relies on a strong adherence to rules and regulations. Even though the mean score for this variable seems to indicate that the nurses perceive unequal consistency with the organizational policies, it is unclear why the variable explains so much of the variance.

With the motivating potential, according to Hackman and Oldham (1980), the mean score of 141 is higher than the

national average of 128; however, it is lower than the 196 reported by Guthrie (1985) for nursing managers. The impact on this satisfaction is probably due to the high internal motivation results from the high MPS. According to Hackman and Oldham, the MPS does not "cause" individuals to be satisfied, but creates an atmosphere in which they can be highly motivated to perform well, and in turn can be satisfied.

When the same variables are regressed on nursing satisfaction, only 19 percent of the variance is explained by the same two variables, in about the same ratio. The rational is similar, in that nursing, like the Air Force, is also high structured, and lends itself well to the MPS.

With the intrinsic satisfaction, of the 54 percent that can be explained by Work Role Design, 41 percent is due to the MPS, followed by the organizational policies. This finding is again supported by Hackman and Oldham in that if the job is internally motivating, and the person performs well, he or she would then obtain satisfaction from the job, or intrinsically. The organizational policies would also affect how the person feels about his or her work.

This same relationship is apparent in the growth satisfaction, and according to Hackman and Oldham, if a person with a high growth need strength has a highly motivating job, he or she is more apt to perform well, and in turn be satisfied.

Although the regressions indicate that with the extrinsic satisfaction, the MPS and organizational policies contribute most to the equation, their relationship is lower. The relationship may be be due in part to the perceptions the individual has about how internal motivation affects work performance, which in turn will affect the external outcomes provided by the job. Hackman and Oldham address this aspect as the high work effectiveness.

With interpersonal satisfaction, positive supervisor feedback provides 38 percent of the explanation for this satisfaction measure. Even with a mean score indicating that the feedback is seldom given, the individual (like those seen in Seybolt, 1983; 1986) places a high value on it. The high portion due to the MPS suggests that the person has a better chance for a social relationship with his or her work than with peers or the client.

The regressions of the components of the MPS on the total score are similar to what Hackman and Oldham describe. To obtain a high motivating potential, a job must have both an experienced responsibility (autonomy), and a knowledge of the results (feedback). On the other hand, they feel that although the other three are important, and contribute to the overall meaningfulness, a low score, or absence of one of the attributes will not significantly alter the overall motivation of the job. They also feel

that a high responsibility or knowledge of the results can compensate for a low score in the overall meaningfulness.

These individual components of the MPS were regressed on those satisfactions thought to be most affected. With the intrinsic measure, as expected, the experienced responsibility for the work explained most of the variance. This is probably due to how much the individuals are satisfied with their freedom, independence and discretion allowed them in doing their work, which in turn will provide them with the inner rewards. The feedback is significant here in that it provides them with the overall knowledge that they are performing well, whether or not someone tells them so.

Similar findings are seen with the growth satisfaction in that the individual has the freedom to search out, use, and learn from what they feel is important to them, and with Skill Variety, the job provides them with the varying opportunities to do so.

With the extrinsic satisfaction, the feedbacks didn't fare so well. This could be due to the perception that the person is going to obtain the extrinsic measures, no matter what he or she is told. However, due to the 10.5 percent total from the supervisor feedbacks, it also shows that the individual may still knows who the boss is.

The regression of the feedbacks indicate that the individual places more credence in what he or she is told

by the supervisor and in the positive feedback received from the coworker. The low impact of the other feedbacks may be due in part to an absence of any client feedback, or negative feedback from one's peers.

In general, little support can be seen for a great impact of the Work Role Design on the satisfactions, other than with the organizational policies and Motivating Potential provided by the work itself. This finding is of interest, in that historically, according to the literature (Hackman & Oldham, 1980), the Work Role Design should have a strong impact on the intrinsic and growth satisfactions.

Individual Motivations

Research Question #5: What is the impact of the Individual Motivations on the levels of Satisfactions?

Similar to work role design, each of the components of the individual motivations were regressed on the levels of satisfactions in an attempt to determine a cause.

With Air Force Satisfaction, the significant component that has an impact is the perceived equity of rewards. The other variables offer little if anything to the total equation. The mean score for this variable indicates that the respondents barely feel that these rewards are administered fairly. However, the regression indicates that they still place a high value on these rewards, and may also indicate that those receiving the rewards are also the

ones satisfied.

Nursing satisfaction is similar, except that the overall percent of variance explained is lower. The low mean score, combined with the low percent explained by the variable, could indicate that due to this perceived inequity, the satisfaction is lower, thus blaming nursing, and not the Air Force.

Equity of rewards is also fairly high with intrinsic satisfaction; however, an addition is seen to the equation. According to expectancy theory, if the person receives what is desired, his or her motivation increases, thus increasing his or her chance for satisfaction. In this case, it appears that what he or she receives intrinsically has more impact on the overall satisfaction, and no impact is seen by what he or she wants.

As above, the equity of rewards is fairly high with extrinsic satisfaction; however, the quantity of role overload also has an impact. The equity of rewards is apparently perceived as an extrinsic portion of the job, and may be equated with the extrinsic measures of pay and promotions, which would serve as an explanation for high impact. The role overload may be due to the individual's perception that he or she is not compensated for any of the extra duties performed, i.e., no overtime pay, or compensatory time off.

Equity of rewards also seems to have a strong impact on

the interpersonal satisfactions, and may be due to the perception that the interpersonal relationships may in part be dictated by who is receiving the rewards, or for that matter, who is giving the rewards. The role ambiguity is apparently affecting the relationships individuals have with their supervisor, in that role clarity is determined by this relationship. The mean scores indicate that in general, the roles are not ambiguous. As before, the internal motivation received from the intrinsic happenings appears to be affecting the interpersonal satisfactions.

The equity of rewards again seems to have a fairly strong impact on the growth satisfactions, and in addition is also affected by what the individual obtains from the growth aspects of the job. The other measures have little impact on the rest of the equation.

Looking at the expectancy theory, in general, the person will be motivated, or satisfied, if he or she obtains (the instrumentality of performance) what he or she desires (the valence of the outcomes). Regression of each of the specific valences and instrumentalities on their specific corresponding satisfactions failed to show this expectancy relationship. In all the cases, what happens to the individual provided more of an impact on the satisfaction, than did what the individual wanted. In reality, the valence provided little if any impact on the equation.

In general, the impact of the individual motivations is weak, with the only strong characteristic being the equity of rewards. Since the Work Role Design provided little impact, one can only conclude that the satisfactions are due to some other measure.

Stated Reasons for Turnover

Research Question #6: What are the individual' stated reasons for either leaving or remaining with the organization?

The regressions of the satisfactions on the turnover only provided part of the overall answers to why nurses were leaving, or for that part, why they were remaining. More specific answers are obtained from the write in responses given by the participants.

Examining the responses by groups, rather than individually, gives a clearer picture of the overall reasons. This could be because the respondents are given the opportunity to state whatever reason they feel, using their own words. In addition, they are given the opportunity to explain their response. With the forced choice, he or she must pick the response that most resembles their feelings. In general, most of the nurses responded to the questions, even if they had no intentions of leaving; however, when compared to the nurses with high intention, in most cases, the reasons were the same.

Looking at the general population, the top reasons given for leaving, the largest group consisted of the working conditions, followed by family responsibilities, the job related reasons, politics, and supervision. However, for the leavers, despite the working conditions being first, politics was next, followed by the job related reasons, family responsibilities, and then supervision. With the working conditions, politics, and supervision, what the respondents are saying is that they do not like the way in which they are being treated. In addition, with the job related issues, it appears that the nurses want more opportunities to choose, and to participate in the decisions that ultimately affect their careers. The findings for the leavers are fairly consistent with the literature, but may not be in the same order given (Cronin-Stubbs, 1977; Friss, 1982; Ginzberg, et al., 1977; Godfrey, 1975; 1977; Gulack, 1983; Hallas, 1980; Kovner & Oliver, 1977; Moore et al., 1981; Ruffing et al., 1984; Sigardson, 1985; Simpson, 1985; Wolf, 1981; and others).

The top reasons given for staying, from the general population, consisted of the job related reasons, benefits, education opportunities, assignments, and personal reasons. For the leavers, the greatest response is from the benefits and job related reasons, followed by education opportunity, personal reasons, and politics. The nurses indicated through their responses that they like the career advance-

ment and security afforded by the Nurse Corps. In addition, the benefits seem adequate, and may even have a slight hold on them, i.e., good pay, with good retirement. As with the reasons given for leaving, the reasons for staying are also supported in the literature (Araujo, 1980; Gulack, 1982; Lemier & Leach, 1985; Seebold, 1984; Weisman, 1982).

CHAPTER 7

SUMMARY AND IMPLICATIONS

Rationale and Objectives

Nursing turnover is costly in terms of money, personnel, and employee morale. Some of the research in nursing turnover has alluded to job satisfaction as a major cause of turnover, while other nursing research alludes to personal reasons or the job itself as the cause. Most of the research was conducted in the private sector, utilizing either a small number of nurses, or a small number of hospitals in the study. In addition, few researchers identify concrete methods for retention.

This study was undertaken to determine: 1) the identity of those at risk for turnover, 2) how different measures of satisfactions impact on this turnover, 3) the impact of both Work Role Design and the Individual Motivations on the satisfactions, and 4) the individual's stated reasons for turnover. It was reasoned that if the satisfaction factors do impact on turnover, and if they can be easily identified, more administrative attention could be focused on these factors through the employment of either Work Role Design and/or Motivational Theory, to increase retention and ultimately decrease turnover.

The research model (Figure 11) used, examined the relationship between the levels of turnover intentions (with and without the aspect of forced commitment) and the levels of satisfactions (Air Force, nursing, intrinsic, extrinsic, interpersonal, and growth). The aspect of mobility (the ease and desirability to leave) was added to this relationship to see if the overall impact would change. In addition, the model examined the relationship between the levels of satisfactions and Work Role Design and the Individual Motivations.

The basic purpose of this research was to look at the phenomenon of nursing turnover, from a managerial perspective,as it relates to the U. S. Air Force Nurse Corps. A descriptive design, utilizing a survey instrument designed by John W. Seybolt, Ph.D., was employed to assess the nurse's turnover intentions and levels of satisfactions.

Sample and Methods

The population for this research consisted of the 5,124 nurses on active duty in the U. S. Air Force, assigned to one of the 124 Medical Treatment Facilities, worldwide. The sample population consisted of 1,200 of the 4,293 nurses assigned in Air Force Speciality Code (AFSC): 9716 (Nursing Administrator), 9726 (Mental Health Nurse), 9736 (Operating Room Nurse), 9756 (Clinical Nurse), and 9756-D [illegible] and Coordinator [Table 4]. The setting for the sample included

all the U. S. Air Force Medical Treatment Facilities worldwide (from Medical Center to Clinic).

An attitude questionnaire was utilized to determine the individual's turnover intentions, level of satisfaction (Air Force, nursing, intrinsic, extrinsic, interpersonal, and growth), mobility, motivating potential, interaction, consistency and equity of policies, valence of performance, role perceptions, and perceived equity of rewards. In addition, open-ended questions were used to determine stated reasons for leaving or staying. Overall, 885 usable surveys were returned for an adjusted return rate of 73.75 percent (Table 5). Participation included most all of the Medical Treatment Facilities (Table 6).

Factor groupings used were those used by Seybolt (1978; 1983, 1986), and although the entire questionnaire was administered, only those items significant to the study were analyzed. The Statistical Package for the Social Sciences (Nie, et al., 1975) was the method used for statistical analysis. Reliability of the instrument was ascertained by the use of the Cronbach alpha test. Demographics, turnover intentions, and the levels of satisfactions were analyzed using multiple, selected frequency distributions. Impacts were measured using Pearson correlations and multiple regressions of the data.

Findings

Generalization

In general, comparison of the sample demographics to the actual Air Force population showed fairly high comparison percentages. Even though some raw number *ns* may be low, the sample should be considered representative, and thus generalizable to the study population.

Reliability

The high reliability of the survey instrument main sections indicate that the questions were homogenous and measured what was intended. The low measures for some of the specialized groupings may be due to the variability of the responses, or to the idea that some of the questions were not homogenous, and should not have been included in the grouping.

Turnover

Two measures of turnover were used in the study. One measured the overall intent to leave the Air Force, while the other removed the aspect of forced commitment.

The first measure (TO#1) identified that 9.[illegible] percent of the sample were at high risk for turnover, a [illegible] that closely equates to the actual Air Force [illegible] percentage. The second measure (TO#2) showed, [illegible] forced commitment were removed, [illegible] percent of [illegible] were at high risk for turnover.

Demographics of Turnover

In general, the description of nurses at high risk for TO#1, indicate that they are either the youngest or oldest of the group, female, primarily single (however if married, would have a military spouse), not the primary wage earner (if more than one wage earner), assigned to a hospital with 30 to 39 beds, located in the continental United States, in AFSC 9756 (if younger) or 9716 (if older), with the rank of 1st Lt (if younger) or Colonel (if older), with a Bachelor's Degree in Nursing, on Indefinite Reserve Status, assigned to their present duty location for over 2 years, with 1.5 to 3 years in the Air Force (if younger) or over 20 years in the Air Force (if older), and have either 1.5 to 3 years nursing experience (if younger) or over 20 years nursing experience (if older).

The description of the nurses at high risk for TO#2, indicate that they are the youngest, single or divorced, not the primary wage earner (if more than one wage earner), assigned to a hospital with 70 to 159 beds, located in the continental United States, in AFSC 9736, 9726 or 9756, in the rank of 2nd Lt or 1st Lt, with a Bachelor's Degree in Nursing or a Master's Degree in Nursing, on their Initial Active Duty tour, assigned at their present duty location for 1 to 2 years, under 3 years in the Air Force, and under 5 years experience in nursing.

Satisfactions

Six measures of satisfactions were used in the study: 1) Air Force, 2) nursing, 3) intrinsic, 4) extrinsic, 5) interpersonal, and 6) growth. In addition, mobility was measured as it relates to the impact of satisfactions on turnover intentions.

In general, the respondents appeared to be satisfied, although not highly satisfied. The mean scores indicated that satisfaction with Air Force was highest, followed (in order of preference) by interpersonal, nursing, growth, intrinsic, and extrinsic.

Turnover and Satisfaction

The mean scores indicate that there is some relationship between turnover and satisfaction, i.e., when the intent for turnover is high, in general, the level of satisfactions are lower. Multiple regressions indicate that of all the satisfaction measures, satisfaction with Air Force alone supplies 42 percent of the variance for TO#1 and 52 percent for TO#2. The other measures add little. In addition, mobility adds little to the equation. Of the more specific measures, when regressed apart from Air Force and nursing, intrinsic satisfaction carries the most weight. Although 42 or 52 percent of the turnover may be due to satisfaction with Air Force, the regressions indicate that turnover is due to some other cause.

Impact of Work Role Design on the Satisfactions

Multiple regressions indicate, in general, that the perceived consistency and equity of the organizational policies and the Motivating Potential of the jobs are the most important in determining the levels of satisfactions. The reason behind the high regression for organizational policies may be due to the Air Force (and nursing) being a highly structured, highly bureaucratic organization, that has strong reliance on rules and regulations. The Motivating Potential indicates that the nurses place a high value on their job, which in turn supplies high satisfaction.

Impact of Individual Motivations on the Satisfactions

The multiple regressions of the individual motivations on the satisfactions indicate that, in general, the perceived equity of rewards is the most important in determining the levels of satisfactions. The other factors only supply little explanation to the variances in the satisfactions. The rationale behind the perceived equity of rewards may be explained by the importance the individual places on these rewards; and it doesn't appear to matter where the rewards are coming from, i.e., from the organization, the profession, the job, the pay, the interactions, or growth.

Stated Reasons

The regressions indicate that turnover and the satisfactions must be due to some other cause. More specific answers are obtained from the written responses. In general, for the total group, the reasons for leaving given most often were related to (in order of importance) working conditions, family responsibilities, the job, politics, supervision, and the personal reasons. For those with high turnover intentions, the reasons given most often were related to (in order of importance) working conditions, politics, the job, family responsibilities, supervision, and policies.

The reasons for staying for the total group were most often related to (in order of importance) the job, benefits, education, assignments, personal reasons, and politics/ policies. Some changes were noted for those with high intentions for turnover and were related to (in order of importance) the job, benefits, politics/policies, education, and the personal reasons.

Implications for Nursing Practice

This study has demonstrated, as was found in the literature, that the younger nurse, with a low tenure, is more prone to leave the organization. Although the turnover intent peaks at the 3 year period for TO#1, the sudden rise seen in TO#2 at the 1 year point indicates that the decision to leave is made quite some time before the

individual can separate from the service.

The other group at risk is those in the later years, i.e., over 20 years in the Air Force. This group is apparently taking advantage of the 20 year retirement afforded them by the military, leaving the Air Force at an early age, i.e., 40 to 45 years old, with a guaranteed income (at least one-half of their base pay), so that they can either reenter the job market competitively, or do nothing. Although not proven, it is assumed that this decision to retire at 20 years is made quite early in the individual's career.

The turnover intentions, by percent, equate closely to the actual turnover in the Air Force Nurse Corps. According to Mobley (1982), turnover intent is the best predictor of actual turnover; thus, it can be safe to assume that the Air Force will have close to 9.5 percent turnover during the next fiscal year. This turnover is still considerably lower than the national average of 18 percent (NAHCR, 1986), and is in line with the last two fiscal measures. Also, some turnover is considered to be necessary for organizational growth (Dalton & Todor, 1979; 1982; Mobley, 1982). With this in mind, since the level of turnover is the same, there may not be a problem; thus, it may not be necessary to implement any programs to deal with turnover.

On the other hand, due to the higher than average replacement costs associated with the Nurse Corps, this

level may be too high, thus requiring methods to lower it. Due to the low percentage of nurses leaving by retirement, emphasis for retention is on the younger population.

This study focused on the turnover intentions, attempting to find the causative factors. Comparison of these factors to the reasons listed in the Nurse Corps' Separation Analysis (Table 1) was impossible, as those found in this study differed in context. The literature suggests specific exit interviews for each person separating (Bayley, 1981), so that this pertinent, causative information can be ascertained on an on-going basis. Since Air Force nurses must give a minimum of 6 months notice prior to voluntary separation (that is, if they do not have a commitment to fulfill), more than ample time exists for these data to be obtained. The information could be gathered through a mandatory, yet confidential questionnaire, filled out by the separating nurse, in addition to a personal exit interview with the facility chief nurse. The completed questionnaire and interview results could then be forwarded to the Military Personnel Center so that trend analysis can be accomplished.

Satisfaction with Air Force has been shown to have the most impact on turnover; however, it only explains part of the variance in the turnover measures. Further regression indicates that this satisfaction may be due in part to the equity and consistency of organizational policies, the

motivating potential of the job, and to the equity of rewards. Any corrective actions intended to increase satisfaction should, therefore, include these three factors. In addition, one cannot overlook the stated reasons given for leaving and/or staying.

Organizational policies may include transfer policies (in the Air Force this could mean assignments, or moving from one unit to another), working hours, rotating shifts, leave policies, etc. (Mobley, 1982). These policies compare quite closely to the working conditions reasons given for leaving. The majority of these can be corrected at the local level, without any great expense or involvement by administration. For example, more fair and equitable assignment of extra duties, shift rotation of the nurses, granting of leaves, or more voice in the working hours may be all that is necessary to improve the satisfaction.

Along with the organizational policies is the area of politics, in which one nurse sees himself or herself as being treated differently than another nurse (this may also be seen as how another professional [a physician] is treated differently than the nurse, i.e., "pro-pay"). Internal jealousies may develop if, for example, one nurse is arbitrarily chosen over another nurse for a special school, with little regard to seniority (rank or time on station, or time in service), productivity, past performance, qualifications, etc. It appears logical that

selections of this kind are made by using a systematic approach, and are not just arbitrary selections; however, they are not always perceived as being made in this way. Thus, conflicts are inevitable. The impact of these conflicts can be lessened if a meaningful, honest explanation, by the supervisor (or person making the selection), is given to the nurse involved.

According to Hackman and Lawler (1971) and Hackman and Oldham (1980), in order to establish proper conditions for internal work motivation, a job must: 1) allow workers to feel personally responsible for an identifiable and meaningful portion of their work, 2) provide work outcomes that are intrinsically meaningful or worthwhile, and 3) provide feedback about performance effectiveness. In other words, the harder and better an individual works on such a job, the more opportunities he or she will have to experience higher order need satisfactions and the more incentive he or she will have for continued effective performance. This motivating potential equates closely with the stated "job related" reasons given by the respondents.

Primary nursing is often mentioned as a curative measure for this area; however, it may not be possible in the Air Force environment. However, a modified approach might be indicated, i.e., a sort of primary-team approach, where the nurse is given responsibility for the admission, assessment, initial planning of care, and the evaluation of

care for some of the patients, but may delegate a majority of the care given to subordinates. Another method involves one of the most despised extra duties, committee meetings. Just assigning nurses to a committee does nothing, unless they are given some responsibility for an action and the authority to carry through with that action. In addition, if staff nurses are involved with the decision making and implementation of policies and procedures, they may be more committed to them, and thus be more motivated.

The last area deals with the perceived equity of rewards. Anyone familiar with the military should realize that the majority of the extrinsic rewards are "givens." For example, all personnel get 30 days of leave each year, no matter how long they have been in the Air Force. This leave may be considered a reward by the way in which it is given. Another example is pay. In the military, pay is determined by rank, and time in service, and is paid regardless of the amount of time worked per pay period, amount of overtime, extra duties performed, or even if the individual worked during the pay period. In essence, a poor performer is paid the same as an overachiever (although the poor performer may not last very long in the military). Pay then, is not really an effective reward. However, there may be other rewards. One example may be "additional" time off, or some sort of compensatory time for the additional duties performed. Staffing may not always allow this; however, if

available, every effort should be made for a fair and equitable approach, rewarding those deserving (rewarding those others serves to negate the reward). Additional recognition may also serve to provide rewards. For example, creation of a "nurse of the month," recognizing an outstanding nurse in a special way, for the work that he or she does, may be one method. Other rewards may be just simply giving the nurse honest feedback as to his or her performance, recognizing that he or she is doing a good job, or if not, giving the nurse methods that can be used to correct his or her performance.

Another method mentioned in the literature deals with the establishment of career ladders or means to advance without having to progress into the administrative track. This method may not be suited to the military environment either, as the military promotion system follows the "up or out" philosophy (if not promoted, the nurse is separated from the service). With each promotion comes additional responsibility, which serves to move the nurse to more administrative positions. However, a modified approach can still be used in some cases, by instituting a sort of "clinical specialist/consultant" program, where expertise is recognized. For example, if the nurse has a proven expertise in a speciality area, i.e., Cardiology, Dialysis, Oncology, etc., regardless of the nurse's rank, this person should be used as a resource for teaching other staff

members, planning patient care, and so on. Although this may be looked upon as another additional duty to some, it may also serve to provide intrinsic rewards to others. The key to rewards is the value that the individual places on it as a reward.

The changes mentioned above can all be implemented at the lower, institutional levels; however, for them to succeed, they must have the recommendation and support from higher headquarters. In reality, the fair and equitable treatment of the nurse in regards to organizational policies, working conditions, politics, and rewards, along with the creation of an environment that provides internal motivation, should be all that is necessary to improve the levels of satisfactions. It only appears logical that a satisfied nurse is a nurse that will remain with the organization.

If more nurses do decide to remain in the Air Force, a dilemma could be created for the Nurse Corps. Currently, Congressional limits are placed upon how many nurses can be on active duty at any given time. Since the nurse must apply to remain on active duty, limits are controlled through how many nurses are selected by the Indefinite Reserve Board. The present policy requires those nurses who wish to remain to apply between the 2 and 2.5 year point of their initial commitment. If selected, they may (if they continue to receive promotions) stay until retirement. In

addition, in order for them to separate after selection, they must give a minimum of 6 months notice (and must have fulfilled all commitments). If they do not apply, or if they are not selected, they separate from the Air Force at the end of their commitment. More nurses requesting to stay may create more work for the selection board; however, it also gives the board more quality nurses to evaluate, resulting, ultimately in a higher quality Nurse Corps.

This last recommendation requires action and further research from higher headquarters, as it involves a change in the Air Force Regulations. The change involves the application for Indefinite Reserve Status (IRS). Instead of the nurse who desires to remain applying at the 2 to 2.5 year point, I propose that they extend for another 3 year period, changing the application for IRS to the 5 to 5.5 year point. These nurses on extension should be allowed to separate as before with 6 months notice, as long as they have no commitment, and as before, if they do not apply within this new time frame, they separate. Since the nurse would have to apply for the extension, the change doesn't force anyone to stay past their initial commitment; however, it provides two distinct advantages: 1) it gives the nurse more opportunity to make the career decision (not basing their decision on just 2 short years in the Air Force), and 2) it gives the Air Force more opportunity to evaluate the nurse's potential.

Implications for Nursing Research

The recommended changes could be implemented in all the Medical Treatment Facilities, and after a predetermined time, could be reinvestigated.

As the majority of stated reasons for leaving were in the areas of working conditions and job related areas, further research needs to be done to specifically identify what the various satisfiers/dissatisfiers are. Just knowing that the nurse is satisfied or not is not sufficient unless one can identify the causes for satisfaction.

A longitudinal study could be conducted to determine the turnover and satisfaction changes over a period of time. This would reveal if any trends are apparent that affect the nurse's decision process.

A study of this magnitude creates many questions and offers many avenues for further exploration. Further statistical examination of how the individual's demographic characteristics impact on turnover and satisfactions would provide additional, valuable information for the researcher and nurse manager. A comparison study of the sister services would also provide comparison data.

Limitations

The sample was limited to U. S. Air Force nurses, on active duty, in AFSC 9716, 9726, 9736, 9756, and 9756-D, assigned to the Medical Treatment Facilities worldwide.

Generalization of the results can only be made to nurses in these categories. Limited generalization may be possible to other active duty U. S. Air Force nurses, and to the nurses assigned to the sister services: the U. S. Army Nurse Corps, and the U. S. Navy Nurse Corps.

This study only explored selected, general group satisfiers, associated with job satisfaction. The individual satisfiers were not addressed except in how they provided input to the group satisfier.

Total random selection of the respondents was not possible due to the limited availability of information. Some bias may have been used in the selection process. Even though participation was voluntary, having the chief nurse select the respondents coupled with the cover letter signed by the Chief, Nurse Utilization Branch, may have compelled respondents to participate.

In addition, the author is an active duty U. S. Air Force Nurse Corps officer, and may be known by some of the respondents; however, it was hoped that the assurances of anonymity and confidentiality were accepted.

Conclusion

The demographic characteristics of nurses along with their levels of satisfactions can have an impact on their turnover intentions. If an individual is satisfied with the job, he or she is not apt to leave the organization. In addition, the equity and consistency of organizational

policies, the motivating potential of the job, and the perceived equity of rewards can have an impact on these satisfactions.

By understanding the demographics of turnover, the satisfiers that influence turnover, and the factors impacting on the satisfiers, the nurse manager can develop methods to reduce turnover.

APPENDIX A

SAMPLE PLAN

Surveys Sent to Medical Facilities

Medical Center > 160 Bed

(AFSC)		(9716)			(9726)					(9736)					(9756)					(9756-D)				Total
Base	Bed	Col	LtC	Maj	LtC	Maj	Cpt	1Lt	2Lt	LtC	Maj	Cpt	1Lt	2Lt	LtC	Maj	Cpt	1Lt	2Lt	LtC	Maj	Cpt	1Lt	
1. Wilford Hall	1000	3	-	1	1	4	2	2	2	-	-	2	1	1	1	3	8	5	8	-	-	1	-	42
2. Keesler	325	2	1	-	1	1	3	1	2	-	-	2	1	1	1	3	7	5	7	-	1	-	-	39
3. Travis	285	2	-	-	-	1	3	1	2	-	1	1	1	-	1	3	7	5	7	-	-	-	-	35
4. Andrews	275	2	-	1	-	1	2	1	3	1	-	2	-	1	1	3	7	5	7	-	-	1	-	38
5. Wright-Patt	245	2	-	1	-	1	2	1	3	1	1	1	1	-	1	2	7	5	6	1	-	-	-	36
6. Weisbaden	215	2	-	-	-	1	3	1	2	1	1	1	1	1	-	2	7	5	5	-	-	1	-	34
7. Clark	160	1	1	1	-	1	2	1	3	1	-	1	1	1	1	2	6	5	5	1	-	-	-	34
8. Scott	160	1	1	1	-	1	2	1	2	1	1	1	-	1	-	2	6	5	5	-	1	-	-	32
Total		15	3	5	2	8	19	9	19	5	4	11	6	6	6	20	55	40	50	1	2	3	-	290
n=8 (AFSC Total)			(23)			(57)					(32)					(171)					(7)			

Hospital 70 - 159 Bed

(AFSC)		(9716)			(9726)					(9736)					(9756)					(9756-D)				Total
Base	Bed	Col	LtC	Maj	LtC	Maj	Cpt	1Lt	2Lt	LtC	Maj	Cpt	1Lt	2Lt	LtC	Maj	Cpt	1Lt	2Lt	LtC	Maj	Cpt	1Lt	
9. Eglin	155	1	1	-	-	2	2	1	2	-	1	1	-	1	1	2	5	4	5	-	1	-	-	30
10. Sheppard	150	1	-	1	-	2	3	1	2	-	-	1	1	-	1	2	5	3	4	-	1	-	-	28
11. Carswell	105	1	-	-	—	—	—	—	—	-	1	1	1	1	1	2	5	4	5	-	1	-	-	23
12. March	105	1	-	-	-	1	2	2	2	-	-	1	-	-	1	1	5	3	4	-	-	1	-	24
13. Elmendorf	90		1	-	-	1	2	1	2	-	-	1	1	-	-	2	4	4	4	-	1	-	-	25
14. Offut	80	1	-	1	—	—	—	—	—	-	1	1	-	1	-	1	5	3	4	-	-	1	-	19
15. A F Academy	75	1	-	-	—	—	—	—	—	-	-	1	1	-	-	2	4	3	4	-	1	-	-	17
16. Lakenheath	75	1	-	-	-	1	2	1	3	-	-	1	1	-	-	1	4	3	4	-	-	-	-	22
17. Langley	70	1	1	-	—	—	—	—	—	-	1	1	-	1	-	1	4	3	4	-	-	-	-	17
18. Luke	70	1	-	-	—	—	—	—	—	-	1	1	-	1	-	2	4	3	4	-	1	-	-	18
19. Mather	70	-	1	-	—	—	—	—	—	-	1	-	1	-	-	1	4	3	4	-	-	-	-	15
Total		10	4	2	-	7	11	6	11	-	6	10	6	5	4	17	49	36	46	-	6	2	-	238
n=11 (AFSC Total)				(16)			(35)					(27)					(152)					(8)		

Hospital 40 - 69 Bed

(AFSC)		(9716)			(9726)					(9736)					(9756)					(9756-D)				Total
Base	Bed	Col	LtC	Maj	LtC	Maj	Cpt	1Lt	2Lt	LtC	Maj	Cpt	1Lt	2Lt	LtC	Maj	Cpt	1Lt	2Lt	LtC	Maj	Cpt	1Lt	
20. Homestead	65	1	-	1	—	—	—	—	—	-	1	1	-	1	-	2	5	3	4	-	1	-	-	20
21. MacDill	65	1	-	-	—	—	—	—	—	-	-	1	1	-	-	1	4	3	4	-	-	-	-	15
22. Maxwell	65	1	-	-	—	—	—	—	—	-	1	1	-	-	-	1	3	3	4	-	1	-	-	15
23. Barksdale	60	-	1	-	—	—	—	—	—	-	-	1	-	1	-	1	4	2	4	-	-	1	-	15
24. Davis Monthan	60	1	-	-	—	—	—	—	—	-	1	-	-	1	-	1	4	3	4	-	-	-	-	15
25. Fairchild	45	-	1	-	—	—	—	—	—	-	-	1	1	-	-	1	4	3	3	-	1	-	-	15
26. Nellis	45	-	-	1	—	—	—	—	—	-	-	1	-	1	-	1	3	3	4	-	1	-	-	15
27. Pease	45	-	-	1	—	—	—	—	—	-	1	-	1	-	-	1	4	3	3	-	-	-	-	14
28. Torrejon	45	-	1	-	—	—	—	—	—	-	1	-	1	-	-	1	3	3	3	-	1	-	-	14
29. Tyndall	45	-	1	-	—	—	—	—	—	-	-	1	-	1	-	1	4	2	3	-	-	-	-	13
30. Bitburg	40	-	1	-	—	—	—	—	—	-	1	1	1	-	-	1	4	3	3	-	-	1	-	16
31. Kirtland	40	-	-	1	—	—	—	—	—	-	-	1	-	-	-	1	3	2	3	-	-	-	-	11
32. Minot	40	-	-	-	—	—	—	—	—	-	1	-	1	-	-	1	4	2	3	-	1	-	-	13
33. Shaw	40	-	-	1	—	—	—	—	—	-	-	1	-	1	-	1	4	2	3	-	-	-	-	13
34. Tinker	40	-	1	-	—	—	—	—	—	-	-	1	-	1	-	1	3	2	2	-	-	-	-	11
35. Vandenberg	40	-	-	-	—	—	—	—	—	-	-	1	-	-	-	1	3	3	3	-	1	-	-	12
Total		4	6	5	—	—	—	—	—	-	7	12	6	7	-	17	59	42	53	-	7	2	-	227
n=16 (AFSC Total)				(15)								(32)					(171)					(9)		

Hospital 30 - 39 Bed

(AFSC)		(9716)			(9726)					(9736)					(9756)					(9756-D)				Total
Base	Bed	Col	LtC	Maj	LtC	Maj	Cpt	1Lt	2Lt	LtC	Maj	Cpt	1Lt	2Lt	LtC	Maj	Cpt	1Lt	2Lt	LtC	Maj	Cpt	1Lt	
36. Bergstrom	35	-	-	-	—	—	—	—	—	-	1	-	-	1	-	-	3	2	3	-	-	-	-	10
37. Chanute	35	1	-	-	—	—	—	—	—	-	-	1	-	1	-	1	3	3	3	-	-	-	-	13
38. Dyess	35	-	-	-	—	—	—	—	—	-	-	1	-	-	-	1	3	2	3	-	1	-	-	11
39. Ellsworth	35	-	-	-	—	—	—	—	—	-	1	-	-	1	-	1	3	3	3	-	-	-	-	12
40. Grand Forks	35	-	1	-	—	—	—	—	—	-	-	1	-	-	-	1	3	2	3	—	—	—	—	11
41. Hill	35	-	1	-	—	—	—	—	—	-	-	1	-	-	-	1	2	1	2	-	-	1	-	9
42. Holloman	35	-	-	-	—	—	—	—	—	-	1	-	1	-	-	1	3	2	3	-	1	-	-	12
43. Upper Heyford	35	-	1	-	—	—	—	—	—	-	-	1	1	-	-	1	3	3	2	-	-	1	-	13
44. Beal	30	-	-	-	—	—	—	—	—	-	1	-	1	-	-	-	3	1	3	-	-	1	-	10
45. Cannon	30	-	-	1	—	—	—	—	—	-	-	1	-	-	-	1	3	3	2	-	-	-	-	11
46. Dover	30	-	1	-	—	—	—	—	—	-	1	-	1	-	-	1	3	2	3	-	-	-	-	12
47. George	30	-	-	-	—	—	—	—	—	-	-	1	-	-	-	1	3	2	2	-	-	1	-	10
48. Little Rock	30	-	-	1	—	—	—	—	—	-	1	-	1	-	-	1	3	2	3	—	—	—	—	12
49. Moody	30	-	1	-	—	—	—	—	—	-	-	1	-	-	-	-	3	2	2	-	-	-	-	9
50. Robbins	30	-	-	1	—	—	—	—	—	-	1	-	-	1	-	1	3	2	3	—	—	—	—	12
51. Seymour Johnson	30	-	1	-	—	—	—	—	—	-	1	-	1	-	-	1	3	3	3	-	-	1	-	14
52. Yakota	30	-	-	1	—	—	—	—	—	-	-	1	-	1	-	1	3	2	2	-	-	-	1	12
Total		1	6	4	—	—	—	—	—	-	6	9	6	5	-	14	50	37	45	-	2	3	1	193
n=17 (AFSC Total)				(11)								(28)					(146)					(8)		

Hospital < 30 Bed

(AFSC)		(9716)			(9726)					(9736)					(9756)					(9756-D)				Total
Base	Bed	Col	LtC	Maj	LtC	Maj	Cpt	1Lt	2Lt	LtC	Maj	Cpt	1Lt	2Lt	LtC	Maj	Cpt	1Lt	2Lt	LtC	Maj	Cpt	1Lt	
53. Altus	25	-	-	-	—	—	—	—	—	-	1	-	-	-	-	1	2	2	2	-	-	1	-	9
54. Blytheville	25	-	1	-	—	—	—	—	—	-	-	1	-	1	-	1	2	1	2	—	—	—	—	9
55. Castle	25	-	-	-	—	—	—	—	—	-	-	-	-	1	-	-	2	1	2	-	-	1	-	7
56. England	25	-	-	1	—	—	—	—	—	-	-	-	1	-	-	1	2	1	2	—	—	—	—	8
57. F E Warren	25	-	-	-	—	—	—	—	—	-	1	-	-	1	-	-	3	2	3	—	—	—	—	10
58. Mt Home	25	-	-	-	—	—	—	—	—	-	1	-	-	-	-	1	2	2	2	-	-	1	-	9
59. Williams	25	-	-	-	—	—	—	—	—	-	-	-	1	-	-	1	2	2	2	—	—	—	—	8
60. Whiteman	25	-	1	-	—	—	—	—	—	-	-	1	-	-	-	-	3	1	3	—	—	—	—	9
61. Edwards	20	-	-	-	—	—	—	—	—	-	1	-	-	-	-	1	2	2	2	-	-	1	-	9
62. Griffiss	20	-	-	1	—	—	—	—	—	-	1	-	-	-	-	1	2	2	2	—	—	—	—	9
63. Hahn	20	-	-	-	—	—	—	—	—	-	-	1	-	-	-	1	2	1	1	—	—	—	—	6
64. Incirlik	20	-	-	-	—	—	—	—	—	-	-	1	-	-	-	1	2	2	2	—	—	—	—	8
65. Laughlin	20	-	1	-	—	—	—	—	—	-	-	-	1	-	-	-	1	2	2	—	—	—	—	7
66. Loring	20	-	-	-	—	—	—	—	—	-	-	-	-	1	-	-	2	1	2	—	—	—	—	6
67. Malmstrom	20	-	-	-	—	—	—	—	—	-	-	-	1	-	-	1	2	1	1	—	—	—	—	6
68. Myrtle Beach	20	-	-	-	—	—	—	—	—	-	-	1	-	-	-	-	2	2	2	—	—	—	—	7
69. Patrick	20	-	1	-	—	—	—	—	—	-	-	1	-	-	-	1	2	1	2	—	—	—	—	8
70. Plattsburgh	20	-	-	1	—	—	—	—	—	-	-	-	-	1	-	-	2	1	1	—	—	—	—	6
71. Wurtsmith	20	-	1	-	—	—	—	—	—	-	-	-	-	1	-	1	2	1	2	—	—	—	—	8
72. Columbus	15	-	-	-	—	—	—	—	—	-	-	-	1	-	-	-	1	2	2	—	—	—	—	6
73. K I Sawyer	15	-	1	-	—	—	—	—	—	-	-	1	-	-	-	-	2	1	2	—	—	—	—	7
74. McConnell	15	-	-	-	—	—	—	—	—	-	-	-	-	1	-	-	2	1	2	—	—	—	—	6
75. Misawa	15	-	1	-	—	—	—	—	—	-	-	1	-	-	-	1	2	1	1	—	—	—	—	7
76. Reese	15	-	-	-	—	—	—	—	—	-	-	-	1	-	-	-	1	1	2	—	—	—	—	5
77. Lajes	8	-	1	-	—	—	—	—	—	-	-	1	-	-	-	-	2	1	1	—	—	—	—	6
78. Osan	6	-	1	-	—	—	—	—	—	—	—	—	—	—	-	-	2	1	1	—	—	—	—	5
79. Hellinikon	5	-	-	1	—	—	—	—	—	—	—	—	—	—	-	-	2	1	1	—	—	—	—	5
80. Kunsan	5	-	-	1	—	—	—	—	—	—	—	—	—	—	-	-	2	1	1	—	—	—	—	5
81. Grissom	4	-	-	-	—	—	—	—	—	-	-	1	-	-	-	-	1	1	1	—	—	—	—	4
82. Iraklion	2	-	-	1	—	—	—	—	—	—	—	—	—	—	—	-	2	1	1	—	—	—	—	5
Total		-	9	6	—	—	—	—	—	-	5	10	6	7	-	13	58	40	52	-	-	4	-	210
n=30 (AFSC Total)				(15)								(28)					(163)					(4)		

Clinic

(AFSC)		(9716)			(9726)					(9736)					(9756)					(9756-D)				Total
Base	Bed	Col	LtC	Maj	LtC	Maj	Cpt	1Lt	2Lt	LtC	Maj	Cpt	1Lt	2Lt	LtC	Maj	Cpt	1Lt	2Lt	LtC	Maj	Cpt	1Lt	
83. Alconbury	—	-	-	1	—	—	—	—	—	—	—	—	—	—	-	-	-	-	-	—	—	—	—	1
84. Anderson	—	-	-	1	—	—	—	—	—	—	—	—	—	—	-	-	-	-	-	—	—	—	—	1
85. Ankara	—	-	-	-	—	—	—	—	—	—	—	—	—	—	-	-	1	-	-	—	—	—	—	1
86. Aviano	—	-	-	1	—	—	—	—	—	—	—	—	—	—	-	-	-	-	-	—	—	—	—	1
87. Bentwaters	—	-	-	1	—	—	—	—	—	—	—	—	—	—	-	-	-	-	-	—	—	—	—	1
88. Bolling	—	-	1	-	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
89. Brooks	—	-	-	-	—	—	—	—	—	—	—	—	—	—	-	-	1	-	-	—	—	—	—	1
90. Camp N Amsterdam	—	-	-	-	—	—	—	—	—	—	—	—	—	—	-	-	1	-	-	—	—	—	—	1
91. Charleston	—	-	-	-	—	—	—	—	—	—	—	—	—	—	-	-	1	-	-	—	—	—	—	1
92. Chicksands	—	-	1	-	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
93. Comiseo	—	-	-	-	—	—	—	—	—	—	—	—	—	—	-	-	1	-	-	—	—	—	—	1
94. Eileson	—	-	-	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
95. Fairford	—	-	1	-	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
96. Florennes	—	-	-	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
97. Geilenkirchen	—	-	-	1	—	—	—	—	—	—	—	—	—	—	-	-	-	-	-	—	—	—	—	1
98. Goodfellow	—	-	-	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
99. Greenham Common	—	-	-	-	—	—	—	—	—	—	—	—	—	—	-	-	1	-	-	—	—	—	—	1
100. Hanscom	—	-	-	-	—	—	—	—	—	—	—	—	—	—	-	-	1	-	-	—	—	—	—	1
101. Hickam	—	-	-	-	—	—	—	—	—	—	—	—	—	—	-	-	1	-	-	—	—	—	—	1
102. High Wycombe	—	-	-	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
103. Howard	—	-	-	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
104. Izmir	—	-	-	-	—	—	—	—	—	—	—	—	—	—	-	-	1	-	-	—	—	—	—	1
105. Kadena	—	-	1	-	—	—	—	—	—	—	—	—	—	—	-	-	-	-	-	—	—	—	—	1
106. Kelly	—	-	-	-	—	—	—	—	—	—	—	—	—	—	-	-	1	-	-	—	—	—	—	1
107. Lowery	—	-	-	-	—	—	—	—	—	—	—	—	—	—	-	-	1	-	-	—	—	—	—	1
108. Los Angeles	—	-	1	-	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
109. McChord	—	-	-	1	—	—	—	—	—	—	—	—	—	—	-	-	-	-	-	—	—	—	—	1
110. McClellan	—	-	-	-	—	—	—	—	—	—	—	—	—	—	-	-	1	-	-	—	—	—	—	1
111. McGuire	—	-	-	1	—	—	—	—	—	—	—	—	—	—	-	-	-	-	-	—	—	—	—	1
112. Norton	—	-	-	-	—	—	—	—	—	—	—	—	—	—	-	-	1	-	-	—	—	—	—	1
113. Peterson	—	-	1	-	—	—	—	—	—	—	—	—	—	—	-	-	-	-	-	—	—	—	—	1
114. Pope	—	-	-	-	—	—	—	—	—	—	—	—	—	—	-	-	1	-	-	—	—	—	—	1
115. Ramstein	—	-	1	-	—	—	—	—	—	—	—	—	—	—	-	-	-	-	-	—	—	—	—	1
116. Randolph	—	-	-	-	—	—	—	—	—	—	—	—	—	—	-	-	1	-	-	—	—	—	—	1
117. Rhein Main	—	-	-	-	—	—	—	—	—	—	—	—	—	—	-	-	1	-	-	—	—	—	—	1
118. San Vito	—	-	-	-	—	—	—	—	—	—	—	—	—	—	-	-	1	-	-	—	—	—	—	1
119. Sembach	—	-	1	-	—	—	—	—	—	—	—	—	—	—	-	-	-	-	-	—	—	—	—	1
120. Spangdahlem	—	-	-	-	—	—	—	—	—	—	—	—	—	—	-	-	1	-	-	—	—	—	—	1
121. Vance	—	-	-	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
122. Wheeler	—	—	—	—	—	—	—	—	—	—	—	—	—	—	-	-	1	-	-	—	—	—	—	1
123. Zaragoza	—	-	-	1	—	—	—	—	—	—	—	—	—	—	-	-	-	-	-	—	—	—	—	1
124. Zweibrucken	—	-	-	-	—	—	—	—	—	—	—	—	—	—	-	-	1	-	-	—	—	—	—	1
Total		-	8	14	—	—	—	—	—	—	—	—	—	—	-	-	20	-	-	—	—	—	—	42
n=42 (AFSC Total)				(22)													(20)							

Totals

By Size

(AFSC)		(9716)			(9726)					(9736)					(9756)					(9756-D)				Total
Size	Bed	Col	LtC	Maj	LtC	Maj	Cpt	1Lt	2Lt	LtC	Maj	Cpt	1Lt	2Lt	LtC	Maj	Cpt	1Lt	2Lt	LtC	Maj	Cpt	1Lt	
Med Center	> 160	15	3	5	2	8	19	9	19	5	4	11	6	6	6	20	55	40	50	2	2	3	-	290
Hospital	70-159	10	4	2	-	7	11	6	11	-	6	10	6	5	4	17	49	36	46	-	6	2	-	238
Hospital	40-69	4	6	5	—	—	—	—	—	-	7	12	6	7	-	17	59	42	53	-	7	2	-	227
Hospital	30-39	1	6	4	—	—	—	—	—	-	8	9	6	5	-	14	50	37	45	-	2	5	1	193
Hospital	< 30	-	9	6	—	—	—	—	—	-	5	10	6	7	-	13	58	40	52	-	-	4	-	210
Clinic		-	8	14	—	—	—	—	—	—	—	—	—	—	-	-	20	-	-	—	—	—	—	42
Total		30	36	36	2	15	30	15	30	5	30	52	30	30	10	81	291	195	246	2	17	16	1	1200
n=124 (AFSC Total)			(102)				(92)				(147)					(823)					(36)			

By Rank and AFSC

	9716	9726	9736	9756	9756-D	Total
Col	30	-	-	-	-	30
LtC	36	2	5	10	2	55
Maj	36	15	30	81	17	179
Cpt	-	30	52	291	16	389
1Lt	-	15	30	195	1	241
2Lt	-	30	30	246	-	306
Total	102	92	147	823	36	1200

Total Return

By Size

(AFSC)		(9716)			(9726)					(9736)					(9756)					(9756-D)				Total
Size	Bed	Col	LtC	Maj	LtC	Maj	Cpt	1Lt	2Lt	LtC	Maj	Cpt	1Lt	2Lt	LtC	Maj	Cpt	1Lt	2Lt	LtC	Maj	Cpt	1Lt	
Total sent		30	36	36	2	15	30	15	30	5	30	52	30	30	10	81	291	195	246	2	17	16	1	1200
n=124 (AFSC Total)			(102)				(92)				(147)					(823)					(36)			
Med Center	> 160	12	7	3	2	5	13	6	8	3	1	7	2	5	3	16	44	37	27	2	1	1	-	205
			(22)				(34)				(18)					(127)					(4)			
Hospital	70-159	6	7	1	-	1	12	4	5	-	5	6	4	3	3	10	40	31	31	-	6	2	-	177
			(14)				(22)				(18)					(115)					(8)			
Hospital	40-69	4	7	5	—	—	—	—	—	-	4	5	5	3	-	14	51	34	26	-	5	2	-	1	166
			(16)								(17)					(125)					(7)			(1)
Hospital	30-39	-	5	4	—	—	—	—	—	-	5	8	2	4	-	12	33	35	26	-	2	3	-	139
			(9)								(19)					(106)					(5)			
Hospital	< 30	-	7	6	—	—	—	—	—	-	4	14	2	1	-	9	44	38	31	-	-	4	-	1	161
			(13)								(21)					(122)					(4)			(1)
Clinic		-	4	15	—	—	—	—	—	—	—	—	—	—	-	-	16	1	-	—	—	—	—	42
			(19)													(17)								
Total		23	37	34	2	6	25	10	13	3	19	40	15	16	6	61	228	176	141	2	14	12	-	1	1200
n=124 (AFSC Total)			(94)				(56)				(93)					(612)					(28)			(2)	

By Rank and AFSC

	9716	9726	9736	9756	9756-D	Other	Total
Col	23	-	-	-	-		30
LtC	37	2	3	6	2		55
Maj	34	6	19	61	14		179
Cpt	-	25	40	228	12		389
1Lt	-	10	15	176	-		241
2Lt	-	13	16	141	-		306
Total	94	56	93	612	28		885

APPENDIX B

SURVEY PACKAGE

Reply to
Attn of: John C. Nichols, Major, USAF, NC
AFIT/CIMI (University of Utah)
2519 East Joni
Layton, Utah 84041
(801)544-3658

Subject: Job Satisfaction Survey - Air Force Nurse Corps

To: Facility Chief Nurse

1. I am an AFIT student in Nursing Administration at the University of Utah interested in researching the correlation of job satisfaction and turnover intent, as it relates to the Air Force Nurse Corps. This study will partially fulfill the requirements for a master's degree.

2. The purpose of the study is to 1) determine the level of job satisfaction through an examination of nurse's perceptions of their work role design, 2) identify certain miscellaneous aspects of the the job along with the individual's mobility and intent to leave the organization, and 3) determine if the level of satisfaction and intent to leave are influenced by biographic, demographic and/or professional characteristics of those nurses responding. The information gathered will be included in the thesis report and also sent to Chief of the Air Force Nurse Corps and the Chief, Nurse Corps Career Management Branch, at AFMPC. If specific components of job dissatisfaction are identified, it is possible that changes can be made to improve the overall job satisfaction of the Air Force Nurse Corps.

3. The validity of this research depends upon how close the sample design is followed. As sensitive data, i.e. names, assignments, etc. can not be provided, I ask for your assistance in helping me accomplish my objective. I have enclosed copies of the survey "Work Role Design" for you to distribute to certain members of your staff. The Survey Control Number (USAF SCN 86-99) on the questionnaires indicates Air Force approval. I am limiting the survey to nurses in the following AFSCs: 9716, 9726, 9736, 9756, and 9756D; to include staff nurses, charge nurses, and administrative nurses. All ranks are to be included. Each survey will indicate AFSC and rank desired (see HQ AFMPC/SGCN cover letter). Please distribute the questionnaires accordingly, to those nurses willing to participate. Your participation may also be required. I ask that you give out the surveys with some regard to random selection, however, I realize that in some cases, your choices are limited. If your nursing personnel do not match the pre-identification criteria, please distribute the surveys as close as possible, i.e. substitute rank, but not AFSC. In an effort to keep the total cost of this research within an acceptable budget, I have limited the total number of surveys sent out. Therefore, to insure the study has statistical significance, it is important for each survey to be filled out, however, this does not mean participation is mandatory. The individual nurse's participation is VOLUNTARY. It should take them no longer than 30 minutes to fill out the questionnaires.

4. Please encourage your staff to participate as the results could be used to improve their nurse corps. I appreciate your assistance and support in this endeavor.

JOHN C. NICHOLS, Major, USAF, NC
AFIT/CIMI (University of Utah)

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR FORCE MILITARY PERSONNEL CENTER
RANDOLPH AIR FORCE BASE TX 78150-6001

REPLY TO ATTN OF HQ AFMPC/SGCN

SUBJECT Job Satisfaction Survey

TO Nurse Corps Officers

1. Premature nursing turnover has been an issue of concern for nursing managers for quite some time. This turnover, combined with the reported nursing shortage, may make it more difficult for the Nurse Corps to recruit qualified nurse replacements. Although the Nurse Corps' turnover rate is considerably less than the turnover rate in the civilian sector, replacement costs are considerably higher. The decrease in the number of nurse replacements and increased costs with the recent budget cuts, makes premature nursing turnover an issue for us to investigate.

2. We all realize that some turnover is necessary; i.e. involuntary, for the best interest of the Air Force, some voluntary, and some retirements. However, part of the voluntary turnover and part of the retirements may be premature, and avoidable. Numerous research studies have shown relationships between a workers job satisfaction and their work-role design, to their intent to leave on organization prematurely. Many times, this premature turnover could have been pervented with a few minor changes in the work environment, but before any change can be implemented, these work related factors have to be identified.

3. Major John Nichols is an AFIT student at the University of Utah, working on his master's degree in nursing administration. His thesis research deals with the subject of how job satisfaction and work-role design affect the intent to turnover. Attached is his survey designed to measure these factors. The results of the survey will be used in his research and also will be given to the Nurse Corps so that problem areas can be identified and possible solutions implemented. I ask that you take the time to fill out the survey frankly and honestly, and then return it to him. Your participation is voluntary, however, without it, we may be unable to identify problem areas and their solutions.

4. Thank you for your participation.

Margaret M. Korach
MARGARET M. KORACH, Colonel, USAF, NC
Chief, Nurse Corps Career Management Branch
Office of the Surgeon

Reply to
Attn of: John C. Nichols, Major, USAF, NC
AFIT/CIMI (University of Utah)
2519 East Joni
Layton, Utah 84041
(801)544-3658

Subject: Job Satisfaction Survey - Air Force Nurse Corps

To: Survey Participants

1. I am an AFIT student in Nursing Administration at the University of Utah interested in researching the correlation of job satisfaction and turnover intent, as it relates to the Air Force Nurse Corps. This study will partially fulfill the .equirements for a master's degree.

2. The purpose of the study is to 1) determine the level of job satisfaction through an examination of nurse's perceptions of their work role design, 2) identify certain miscellaneous aspects of the the job along with the individual's mobility and intent to leave the organization, and 3) determine if the level of satisfaction and intent to leave are influenced by biographic, demographic and/or professional characteristics of those nurses responding. The information gathered will be included in the thesis report and also sent to Chief of the Air Force Nurse Corps and the Chief, Nurse Corps Career Management Branch, at AFMPC. If specific components of job dissatisfaction are identified, it is possible that changes can be made to improve the overall job satisfaction of the Air Force Nurse Corps.

3. In order to make qualified statistical analysis of your responses, it is extremely important that you complete the attached questionnaire. This does not mean that your participation is mandatory though; your participation is VOLUNTARY. In addition, your anonymity will be protected, as only the analysis of the results will be included in the thesis. In accordance with Air Force policy, your name and/or SSAN are not required.

4. In accordance with Public Law 93-573. the Privacy Act of 1974, you have been informed of the purposes and uses of the survey information as provided in paragraph 2. Your completion and return of the questionnaire will indicate your consent to participate in the survey. The Survey Control Number (USAF SCN 86-99) on the questionnaire is your assurance that the survey has USAF approval and that no names will be used in reported results.

5. The questionnaire contains two parts. Part I is the Work Role Design Questionnaire divided into nine sections. This questionnaire was developed by John W. Seybolt, PhD; Professor of Management at the University of Utah; and is designed to study jobs and how people react to them. The questions are designed to obtain <u>your</u> perceptions of your job and <u>your</u> reactions to it. There are no trick questions. Your individual responses will be kept completely confidential. Part II is a biographic, demographic, and professional questionnaire. Specific instructions are given at the start of each section. Please read the instructions carefully, and answer each item as honestly and frankly as possible. This survey is copyrighted, therefore, please do not copy it without the consent of the author, Dr. Seybolt.

USAF SCN 86-99 (expires 30 Nov 86)

6. The entire questionnaire will take approximately 30 minutes to complete. Please complete the attached questionnaire AS SOON AS POSSIBLE and return it in the stamped envelope provided for you.

7. If you have any questions or comments about the research and/or survey, please call me at (801)544-3658. If you feel that the issue or problem can not be discussed with me, feel free to call the University of Utah, Institutional Review Board office at (801)581-3655.

8. Thank you very much for your participation in the study.

JOHN C. NICHOLS, Major, USAF, NC
AFIT/CIMI (University of Utah)

2 atch
Work Role Design Survey
Return envelope

PRIVACY ACT STATEMENT

In accordance with AFR 12-35, paragraph 8, the following information is provided as required by the Privacy Act of 1974:

a. Authority:

(1) 5 U.S.C. 301, Departmental Regulations, and/or

(2) 10 U.S.C. 8012, Secretary of the Air Force, Powers, Duties, Delegation by Compensation; and/or

(3) DOD Instruction 1100.13, 17 Apr 68, Surveys of Department of Defense Personnel; and/or

(4) AFR 30-23, 22 Sep 76, Air Force Personnel Survey Program.

b. Principal Purposes. The survey is being conducted to collect information to be used in research aimed at illuminating and providing inputs to the solution of problems of interest to the Air Force and/or DOD.

c. Routine Uses. The survey data will be converted to information for use in research of management related problems. Results of the research, based on the data provided, will be included in written master's theses and may also be included in published articles, reports, or texts. Distribution of the results of the research, based on the survey data, whether in written form or presented orally, will be unlimited.

d. Participation in this survey is entirely voluntary.

e. No adverse action of any kind may be taken against any individual who elects not to participate in any or all of this survey.

WORK ROLE DESIGN
Part I

Section I

What Is Desirable To You At Work

Listed below are a number of characteristics which could be present on any job. People differ about how much they would like to have each one present in their own jobs. I am interested in learning how much you personally would like to have each one present in your job.

Using the scale below, please indicate the degree to which you would like to have each characteristic present in your job.

4	5	6	7	8	9	10
Would like having this only a moderate amount (or less)			Would like having this very much			Would like having this extremely much

1. _____ the opportunity for participating in the determination of methods and procedures.
2. _____ stimulating and challenging work.
3. _____ the feeling of security associated with your job.
4. _____ chances to use independent thought and action.
5. _____ prestige inside the organization (i.e., regard received from others within the hospital).
6. _____ opportunities to learn new things.
7. _____ the feeling of self-fulfillment you get in your job.
8. _____ opportunities to be creative and imaginative.
9. _____ the opportunity for conversation and exchange of ideas with colleagues and co-workers.
10. _____ opportunities for personal growth and development.
11. _____ the feeling of self-esteem you get in your job.
12. _____ a high level of pay for your work.
13. _____ having no threat of change which could make your present skills and knowledge obsolete.
14. _____ experiencing tension and pressure at work.
15. _____ the feeling of worthwhile accomplishment associated with your job.
16. _____ having a lot of work to do.
17. _____ the opportunity for participating in the setting of goals.
18. _____ the opportunity for promotion.
19. _____ the opportunity to give help to other people.

Please continue on reverse.

Section II

About Your Work

Listed below are a number of statements which could be used to describe a job. You are to indicate whether each statement is an ACCURATE or INACCURATE description of your job. Please try to be as objective as you can in deciding how accurately each statement describes your job — regardless of whether you like or dislike your job. Write a number in the blank beside each statement, based on the following scale:

1	2	3	4	5	6	7
Very Inaccurate	Mostly Inaccurate	Slightly Inaccurate	Uncertain	Slightly Accurate	Mostly Accurate	Very Accurate

1. _____ the job requires me to use a number of complex or high-level skills.
2. _____ the job is arranged so that I do not have the chance to do an entire piece of work from beginning to end.
3. _____ my job is quite simple and repetitive.
4. _____ this job is one where a lot of other people can be affected by how well the work gets done.
5. _____ the job provides me the chance to completely finish the pieces of work I begin.
6. _____ my job itself is not very significant or important in the broader scheme of things.
7. _____ just doing the work required by my job provides many chances for me to figure out how well I am doing.
8. _____ the job denies me any chance to use my personal initiative or judgement in carrying out the work.
9. _____ my job itself provides very few clues about whether or not I am performing well.
10. _____ my job gives me considerable opportunity for independence and freedom in how I do the work.

Please continue on next page.

Section III

What Happens When You Do A Really Good Job

If you perform very well and do an extremely good job at work, what will happen in terms of the following things:

1	2	3	4	5	6	7
It will decrease a lot; I'll get a lot less than now	Decrease	Decrease Slightly	Nothing will happen; I'll get the same amount	Increase Slightly	Increase	It will increase a lot; I'll get a lot more than now

1. _____ the opportunity for participating in the determination of methods and procedures.
2. _____ the amount of stimulating and challenging work.
3. _____ the feeling of security associated with your job.
4. _____ the chances to use independent thought and action.
5. _____ the prestige inside the organization (i.e., regard received from others within the hospital).
6. _____ the opportunity to learn new things.
7. _____ the feeling of self-fulfillment you get in your job.
8. _____ the opportunity to be creative and imaginative.
9. _____ the opportunity for conversation and exchange of ideas with colleagues and co-workers.
10. _____ the opportunity for personal growth and development.
11. _____ the feeling of self-esteem you get in your job.
12. _____ the level of pay you get for your work.
13. _____ the amount of threat of change which could make your present skills and knowledge obsolete.
14. _____ the amount of tension and pressure at work.
15. _____ the feeling of worthwhile accomplishment associated with your job.
16. _____ the amount of work you have to do.
17. _____ the opportunity for participating in the setting of goals.
18. _____ the opportunity for promotion.
19. _____ the opportunity to give help to other people.

Please continue on reverse.

Section IV

Your Expectations at Work

1. If you were to try very hard and exert your maximum effort at work, what would your chances be of doing a really good job and performing very well at your job?

   _____ 1. not at all likely
   _____ 2. about a 10% chance
   _____ 3. about a 25% chance
   _____ 4. about a 50% chance
   _____ 5. about a 75% chance
   _____ 6. about a 90% chance
   _____ 7. a sure thing

2. Honestly, how would you rate your ABILITY to do the technical parts of your job (rate it as if you knew that no one would ever see your answer)?

   _____ 1. far below average
   _____ 2. below average
   _____ 3. slightly below average
   _____ 4. about average
   _____ 5. slightly above average
   _____ 6. above average
   _____ 7. far above average

3. If you don't try hard at all, that is put in very little effort, what are your chances that you could do an extremely good job at work?

   _____ 1. not at all likely
   _____ 2. about a 10% chance
   _____ 3. about a 25% chance
   _____ 4. about a 50% chance
   _____ 5. about a 75% chance
   _____ 6. about a 90% chance
   _____ 7. a sure thing

4. Honestly, how would you rate your ABILITY to do the administrative parts of your job (rate it as if you knew no one would ever see your answer)?

   _____ 1. far below average
   _____ 2. below average
   _____ 3. slightly below average
   _____ 4. about average
   _____ 5. slightly above average
   _____ 6. above average
   _____ 7. far above average

5. If you work at about one half of your capability, that is exert about one half of your possible effort, what are your chances you could perform well and do an extremely good job at work?

   _____ 1. not at all likely
   _____ 2. about a 10% chance
   _____ 3. about a 25% chance
   _____ 4. about a 50% chance
   _____ 5. about a 75% chance
   _____ 6. about a 90% chance
   _____ 7. a sure thing

Please continue on next page.

Section IV

Your Expectations at Work

1. If you were to try very hard and exert your maximum effort at work, what would your chances be of doing a really good job and performing very well at your job?

_____ 1. not at all likely
_____ 2. about a 10% chance
_____ 3. about a 25% chance
_____ 4. about a 50% chance
_____ 5. about a 75% chance
_____ 6. about a 90% chance
_____ 7. a sure thing

2. Honestly, how would you rate your ABILITY to do the technical parts of your job (rate it as if you knew that no one would ever see your answer)?

_____ 1. far below average
_____ 2. below average
_____ 3. slightly below average
_____ 4. about average
_____ 5. slightly above average
_____ 6. above average
_____ 7. far above average

3. If you don't try hard at all, that is put in very little effort, what are your chances that you could do an extremely good job at work?

_____ 1. not at all likely
_____ 2. about a 10% chance
_____ 3. about a 25% chance
_____ 4. about a 50% chance
_____ 5. about a 75% chance
_____ 6. about a 90% chance
_____ 7. a sure thing

4. Honestly, how would you rate your ABILITY to do the administrative parts of your job (rate it as if you knew no one would ever see your answer)?

_____ 1. far below average
_____ 2. below average
_____ 3. slightly below average
_____ 4. about average
_____ 5. slightly above average
_____ 6. above average
_____ 7. far above average

5. If you work at about one half of your capability, that is exert about one half of your possible effort, what are your chances you could perform well and do an extremely good job at work?

_____ 1. not at all likely
_____ 2. about a 10% chance
_____ 3. about a 25% chance
_____ 4. about a 50% chance
_____ 5. about a 75% chance
_____ 6. about a 90% chance
_____ 7. a sure thing

Please continue on next page.

6. Honestly, how would you rate your ABILITY to do the interpersonal parts of your job (rate it as if you knew that no one would ever see your answer)?

_____ 1. far below average
_____ 2. below average
_____ 3. slightly below average
_____ 4. about average
_____ 5. slightly above average
_____ 6. above average
_____ 7. far above average

7. As you think about your job, how much effort do you think it takes to do your job adequately?

_____ 1. almost no effort
_____ 2. a slight amount of effort
_____ 3. some effort
_____ 4. a fair amount of effort
_____ 5. quite a bit of effort
_____ 6. a lot of effort
_____ 7. a very great amount of effort

8. As you think about your job, how much effort do you think it takes to do your job especially well?

_____ 1. almost no effort
_____ 2. a slight amount of effort
_____ 3. some effort
_____ 4. a fair amount of effort
_____ 5. quite a bit of effort
_____ 6. a lot of effort
_____ 7. a very great amount of effort

9. As you think about your job, how much effort do you think it takes to do your job in a minimally acceptable manner?

_____ 1. almost no effort
_____ 2. a slight amount of effort
_____ 3. some effort
_____ 4. a fair amount of effort
_____ 5. quite a bit of effort
_____ 6. a lot of effort
_____ 7. a very great amount of effort

Please continue on reverse.

Section V

Feedback at Work

Please answer the following questions about the kinds of feedback you get at work, using the following scale:

1	2	3	4	5	6	7
Never	Almost Never	Seldom	Occasionally	Fairly Often	Often	Extremely Often

1. _____ My immediate supervisor tells me when he/she thinks I am doing a good job.
2. _____ People from other departments tell me they think I am doing a good job.
3. _____ My co-workers tell me when they are not pleased with what I am doing.
4. _____ My immediate supervisor tells me when she/he is not pleased with the quantity (amount) of work I do.
5. _____ Clients or patients tell me when they think I am doing a good job.
6. _____ My immediate supervisor tells me when she/he is pleased with the quality of work I do.
7. _____ My co-workers tell me when they think I am not doing a good job.
8. _____ People from other departments tell me when they think I am not doing a good job.
9. _____ My immediate supervisor tells me when she/he is pleased with what I am doing.
10. _____ My co-workers tell me when they think I am doing a good job.
11. _____ Clients or patients tell me when they think I am not doing a good job.
12. _____ My immediate supervisor tells me when he/she is not pleased with the quality of work I do.
13. _____ My immediate supervisor tells me when she/he thinks I am not performing the way I should be.
14. _____ My co-workers tell me when they are pleased with what I am doing.
15. _____ My immediate supervisor tells me when she/he is not pleased with what I am doing.
16. _____ My immediate supervisor tells me when she/he is pleased with the quantity (amount) of work I do.
17. _____ My immediate supervisor offers suggestions on how I could maintain or improve my job performance.

Please continue on next page.

Section VI

Role Issues at Work

Please answer the following questions about different aspects of your work role, using the following scale:

1	2	3	4	5	6	7
Never	Almost Never	Seldom	Occasionally	Fairly Often	Often	Extremely Often

1. _____ My job duties and work objectives are unclear to me.
2. _____ I work on unnecessary tasks or projects.
3. _____ I have to take work home in the evenings or on weekends to stay caught up.
4. _____ The demands for work quality made upon me are unreasonable.
5. _____ I am unclear about whom I report to and/or who reports to me.
6. _____ I get caught in the middle between my supervisors and my subordinates.
7. _____ I spend too much time in unimportant meetings that take me away from my work.
8. _____ My assigned tasks are sometimes too difficult and/or complex.
9. _____ I lack the authority to carry out my job responsibilities.
10. _____ The formal chain of command is not adhered to.
11. _____ I am responsible for an almost unmanageable number of projects or assignments at the same time.
12. _____ Tasks seem to be getting more and more complex.
13. _____ I do not fully understand what is expected of me.
14. _____ I do things on the job that are accepted by one person and not by others.
15. _____ I simply have more work to do than can be done in an ordinary way.
16. _____ The organization expects more of me than my skills and/or abilities provide.
17. _____ I do not understand the part my job plays in meeting overall organizational objectives.
18. _____ I receive conflicting requests from two or more people.
19. _____ I feel that I just don't have the time to take an occasional break.
20. _____ I have insufficient training and/or experience to discharge my duties properly.

Please continue on reverse.

Section VII

Miscellaneous Aspects of Your Work

Please answer according to the following scale:

1	2	3	4	5	6	7
I strongly disagree	Disagree	Slightly disagree	Neither disagree nor agree	Slightly agree	Agree	Strongly agree

1. _____ I am very sure what my immediate supervisor's expectations of me are on my job.

2. _____ It would be very difficult for me personally to leave this job for one in another organization (other than the Air Force).

3. _____ I feel that the money, benefits, and other "external" rewards which I get are appropriate and equitable for the work that I do.

4. _____ Even if I did not have a service commitment (ADSC) I would remain on active duty.

5. _____ All in all, I would prefer to work in the smaller Air Force hospitals.

6. _____ I have serious intentions about leaving this organization (Air Force) within the next year.

7. _____ I am confident that I am headed in the direction of my career goals.

8. _____ Organizational (hospital) policies and procedures are administered fairly across work groups.

9. _____ Even if I can remain on active duty longer, I plan on retirement at 20 years.

10. _____ I agree with my immediate supervisor's expectations of me on the job.

11. _____ I would rate the labor market as very good for people like me.

12. _____ Considering all the Air Force Hospitals, I prefer working in the larger ones.

13. _____ I feel that the amount of personal satisfaction and the "internal rewards" that I get from my job are appropriate and equitable for the work that I do.

14. _____ Not counting retirement, I will be working for this organization (Air Force) one year from now if I have my way.

15. _____ I prefer being stationed overseas.

16. _____ I spend an appropriate amount of time with my immediate supervisor clarifying expectations he/she has of me and my job.

17. _____ All in all, I am rewarded appropriately and equitably for the work I do.

18. _____ It would be very easy for me to find a job in another organization (other than the Air Force).

19. _____ I would remain with this organization (Air Force) if I had the opportunity for another career field in nursing. (i.e. different AFSC, extended role, or practitioner)

20. _____ My career is progressing very well these days.

Please continue on next page.

1	2	3	4	5	6	7
I strongly disagree	Disagree	Slightly disagree	Neither disagree nor agree	Slightly agree	Agree	Strongly agree

21. _____ Of all the assignments possible, I would prefer to remain in the CONUS.

22. _____ Relative to other parts of the organization (hospital), our work group receives fair treatment from the organization (hospital).

23. _____ It would be very easy for me to find a job as good as the one I now have in another organization (other than the Air Force).

24. _____ If I were to leave this organization (Air Force) I would seek employment outside of nursing.

25. _____ I have serious intentions on remaining in the Air Force past 20 years.

26. _____ If I could not retire, i.e. the Air Force did not have a 20 year retirement plan, I would not remain on active duty.

27. _____ If I did not have a service commitment, i.e. ADSC, I would resign within the next six months.

28. _____ Organizational (Air Force) policies and procedures are administered fairly across work groups.

Section VIII

Your Job Satisfaction

How satisfied are you with the following aspects of your job and the work you do:

1	2	3	4	5	6	7
Very dissatisfied	Dissatisfied	Slightly dissatisfied	Neither satisfied nor dissatisfied	Slightly satisfied	Satisfied	Very satisfied

1. _____ the opportunity for participating in the determination of methods and procedures.

2. _____ the amount of stimulating and challenging work.

3. _____ the feeling of security associated with your job.

4. _____ the chances to use independent thought and action.

5. _____ the Air Force in general.

6. _____ the prestige inside the organization (i.e., regard received from others within the hospital).

7. _____ the opportunity to learn new things.

8. _____ Your geographic area of assignment (CONUS or Overseas).

Please continue on reverse.

1 Very dissatisfied	2 Dissatisfied	3 Slightly dissat-isfied	4 Neither satisfied nor dis-satisfied	5 Slightly satisfied	6 Satisfied	7 Very satisfied

9. _____ the feeling of self-fulfillment you get in your job.
10. _____ the opportunity to be creative and imaginative.
11. _____ the opportunity for conversation and exchange of ideas with colleagues and co-workers.
12. _____ the opportunity for personal growth and development.
13. _____ the feeling of self-esteem you get in your job.
14. _____ the level of pay you get for your work.
15. _____ the amount of threat of change which could make your present skills and knowledge obsolete.
16. _____ Nursing as a career.
17. _____ the amount of tension and pressure at work.
18. _____ the feeling of worthwhile accomplishment associated with your job.
19. _____ the amount of work you have to do.
20. _____ the opportunity for participating in the setting of goals.
21. _____ the opportunity for promotion.
22. _____ the opportunity to give help to other people.
23. _____ the work that you do.
24. _____ your immediate supervisor.
25. _____ how you feel mentally after work.
26. _____ how you feel physically after work.
27. _____ the feedback you get about your work.
28. _____ your job in general.
29 _____ the way your career is going these days.
30. _____ the Air Force as a career.
31. _____ Nursing in general.
32. _____ The size of the Medical Treatment Facility you work in now.
33. _____ The length of time you must spend "on station" before being eligible for P.C.S. orders.

Please continue on next page.

Section IX

Answer the following questions briefly, but completely.

1. If you were to leave the Air Force Nurse Corps, what would be the most important reason? (Please explain your answer).

2. If you were to remain in the Air Force Nurse Corps, what would be the most important reason? (Please explain your answer).

Please continue on reverse.

Part II

Identifying Data

Please answer the following (mark one in each category only):

1. Age: _____.

2. Sex: Male _____; Female _____.

3. Marital Status: Single _____; Married _____; Divorced _____; Separated _____; Widowed _____.

   If married, is your spouse military? Yes _____; No _____.

   If yes, are you stationed together? Yes _____; No _____.

4. Number of dependent children living with you: _____.

5. Primary wage earner: Yes _____; No _____.

6. Facility Assigned:
   - Medical Center (Over 160 beds) _____
   - Hospital (70 - 159 beds) _____
   - Hospital (40 - 69 beds) _____
   - Hospital (30 - 39 beds) _____
   - Hospital (under 30 beds) _____
   - Clinic _____
   - Other _____

7. Location:
   - CONUS _____
   - Overseas _____

8. How long have you been at your present assignment?:

   years _____ months _____

9. Major Command of Facility:

10. AFSC (Primary):
    - 9716 _____
    - 9726 _____
    - 9736 _____
    - 9756 _____
    - 9756-D _____
    - Other _____

11. Position Title (Primary):
    - Staff Nurse _____
    - Charge Nurse _____
    - Supervisor _____
    - Educ Coordinator _____
    - Asst Chief Nurse _____
    - Chief Nurse _____
    - other _____

12. Speciality (Primary):
    - Medicine _____
    - Surgery _____
    - Med-Surg _____
    - Obstetrics _____
    - Psychiatry _____
    - Pediatrics _____
    - Operating Room _____
    - Emergency Room _____
    - Clinics _____
    - Education _____
    - Administration _____
    - ICU/CCU _____
    - Other _____

13. Rank:
    - 2nd Lt _____
    - 1st Lt _____
    - Captain _____
    - Major _____
    - Lt Col _____
    - Colonel _____

14. Years in Nursing:

    years _____

15. Years in Air Force:

    years _____

    (if prior service, also give number of years in Nurse Corps)

    years _____

16. Component
    - Regular _____
    - Indefinite Reserve Status _____
    - Initial Active Duty _____
    - Other _____

17. Education Level: (Mark highest attained)
    - Assoc Degree _____
    - Diploma _____
    - Bachelor's Degree
      - Nursing _____
      - Non-nursing _____
    - Master's Degree
      - Nursing _____
      - Non-nursing _____
    - Doctorate
      - Nursing _____
      - Non-nursing _____

18. Active Duty Service Commitment:
    - none _____
    - 0 - 6 months _____
    - 6 - 12 months _____
    - 12 - 18 months _____
    - 18 - 24 months _____
    - over 24 months _____

APPENDIX C

QUESTIONS AND THE VARIABLES EXAMINED

Part I

Section 1

What is desirable to you at work

Importance of:

Extrinsic:

Security Needs: #3, #13
Tension at Work: #14
Lots of Work: #16
Promotion Opportunities: #18
Good Pay: #12

Intrinsic:

Esteem Needs: #5, #11
Autonomy Needs: #1, #4, #17
Self-Actualization: #7, #10, #15

Interpersonal:

Social Needs: #9, #19

Growth Needs: #2, #4, #6, #8, #10, #15

Section 2

About your work

*Skill Variety: #1, #3
*Task Identity: #2, #5
*Task Significance: #4, #6
*Autonomy: #8, #10
*Job Feedback: #7, #9

Section 3

What happens when you do a really good job

Extrinsic:

Security: #3, #13
Tension: #14
Amount of Work: #16
Promotions: #18
Pay: #12

Intrinsic:

Esteem: #5, #11
Autonomy: #1, #4, #17
Self-Actualization: #7, #10, #15

Interpersonal:

Social: #9, #19

Growth: #2, #4, #6, #8, #10, #15

Section 4

Expectations

Perceived link between effort and performance:

If 100% effort: #1
If 50% effort: #5
If little effort: #3

Effort for minimal performance: #9
Effort for adequate performance: #7
Effort for excellent performance: #8

Ability:

Technical: #2
Administrative: #4
Interpersonal: #6

Section 5

Feedback at work

Supervisory feedback:

Quantity of Work - Positive: #16
Quantity of Work - Negative: #4

Quality of Work - Positive: #6
Quality of Work - Negative: #12

Overall Positive: #1, #9
Overall Negative: #12, #15
Suggestions for Improvement: #17

Co-Worker Feedback:

Positive: #10, #14
Negative: #3, #7

Customer/Client Feedback:

Positive: #5
Negative: #11

Other Department's Feedback:

Positive: #2
Negative: #8

Section 6

Role issues at work

Role Ambiguity: #1, #5, #9, #13, #17
Role Conflict: #2, #6, #10, #14, #18
Role Overload - Quantitative:
#3, #7, #11, #15, #19
Role Overload - Qualitative:
#4, #8, #12, #16, #20

Section 7

Miscellaneous aspects of your work

Supervisory Role Expectations: #1, #10, #16
Equity of Rewards: #3, #13, #17
Equity of Policies & Procedures: #8, #22, #28
Career Satisfaction: #7, #20
*Mobility: #2, #11, #18, #23
*Turnover Intentions: #6, #14
*Retirement Intentions: #9, #25
*Facility Size: #5, #12
*Facility Location: #15, #21

Career Change: #19
No Retirement: #26
Forced Commitment: #4, #27

Section 8

Your Job Satisfaction

Satisfaction of:

Extrinsic:

Security: #3, #15
Tension: #17
Amount of Work: #19
Promotions: #21
Pay: #14
Your Work: #23
How You Feel After Work - Mentally: #25
How You Feel After Work - Physically: *26
Facility Size: #32
Facility Location: #8
Time on Station: #33

Intrinsic:

Esteem: #6, #13
Autonomy: #1, #4, #20
Self-Actualization: #9, #12, #18
Job in General: #28
Career: #29

Interpersonal:

Social: #11, #22
Your Supervisor: #24
Feedback: #27

Growth: #2, #4, #7, #10, #12, #18

Nursing:

In General: #31
As a Career: #16

Air Force:

In General: #5
As a Career: #30

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* Indicates item reverse scored

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