Employee Turnover: The Effects of Labor Market Classification, Professionalism, Career Commitment, Career Opportunity, Job Satisfaction, Organizational Commitment, and Ease of Movement.

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Employee turnover: The effects of labor market classification, professionalism, career commitment, career opportunity, job satisfaction, organizational commitment, and ease of movement

Pizzolatto, Allayne Barrilleaux, Ph.D.

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EMPLOYEE TURNOVER: THE EFFECTS OF
LABOR MARKET CLASSIFICATION, PROFESSIONALISM, CAREER
COMMITMENT, CAREER OPPORTUNITY, JOB SATISFACTION,
ORGANIZATIONAL COMMITMENT, AND EASE OF MOVEMENT

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

in
The Interdepartmental Programs in Business Administration

by
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Abstract

This paper extends previous research by analyzing the effects of selected variables on employee turnover decisions. Specifically, the purpose of this study was to: (a) examine both the relation of ease of movement to turnover and intent to leave and the relation of job satisfaction to perceived career opportunities, as moderated by labor market classification; (b) test the relation of professionalism to organizational commitment, job satisfaction, and turnover; and (c) examine the relations of perceived career opportunities to turnover and intent to leave, as moderated by career commitment. Subjects were Registered Nurses, Licensed Practical Nurses and Nurses' Aids (n = 302) employed by two medium-size hospitals in a southern community. Questionnaires were used to measure independent variables, and six months after the initial questionnaire distribution, turnover data were collected from hospital records. Given the dichotomous nature of turnover as a dependent variable, analyses were conducted using both moderated and logistic regression techniques so as to compare results. The results suggest that professionalism should be considered as a construct separate from career commitment when predicting turnover. Labor market classification was found to significantly moderate the relationship between job satisfaction and perceived career opportunities,
although it did not moderate the relationship between ease of movement and turnover. Career commitment was found to significantly moderate the relationship between perceived career opportunities and intent to leave, although it did not moderate the relationship between perceived career opportunities and turnover. There is evidence that moderated regression may be a more stringent test than logistic regression when a dichotomous dependent variable is employed. Results are discussed in terms of their impact on managing turnover and on future investigations in this theoretical arena.
EMPLOYEE TURNOVER: THE EFFECTS OF
LABOR MARKET CLASSIFICATION, PROFESSIONALISM,
CAREER COMMITMENT, CAREER OPPORTUNITY, JOB SATISFACTION,
ORGANIZATIONAL COMMITMENT, AND EASE OF MOVEMENT

Chapter 1

Introduction

The subject of employee turnover has interested scholars for over seven decades (Crabb, 1913; Greenwood, 1919). During this time, numerous models of turnover have been developed and tested. In reviewing the relevant literature, one may observe that succeeding models have built largely upon the merits and usefulness of their predecessors, tending to be complementary rather than contradictory (Bluedorn, 1982).

Rather than testing or synthesizing the turnover models presently in the literature, the study reported here likewise builds upon existing models by focusing on several individual difference variables.

Historical Overview: Explanatory Variables and Data Analysis in Turnover Research

An analysis of the turnover literature reveals that a number of models have been offered in an effort to summarize the turnover process (viz., March & Simon, 1958;

March and Simon’s (1958) model of turnover specified that a voluntary choice to leave an organization is a function of an individual’s perceptions of the ease and desireability of withdrawal. Ease of withdrawal is related to the number of perceived opportunities outside the organization. Desireability is a negative function of an individual’s job satisfaction. Thus, March and Simon’s model hypothesizes that when both perceived ease of withdrawal and desireability of withdrawal are high, individuals are more likely to leave the organization. The impact of March and Simon’s (1958) model is evident from the research which continues to develop and test this hypothesis.

Porter and Steers (1973) centered their turnover process model around the role of met expectations. Under this conceptualization, Porter and Steers see each jobholder as bringing a unique set of job expectations to an employment situation. It is likely that most employees place a fairly high valence on the attainment of these expectations. Whatever their composition, Porter and Steers note that it is important that expectations be met if an employee is to remain with an organization. Although direct support of Porter and Steer’s met
expectations hypothesis is rather weak (Mobley et al., 1979), it has been modified and utilized by a more recent turnover model (i.e., Mobley et al., 1979). That is, it is suggested that jobholders may remain in a job if they expect that it will lead to future attainment of positively valued outcomes. This study further explores the usefulness of this hypothesis by examining the relationships between career commitment and perceived career opportunities to turnover.

In 1974, Porter, Steers, Mowday, and Boulian opened a new avenue in the study of turnover by introducing organizational commitment as a focal variable. This variable has come to generate considerable interest, and has been studied as both an independent and dependent variable. Overall, organizational commitment has been consistently related to turnover. Bluedorn (1982) suggests that organizational commitment may be caused by several different variables (e.g., satisfaction, age, promotion opportunity). There is question, however, as to how professionalism is related to organizational commitment (Bartol, 1979b), and this issue is explored in this study.

Price's (1977) model of employee turnover depicts a turnover process which begins with a series of structural and individual determinants of job satisfaction (e.g., promotion, opportunity, centralization, pay). Satisfaction
with one's job, in turn, is related to turnover; however, this satisfaction/turnover relation is also contingent upon the state of the prevailing economy (i.e., existing job opportunities). This model further proposes that demographic characteristics (e.g., age, tenure, education) should not have independent causal impacts once job satisfaction and the prevailing economy have been taken into account. Bluedorn (1982) notes that several studies support the basic structure of Price's model with two exceptions: (1) The job satisfaction by job opportunity interaction is rejected. Rather, job opportunity is directly related to turnover or indirectly related to turnover through job satisfaction; (2) demographic variables are still important causes of turnover. Drawing from Price's model, this study further examines the role of job opportunities and promotion opportunities in the turnover decision.

Mobley (1977) has also proposed a detailed model of an intermediate linkage system to explain the relationship between job satisfaction and turnover. A simplified description (Bluedorn, 1982) of Mobley's model is as follows: Job dissatisfaction leads to job search which leads to intent to quit or stay, which leads to the individuals actual staying or leaving behavior. Whereas Price's model is detailed in specifying the antecedents of satisfaction, Mobley's model suggests a number of possible
mediating steps between job dissatisfaction and actual quitting. One of the greatest contributions of Mobley's model to turnover research is the inclusion of behavioral intentions as a predictor of turnover. The behavioral intent construct is drawn from the theory of reasoned action (Fishbein & Ajzen, 1975) which states that a person's behavioral intention to perform a specific behavior is the immediate determinant of that behavior (Prestholdt, Lane, & Mathews, 1987).

It seems that a veritable explosion of intent-turnover research has taken place (Steel & Ovalle, 1984) since the publication of Mobley's (1977) model. Perhaps this is because the theory of reasoned action possesses numerous characteristics listed by Mobley et al. (1979) as desirable for process models of turnover. Prestholdt, Lane, and Mathews (1987) summarize these characteristics as follows: (a) focusing on the individual as the unit of analysis; (b) recognizing the role of an individual's perception and evaluation of alternatives to the present job; and (c) considering an individual's intention as the immediate determinant of behavior.

Indeed, in their meta-analysis of research on the relationship between behavioral intent and turnover, Steel and Ovalle (1984) note that psychological models of the decision making process preceding employee turnover have made extensive use of behavioral intent as an explanatory
construct. Further, their analysis indicates that behavioral intentions were routinely superior to affective (e.g., job satisfaction, organizational commitment) variables in the prediction of attrition. Given the theoretical significance of behavioral intent to turnover research, this study examines behavioral intent, as well as turnover as a dependent variable.

Perhaps the most highly integrated and comprehensive model of turnover in the literature (Muchinsky & Morrow, 1980) is that of Mobley, Griffeth, Hand, and Meglino (1979). Their model is based upon individual variables, as well as perceptions of organizational and economic factors. Hence, specific factors (e.g., job related and labor market perceptions, expectations, individual values, expectations, job satisfaction) are hypothesized to interact and ultimately influence intentions to search, intentions to quit, and actual turnover. This model has generated much interest, although it has not yet been comprehensively tested.

Drawing on the above-mentioned theoretical formulations and related research, the present study seeks to clarify specific discrepancies among these models and to further analyze several neglected variables. Specifically, the following issues are addressed:

1. Dalessio, Silverman, and Schuck (1986) have found discrepancies between studies (Michaels & Spector,
1982; Miller, Katerburg & Hulin, 1979; Mobley, Horner & Hollingsworth, 1978; Mowday, Koberg & McArthur, 1984; Spencer, Steers & Mowday, 1983) using various turnover models. They note that one reason for the mixed results in turnover research may be that the models used are too general to consistently describe the turnover process for any single group. Dalessio, Silverman, and Schuck (1986) suggest that attention be given to possible differences in the turnover process among members of different groups within an organization. Thompson and Terpening (1981) incorporate labor market classification as a means of differentiating among groups of workers. This study explores the usefulness of this categorization in determining the relationship between ease of movement and turnover, and between perceived career opportunities and job satisfaction.

(2) Porter and Steers (1983) report promotion opportunity to be consistently related to turnover, yet Price (1977) and Mobley et al. (1979) are less convinced (Cotton & Tuttle, 1986). The present study seeks to clarify this discrepancy by analyzing the role of perceived career opportunities in the turnover process.

(3) Cotton and Tuttle (1986) note that while models such as Mobley et al.'s (1979) and Price and Mueller's (1981) acknowledge professionalism as a determinant factor, this variable is almost never examined. Cotton
and Tuttle suggest that research on employee turnover needs to include professionalism and related variables. Hence, this study analyzes the relationship of career commitment and professionalism to turnover.

Summarizing, in an attempt to enhance further understanding of employee turnover, the present study focuses on several variables: (a) labor market classification, (b) professionalism, (c) career commitment, (d) perceived career opportunities, (e) ease of movement, (f) job satisfaction, (g) organizational commitment, and (h) behavioral intent. Evidence supporting the need to study these variables is presented in the accompanying literature review.

The general linear regression model is widely used to estimate the effects of multiple variables on turnover. However, there is question as to whether this analysis is appropriate given the dichotomous nature of the dependent variable, turnover. It is suggested that the logistic function used in logit analysis may be employed to minimize problems associated with the use of traditional regression analysis when a dependent variable is dichotomous (Aldrich & Nelson, 1985; Swafford, 1980; Walsh, 1987).

This study incorporates both traditional moderated and logistic regression techniques to analyze field data.
in an attempt to ascertain whether the above-mentioned methodological problem truly exists in turnover research.

Statement of the Research Problem

Turnover theories and research indicate that ease of movement, job satisfaction, organizational commitment, and perceived career opportunities in one's employing organization serve as predictors of turnover. Generally, perceptions of low levels of career opportunities and high levels of ease of movement are positively related to turnover (Cotton & Tuttle, 1986). However, these effects may be influenced by other variables; specifically, career commitment and labor market classification (e.g., Farris, 1971; Graen & Ginsburg, 1977; Thompson & Terpening, 1983).

The purpose of this study is to: (a) examine both the relation of ease of movement to turnover and intent to leave and the relation of job satisfaction to perceived career opportunities, as moderated by labor market classification; (b) test the relation of professionalism to organizational commitment, job satisfaction, and turnover; and (c) examine the relations of perceived career opportunities to turnover and intent to leave, as moderated by career commitment. Following the accompanying literature review, hypotheses related to each purpose are presented.
Significance of the Study

Since turnover is important to many ongoing undertakings, the concerns about this issue are well-founded. Nursing turnover has recently drawn particular interest in turnover studies (Prestholdt et al., 1987). RN Magazine reports that each year a third of all staff nurses leave their jobs ("Are Hospitals," 1987) and that more than 90% of the nation's hospitals are actively recruiting nurses ("Why RNs," 1987). The relatively high rate of nursing turnover has also been blamed for reducing the overall quantity and quality of patient care (Wolf, 1981). In light of these concerns, the present study also considers the turnover of nurses.

The ever growing body of literature in the area of employee turnover is evidence of academicians' attempts to understand the turnover process. As previously noted, a number of comprehensive models of the turnover process have been generated, and researchers are continually analyzing and building upon these models in hope of further understanding this process. The present study is an attempt to aid in the development of these models and their underlying theories by analyzing cited discrepancies and neglected areas of study.

A better understanding of how perceived career opportunities and career commitment are related to
turnover should also be of practical significance. For example, if career commitment is found to be a significant influence on turnover, employers might offer incentives pertaining to employees' careers in order to discourage turnover. Knowledge of these variables' links to turnover promise to aid managerial attempts to retain valued employees.

The use of logit analysis to test the hypotheses of the present study is significant from a methodological standpoint. Logit analysis is used widely in areas such as economics and marketing (Doyle, 1977). However, it has not yet been widely incorporated in turnover research (cf. Wolpin & Burke, 1985). The use of logit analysis is particularly appealing since this study employs a dichotomous dependent variable.

Scope and Delimitations

As with turnover research in general, the results of this study are constrained by the context in which it is conducted—only Registered Nurses, Licensed Practical Nurses and Nurses' Aids in two medium-size southern hospitals were sampled. Therefore, the results must be generalized with caution.

The literature has expressed concern with the quality of self-report data (Chao & Kozlowski, 1986; Podsakoff & Organ, 1986; Spector, 1987). Because data for this study were collected with self-report measures,
potential problems with respondent biases are noted. One source of systematic variation which may result from self-report data is the possibility of idiosyncratic response styles. That is, respondents may answer questions in patterns which they believe are characteristic of themselves. Transient moods may also affect the accuracy of answers. For example, a jobholder may be in a terrible mood on the day a questionnaire is administered and, consequently, indicate a high degree of dissatisfaction with a job. Also, respondents may attempt to guess what a researcher is really trying to find out and, hence, answer inaccurately or give the researcher what the researcher is believed to want. This study attempts to minimize these problems by emphasizing the importance of responding completely and accurately.

In many studies of turnover, measures of the dependent (i.e., behavioral intent) and independent (e.g., ease of movement, organizational commitment, job satisfaction) variables are obtained in one questionnaire. This practice can lead to inflated correlations between these variables because of the influence of common method variance and response consistency effects (Ganster, Fusilier, & Mayes, 1986). A recent study by Spector (1987) addressed this issue. Based on the data and results of his study, Spector concluded that such method variance problems may be
mythical. He contends that method variance may be more of a problem with single items or poorly designed scales. Nevertheless, this study uses a true predictive validation procedure (Childs & Klimoski, 1986). That is, a 6 month time lapse occurred between the collection of self-report predictor information and the turnover measurement. It seems plausible to assume that the temporal separation of these measurements further minimizes any inflated correlations between the study's dependent (turnover) and independent variables. Furthermore, the measures used in the study were adapted from those developed and tested by previous researchers, and they are all multi-item measures.
Chapter 2

Review of the Literature

**Labor Market Classification**

Research indicates that the turnover process varies for jobholders in different occupations or groups. (Dalessio, et al., 1986; Mowday, et al., 1984). One reason for this variation may be that turnover models which have been developed are too general to consistently describe the turnover process for all work groups (Dalessio et al., 1986). Dalessio et al. (1986) suggest that attention be given to possible differences in the turnover process among different groups within the same organization. The impact of these differences then needs to be considered in the development of turnover models.

In a recent study, Thompson and Terpening (1983) investigated the impact of distinguishing among types of jobs (i.e., occupations and groups) as an explanatory variable in the turnover process. Thompson and Terpening's classification of jobs into "types" is based on the labor economic literature (e.g., Victorisz & Harrison, 1973) which has advocated that there are two dichotomous job segments or markets, and each entails separate and distinct characteristics. The "primary labor market" is characterized by high wages, high productivity,
high stability, and high rates of technical progress. The "secondary labor market" is characterized by low wages, low productivity, and low stability, and by technological stagnation.

Thompson and Terpening (1983) suggest that the differences between labor markets may explain variations that occur across turnover studies. Indeed, they increased the variance explained in a hypothesized turnover model by dividing subjects into primary and secondary labor market jobholders. As regards the economic nature of an occupation or group, Thompson and Terpening (1983) distinguish between primary and secondary labor market jobs. Primary jobs are characterized by high individual growth and advancement potential, high skill requirements with high marketability, good salary levels, greater expectations of job autonomy and responsibility—for example, managerial work, advanced technical work, professionally-based work such as is currently the case with nurses, supervisors, engineers, and computer programmers. Secondary jobs are characterized by low potential for individual growth and advancement, low skill requirements with marginal marketability, poor salary level, low expectations of job autonomy and responsibility—for example, clerical, assembly line, and maintenance jobs.
As reflected in the literature, turnover of nursing staff personnel has been studied consistently (e.g., Bannister & Griffeth, 1986; Bateman & Strasser, 1984; Blau, 1985b; Farrell & Peterson, 1984; Price & Mueller, 1981; Taylor & Covaleski, 1985; Thompson & Terpening, 1981). However, these studies do not always indicate whether the nurses are Registered Nurses, Licensed Practical Nurses or Nurses' Aids. Because education level and skills vary by type, nursing staff positions may be classified into different labor markets.

The nursing and personnel directors of each hospital were interviewed to ascertain how the nursing staff positions should be categorized. After a review of relevant job descriptions and labor market descriptions, they suggested that the Registered Nurses be classified as primary labor market jobholders, and Licensed Practical Nurses and Nurses' Aids as secondary labor market jobholders. In comparing the positions, it was noted that Registered Nurses are required to have at least an associate degree, whereas Licensed Practical Nurses must have only one year of training at a vocational technical school, and Nurses' Aids are not required to have any formal education. Further, the Registered Nurse positions have higher salary levels and marketability, and more responsibilities and advancement potential.
Thus, this study divides the sample into primary (i.e., Registered Nurses) and secondary (i.e., Licensed Practical Nurses and Nurses' Aids) labor markets. As a validity check of this classification, these groups were compared on education and salary level. Chi square results were as expected. There was a significant difference in education level, $\chi^2(5, n = 302) = 130.7$, $p < .00$, in that the primary labor market jobholders had a higher level of education. There was also a significant difference in salary levels, $\chi^2(5, n = 302) = 169$, $p < .00$, with 85% of primary labor market jobholders earning over $20,000, and only 12% of the secondary labor market jobholders earning that level of income.

In an attempt to further test Thompson and Terpening's (1981) findings, labor market classification will be used to assess whether the variance explained in the hypothesized relations between ease of movement and turnover (Hypothesis 1) and between job satisfaction and perceived career opportunities (Hypothesis 7) may be increased. The development and description of these hypotheses are explained in the corresponding sections of this literature review.

**Demographic Factors**

Reviews of turnover research by Mobley et al. (1979), Porter and Steers (1973), Price (1977), and Stumpf and Dawley (1981), indicate that sex, age, educational level,
and tenure often account for significant variance in withdrawal behavior. Most studies suggest that such demographic factors operate indirectly through intention to leave (Parasuramen, 1982; Thompson & Terpening, 1983), intention to search (Arnold & Feldman, 1982), or through organizational commitment or job satisfaction (Bluedorn, 1982; Michaels & Spector, 1982). Although only tenure has been consistently cited as having direct, as well as indirect effects on turnover decisions (Arnold & Feldman, 1982; Koch & Rhodes, 1981; Miller et al., 1979), Bluedorn (1982) also found independent effects for age.

While there is agreement on the indirect effects of most demographic factors, there is less agreement on (a) why they operate, (b) whether they should be included in turnover research, or (c) whether they are simply surrogates for other variables (Mobley et al., 1979). For example, it has been suggested that age and tenure affect a jobholder’s perception of being able to find another job (Mobley et al., 1978). An older jobholder, for example, may fear job employment discrimination.

Other researchers suggest that demographic factors do not directly affect turnover but, rather, are surrogates for other factors such as job status and job satisfaction. For example, with increasing age or tenure, a jobholder is likely to attain a higher status position with more
responsibility, challenge or satisfaction, and be less likely to quit. Thus, the actual "cause" of remaining might be job satisfaction (Abelson & Baysinger, 1984; Marsh & Mannari, 1977), or an opportunity for job transfer or participation (Price & Mueller, 1981).

Mobley et al. (1979) contend that demographic factors affect both job and labor market perceptions. For example, a female jobholder could feel that her position was the best she, as a woman, could obtain and that opportunities for women were limited. With these perceptions, she might be less likely to consider job search. It is also possible that demographic factors operate by affecting jobholders' personal values. For instance, women or older jobholders may place a high value on stability. In such a case, they would be less likely to consider alternative employment. Values might likewise affect job satisfaction or organizational commitment (Mobley et al., 1979).

There is also evidence that labor market classification moderates the relationship between certain demographic factors and other variables. In comparing primary labor market jobs with secondary labor market jobs, Thompson and Terpening (1983) found that education affected intent to leave in secondary labor market jobs while other factors such as gender, tenure,
or marital status had little impact. In primary labor market jobs, the opposite was true.

Similarly, Cotton and Tuttle (1986) found that age and gender were less consistently related to the turnover of blue-collar workers. These results suggest that age and gender may have an impact on white-collar jobs, in which jobholders see the possibility of advancement, and may be frustrated when advancement appears to be hindered by factors such as age or gender. In blue-collar jobs, there is arguably less chance of advancement; therefore, a jobholder's age or gender would have a lesser opportunity for effect.

There is considerable evidence which supports the hypothesis that tenure has an impact on both intended, as well as actual turnover (Arnold & Feldman, 1982; Stumpf & Dawley, 1981; Thompson & Terpening, 1983). Mobley et al. (1979) note that tenure is cited as being one of the best single predictors of turnover. The present study controls for tenure by entering it as the first variable in both the traditional moderated and logistic regression techniques.

Additionally, this study takes the position, in accordance with previous research findings, that demographic factors indirectly affect turnover through ease of movement.
Ease of Movement

The role of ease of movement in turnover has long been recognized (Jackofsky & Peters, 1983a & 1983b; March & Simon, 1958; Mobley, 1979). For example, March and Simon (1958) hypothesized that the voluntary choice to leave an organization depends on a jobholder's perceived ease of movement and desire to turnover.

Various approaches have been used to operationalize the ease of movement construct. In general, however, ease of movement is frequently collapsed into a "general level of economic activity" or "perception of favorable job alternatives" construct (e.g., Cotton & Tuttle, 1986).

Turnover research incorporating the ease of movement construct has had mixed results. For example, Arnold and Feldman (1982) found no support for a hypothesized interaction between intent and perceived existence of job alternatives in influencing turnover. Michaels and Spector (1982) concluded that perceived alternative employment opportunities could not be confirmed as a significant factor in the turnover process. Mobley, Horner, and Hollingsworth's study (1978) of hospital employees found that the probability of finding an acceptable job alternative significantly correlated with intention to quit. Dansereau, Cashman, and Graen (1974) used a sample of office workers and managers and found that the perceived expectancy of finding a comparable job
moderated the relationship between attitude toward work and employee turnover.

Hulin, Roznowski, and Hachiya (1985) suggest that economic opportunity factors, including both local and national unemployment, act as a releaser, allowing job satisfaction to best predict turnover during periods of high economic opportunity. Carsten and Spector's (1987) meta-analysis of the relation between unemployment, job satisfaction, and turnover support this notion. The data and results denote a low relationship between job satisfaction and turnover when employment opportunity is limited, and a stronger relationship when employment opportunity is expanded.

In their meta-analysis of turnover, Cotton and Tuttle (1986) found that data related to jobholders' perceptions of economic conditions or possible job alternatives are consistently related to turnover. However, as observed by Mobley et al., (1979), demonstrations of a relationship between economic conditions and turnover do little to aid understanding of turnover. A linking mechanism is needed that considers jobholders' perceptions and evaluations of available alternatives relative to their present position. Isolating the influence of factors such as ease of movement is complicated by individual differences in perceiving job alternatives. Hulin et al. (1985)
note that a general problem in this research area is that national or even local labor markets may be poorly related to the relevant labor opportunities for a given individual. Labor opportunities for individuals should reflect the job openings that require the specific mix of skills and experiences of the person in question.

In line with this reasoning, Mowday et al. (1984) have attempted to assess the significance of mobility cognitions (ease of movement) for managerial versus clerical workers. Mobility cognitions was measured using a questionnaire that asked jobholders questions related to their specific personal characteristics, abilities, and experiences. Their findings suggest that the role of mobility cognitions remains poorly understood in turnover models, playing a more complex role than originally thought. The differences observed between the managerial and clerical workers in the relationship of mobility cognitions to other variables suggest that the different job markets may have influences on the turnover decision.

Additionally, Thompson and Terpening (1983) have found that labor market classification moderates responses to environmental factors. External opportunity was found to be important to jobholders in both primary and secondary labor markets. However, the career-centered and cosmopolitan nature of primary labor market jobholders heightens the value of external job opportunities in
seeking new positions as compared to secondary labor market jobholders. Without the skills necessary to advance, secondary labor market jobholders may find external opportunities less attractive and, therefore, less important to the turnover decision. Hence, there is evidence that labor market classification may moderate the relationship between ease of movement and turnover.

In accordance with these research findings, it is hypothesized that there is a positive relationship between ease of movement and turnover, and between ease of movement and intent to leave, and that this relationship will be stronger for primary labor market jobholders than for secondary labor market jobholders (Hypothesis 1).

**Job Satisfaction, Organizational Commitment, and Professionalism**

An extensive body of research has shown that job satisfaction and organizational commitment are negatively related to turnover (Cotton & Tuttle, 1986; Muchinsky & Morrow, 1979; Peters, Bhagat, & O’Connor, 1981). Job satisfaction is generally defined as the degree to which individuals like their jobs (Price & Muller, 1981), and organizational commitment is generally defined as the strength of an individual's identification with and involvement in a particular organization (Porter et al., 1974).
In their model of turnover, Muchinsky and Morrow (1979) classify three determinants of turnover: (a) individual determinants such as age, tenure, and vocational interest; (b) work-related determinants such as job satisfaction and organizational commitment; and (c) economic determinants such as labor turnover and alternative opportunities. Their model suggests that the relation of work-related determinants to turnover may be confounded with individual determinants. In particular, Bartol (1979a) notes that understanding the impact of individual determinants on variables such as job satisfaction and organizational commitment, as well as turnover, is important because of the practical implications. For example, from a practitioner's standpoint, the improvement of existing levels of job satisfaction or organizational commitment may decrease employee turnover. Professionism as an individual determinant has not been thoroughly studied in turnover research to date.

While various researchers have acknowledged a need to study professionalism as it relates to turnover (e.g., Mobley et al., 1979, Price et al., 1981), Cotton and Tuttle (1986) note that this variable is almost never examined and often not even recorded. Bartol (1979a & 1979b), however, has incorporated professionalism in her
studies of job satisfaction, organizational commitment, and turnover.

Professionalism has been defined in various ways. For example, Price and Mueller (1981) define it as the degree of dedication to occupational standards of performance. Morrow & Goetz (1988) define it as the extent to which one identifies with one's profession and accepts its values. Although there is no universally accepted definition of professionalism (Cullen, 1983), there is agreement that professionalism should be considered a multidimensional construct (Hall, 1968; Kerr, Von Glinow, & Schriesheim, 1977; Snizek, 1972). Hall (1968) uses five attitudinal components to describe professionalism: (a) use of a professional organization as a major referent, (b) belief that a profession provides a public service, (c) belief in self-regulation of a profession, (d) belief that practitioners in a profession sense a lifelong calling to the field, and (e) belief that individuals in a profession should have autonomy. Researchers have subsequently used Hall's dimensions in operationalizing professionalism (Bartol, 1979a & 1979b; Morrow & Goetz, 1988; Snizek, 1972).

Bartol criticizes the use of global professionalism constructs and the tendency to split professionalism scales into high and low categories for analysis. Her
criticism is based on Ritzer's (1972) contention that within occupations there are some individuals who are more professional than others. Bartol feels that the categorization of professionalism into an either/or category may account, in part, for disparate research results involving professionals. For example, available literature points toward a positive relationship between professionalism and turnover (Filley, House, & Kerr, 1976; Gouldner, 1957). Yet, this notion that there is an inherent conflict between professionals and their employing organizations has been challenged (Aranya & Ferris, 1984; Flango & Brumbaugh, 1974; Friedlander, 1971). The results of Bartol's (1979a & 1979b) study of accounting professionals support this challenge. Bartol's multidimensional professionalism measure used in her studies reflects five subscales: (a) autonomy, (b) collegial maintenance of standards, (c) ethics, (d) professional commitment, and (e) professional identification. The results indicate that professionalism is positively related to job satisfaction, and is related to greater, rather than lesser, degrees of organizational commitment. Further, professionalism did not predict a significant amount of variance in turnover. Thus, with professionalism operationalized as a multidimensional attitudinal construct, the data showed little evidence of the negative outcomes commonly associated with
professionalism. A possible limitation of her studies is the effect of common method variance. That is, these results may be attributable to the measurement method rather than to the variables themselves. Specifically, since job satisfaction, organizational commitment, and professionalism were measured with one method, there may be higher correlations between the variables. Therefore, the reported coefficients may not be uniquely determined (Nie, Hull, Jenkins, & Steinbrenner, 1975).

This study uses Bartol’s multidimensional construct to measure professionalism and test similar hypotheses to establish the generalizability of her results to another professional group. Based on her findings it is expected that there will be a positive relation between organizational commitment and professionalism (Hypothesis 2), and a positive relation between job satisfaction and professionalism (Hypothesis 3). It is also expected that there will no relationship between turnover and professionalism (Hypothesis 4). To control for the effects of multicollinearity, job satisfaction and organizational commitment will be partialled out of hypotheses 2 and 3, respectively.

Career Commitment and Perceived Career Opportunities

In recent years, "commitment" has gained attention as a useful construct in the turnover process (Mowday et al., 1984). According to Hall (1971), "career" commitment
is the strength of one's motivation to work in a chosen career role. Commitment to an entire career field or role is to be distinguished from commitment to a "job" or to one's employing "organization". These three forms of commitment are often correlated. However, they are theoretically distinct, frequently having different antecedents and consequences. As noted by Hom, Katerburg, and Hulin (1979), resignation implies rejection of an organization, but not necessarily rejection of a profession. In the case of career commitment, an employee may have low organization loyalty, but high identification with outside professional reference groups (Thompson & Terpening, 1983).

Blau (1985b) draws upon such concepts as career orientation, professional commitment, and occupational commitment in defining and operationalizing career commitment. He defines career commitment as one's attitude towards one's profession or vocation. Bartol defines professional commitment as dedication to the work and the long term career aspirations of the profession. Because the concepts of career and professional commitment are so closely related, these terms are used interchangeably.

Blau's (1985b) research supports the notion that career commitment is distinct from job involvement and
organizational commitment. Bartol’s (1979a & 1979b) research suggests that professional (career) commitment is also distinguishable from professionalism. As noted previously, Bartol found no support for the commonly held notion that professionalism is likely to be strongly associated with turnover. However, when the professionalism dimension subscales were analyzed independently, there were differential results. Specifically, there was a significant inverse relation between professional commitment and turnover. Similar results were found in Harrel, Chewning, and Taylor’s (1986) study of internal auditors. They found that professional commitment revealed a direct and negative relationship to turnover intent. Therefore, it is hypothesized that although there is no relationship between professionalism and turnover (Hypothesis 4), there will be an inverse relation between professional commitment and turnover (Hypothesis 5).

The present research measures jobholders’ career (professional) commitment apart from professionalism, to determine if this individual difference variable enhances predicted turnover. Blau’s (1985b) measure of career commitment is used. It should be noted that Bartol’s (1979a & 1979b) measure of professionalism includes professional commitment as a subscale. These items were eliminated in the present investigation so as to avoid an
overlap in what are purported to be distinct measures.
To control for the possible effects of multicollinearity
between the professional commitment and professionalism
scales, these variables will be partialled out of
Hypotheses 4 and 5, respectively.

This disparity between professionalism and
professional commitment also suggests that career or
professional commitment alone may serve a useful purpose
in analyzing the turnover process. Blau (1985b) and
Bartol (1979a & 1979b) call for future research to
further explore and understand the career commitment
construct. One possible explanation for the usefulness
of career commitment as a predictor of turnover is the
"substitution effect" offered by Jauch, Osborn, and
Terpening (1980).

Jauch et al. (1980) suggest that a jobholder's
attachment to an organization may be a result of one's
identification with an organization, a profession, or with
other jobholders in an organization. They contend that
incorporating the notion of a potential substitution
effect may be useful in turnover research. That is, when
attempting to predict turnover, perhaps commitment to an
organization, to one's fellow workers, or to one's
profession may substitute for one another. For example,
if a jobholder is attached to a profession, but not
attached to an organization or even fellow workers, organizational commitment may be comparatively unimportant in predicting turnover. The jobholder who is committed to a career is less likely to leave as long as the organization provides career opportunities.

Indeed, the indication of a relationship between perceived career opportunities and turnover is not new. The concept of "career" has been variously incorporated in turnover studies as "satisfaction with promotional opportunities" (Dreher, 1982; Jackofsky & Peters, 1983a; Marsh & Mannari, 1977; Parasuraman, 1982), and "perceptions of upward mobility" (Farris, 1971; Martin, 1979; Thompson & Terpening, 1983).

In a predictive study of turnover, Farris (1971) found that turnover is positively associated with the perception that it would aid in career advancement. More leavers than stayers said that leaving their positions was likely to be profitable to their career development. Graen and Ginsburg (1977), in a study of job resignation, found that the belief that one's job is irrelevant to one's career is significantly related to resignation. Martin (1979) found a direct impact of upward mobility on intent to leave and suggests that organizational members place a high value on promotional and advancement opportunity. The results of Cotton and Tuttle's (1986) meta-analysis suggest that satisfaction with promotional
opportunities is negatively related to turnover. Although research has generally indicated a positive relationship between perceived career opportunities and turnover, Mobley et al. (1979) suggest that the results are inconclusive after reviewing the literature. Price and Mueller (1981) found no relationship between promotion opportunities and turnover.

Porter and Steer's (1973) met expectations hypothesis suggests that jobholders bring sets of expectations to their employment situation, and these expectations must be met in order for a jobholder to remain on the job. Mobley et al. (1979) utilize the met expectations hypothesis in their integrated model and suggest that a jobholder may remain in a job if it is expected that the job will lead to attainment of various positively valued outcomes. This study proposes that a jobholder's career opportunities is a positively valued outcome for jobholders who are committed to their careers. Thus, in line with Jauch et al.'s reasoning, it is hypothesized that career commitment interacts with career opportunities in predicting turnover and intent to leave. That is, individuals with both higher levels of career commitment and perceived career opportunities will exhibit less turnover and intent to leave than jobholders with lower levels (Hypothesis 6).
Although the concept of career opportunity has generally been found to be related directly to turnover and intent to leave, researchers have also proposed a relationship between perceived career opportunities and job satisfaction (Porter & Steers, 1973; Price & Mueller, 1981). Tests of this hypothesis have had mixed results. Martin (1979) and Bluedorn (1982) did not find significant relations between perceived career opportunities and job satisfaction, whereas Price and Mueller (1981) did. Thompson and Terpening (1981) also tested this proposition and found that the positive relationship between perceived career opportunities and job satisfaction was stronger for primary labor market jobholders. That is, perceived career opportunities was more important to the job satisfaction of primary labor market jobholders than secondary labor market jobholders. They advocate that this is due to the career-centered nature of the primary jobholder. Thus, their study offers a possible explanation for the mixed results. That is the relationship between perceived career opportunities and job satisfaction may be moderated by labor market classification. This investigation tests Thompson and Terpening's (1981) hypothesis to see if the results are generalizable to another sample. Thus, it is hypothesized that perceived career opportunities will be positively related to job satisfaction, and this effect will be more
pronounced for primary labor market jobholders (Hypothesis 7).

**Behavioral Intent**

Since 1979, most research pertaining to employee turnover has identified behavioral intent (BI) as a critical factor in decisions to terminate employment. In the current context, behavioral intent refers to a jobholder's motivation to stay in or leave an organization. Such intent is posited to be the most immediate predictor of eventual turnover (Parasuramen, 1982).

Use of BI in predicting turnover has largely followed a social behavior model first proposed by Fishbein and Ajzen (1975). This model assumes a person's behavior is a function of the intention to perform that behavior. Intention, in turn, is a function of two basic determinants: (a) attitude toward performing the behavior, and (b) a subjective norm regarding the behavior (Hom et al., 1979).

Based upon a meta-analysis of turnover, Cotton and Tuttle (1986) have drawn three conclusions concerning turnover and BI:

1. BI appears to be a direct step prior to turnover. Other variables occasionally directly affect turnover, but more often they act through BI.
2. Perceived employment alternatives appear to affect turnover directly and indirectly through BI.

3. Job satisfaction and organizational commitment, as well as a number of other variables impact on turnover through BI.

Although there seems to be no question as to the importance of including BI in any attempt to predict turnover, its use has been criticized. Horn et al. (1979) note that the intention notion incorporated by Fishbein and Ajzen's theory assumes that the prediction of turnover becomes more accurate the more closely in time BI is assessed relative to actual separation. Thus, the Fishbein and Ajzen theory may be a weak predictor of turnover if BI is not assessed in close proximity to turnover.

After a review of the relevant literature, Mobley et al. (1979) concluded that although the relationship between BI and turnover appears to be consistent and generally stronger than the job satisfaction/turnover relationship, it nevertheless accounts for less than 24% of the variance in actual turnover. Among the possible reasons offered for this discouraging result are that (a) intent does not account for impulsive behavior, (b) intent inadequately captures the perception and evaluation of alternatives, and (c) along with personal,
organizational, and external conditions, intent may change between its original measurement and the observation of actual behavior. These proffered reasons thus suggest that the more specifically behavioral intent is worded, and the less time between its measurement and a focal behavior, the more strongly intent and behavior should be related. At the same time, Graen and Ginsburg (1977) note that the closer the period between the measurement of intent and a jobholder's actually quitting, the more trivial any prediction.

Despite the above-mentioned problems, Dalessio et al. (1986) note that future turnover research should give attention to the direct and indirect effects of variables on intention to quit as opposed to the actual act of turnover. After all, once an employee quits there is little an employer can do. However, if the precursors to intention to quit were better understood, an employer could possibly institute changes to affect this intention.

Given the practical and theoretical significance of behavioral intent to turnover research, behavioral intent will also be analyzed as a dependent variable (Hypotheses 1 and 6).
As indicated in the preceding literature review, turnover theories and research suggest that labor market classification, professionalism, career commitment, job satisfaction, organizational commitment and ease of movement serve as predictors of turnover. Therefore, the following hypotheses are investigated:

1. The relationship between ease of movement and turnover, and between ease of movement and intent to leave, will be stronger for primary labor market jobholders than for secondary labor market jobholders. That is, ease of movement will be positively related to turnover and intent to leave, and this effect will be more pronounced for primary labor market jobholders. This hypothesized relation is depicted in Figure 1a.

There is significant evidence which indicates a relation between environmental factors such as ease of movement and turnover (Cotton & Tuttle, 1986). Thompson and Terpening (1983) have found that the variance explained in this hypothesized relation is increased when subjects are divided into primary and secondary labor market jobholders. Specifically, primary labor market jobs are characterized as being more marketable
Figure 1a. Schematic representation of Hypothesis 1

```
Labor Market Classification
\/
\/
\(+\)
\/
\/
Turnover
\/
\/
Ease of Movement ------- (+) -----------
\ \ Intent to Leave
```

Figure 1b. Schematic representation of Hypothesis 6

```
Career Commitment
\/
\/
\(-\)
\/
\/
Turnover
\/
\/
Career Opportunity ---- (-) -----------
\ \ Intent to Leave
```

Figure 1c. Schematic representation of Hypothesis 7

```
Labor Market Classification
\/
\(+\)
\/
Career Opportunity----- (+) ----------- Job Satisfaction
```

Figure 1. Schematic Representation of Hypotheses 1, 6, and 7
than secondary labor market jobs. Therefore, primary labor market jobholders should find ease of movement to be more relevant to their turnover decision. Hypothesis 1 incorporates Thompson and Terpening's labor market classification as a moderator of the relation between turnover and ease of movement, and between intent to leave and ease of movement.

2. Professionalism will be positively related to organizational commitment.

2a. Professionalism will be positively related to organizational commitment, controlling for job satisfaction.

3. Professionalism will be positively related to job satisfaction.

3a. Professionalism will be positively related to job satisfaction, controlling for organizational commitment.

These hypotheses are based on studies by Bartol (1979a & 1979b) which suggest a challenge to the notion that there is conflict between professionals and their employing organizations in terms of job satisfaction and organizational commitment. She found that professional attitudes were positively related to job satisfaction, and generally were found to be related to greater, rather than lesser, degrees of organizational commitment. Hypotheses 2a and 3a will be tested in order to control for the
confounding effects of job satisfaction and organizational commitment as they relate to professionalism.

4. There will be no relationship between turnover and professionalism, or between intent to leave and professionalism.

4a. There will be no relationship between turnover and professionalism, or between intent to leave and professionalism, controlling for career commitment.

5. There is a negative relationship between turnover and career commitment, and between intent to leave and career commitment.

5a. There is a negative relationship between turnover and career commitment, and between intent to leave and career commitment, controlling for professionalism.

Bartol’s (1979a) study found no support for a relationship between professionalism and turnover. Her finding is consistent with that of Price and Mueller (1981). However, there is evidence that professional commitment, an attitudinal component of professionalism, relates differently to turnover than the overall construct of professionalism (Bartol, 1979a & 1979b). For example, Bartol (1979a) found a significant inverse relation between career commitment and turnover. Harrell, Chewning, and Taylor (1986) also found a negative relationship between career commitment and behavioral
intent for a sample of auditors. These findings suggest that professionalism alone is not a determinant of turnover; yet, career commitment may be an important factor. Thus, hypotheses 4 and 5 are tested. Partial correlation analysis will also be used to assess the confounding effects of professionalism and career commitment in their relation to turnover and intent to leave (Hypotheses 4a and 5a).

6. Jobholders with higher levels of career commitment and perceived career opportunities within an employing organization will exhibit less turnover and intent to leave than individuals with lower levels of career commitment and perceived career opportunities.

Research consistently indicates an inverse relation between career commitment and turnover and between career opportunities and turnover (e.g., Bartol, 1979a, Farris, 1971; Harrell et al., 1986; Martin, 1979). Additionally, however, Jauch et al.'s (1980) proposal of a "substitution effect" suggests that these two variables may interact in predicting turnover and intent to leave. That is, the effect of organizational commitment on the turnover decision may be substituted with career commitment. A career committed jobholder is less likely to leave an organization as long as the organization provides career
or advancement opportunities. Hypothesis 6 is tested to examine this proposition. Figure 1b is a schematic representation of this proposed interaction.

7. The relationship between perceived career opportunities and job satisfaction will be stronger for primary labor market jobholders than for secondary labor market jobholders. That is, career opportunities will lead to greater job satisfaction, and this effect will be greater for primary labor market jobholders (see Figure 1c).

Previous studies of the relationship between perceived career opportunities and job satisfaction (e.g., Martin, 1979; Price & Mueller, 1981) have yielded mixed results. Thompson and Terpening’s (1983) research indicates that this relationship is moderated by labor market classification. Their findings suggest that perceived career opportunities have important effects on the job satisfaction of primary labor market jobholders as opposed to secondary labor market jobholders. They suggest that the ability for advancement seems to predominate the primary labor market jobholders definition of job satisfaction. Hypothesis 7 is examined in this study to determine if similar results may be generated with a different sample of jobholders.

Hypotheses 1, 6, and 7 will be tested using standard moderated regression techniques. Full and restricted
models will assess the amount of variance owing to interaction effects beyond that amount explained by main effects alone (Arnold, 1982). Hypotheses 1 and 6 will also be tested using logit analysis since the dependent variable (turnover) is dichotomous.

Hypotheses 2, 3, 4, and 5 will be tested using correlation analysis. The correlation coefficient will indicate the degree of association between the variables investigated in each hypothesis. Partial correlation analysis (Hypotheses 2a, 3a, 4a, and 5a) will also be used to control for the effects of multicollinearity which may result from common method variance. Thus, each hypothesized relation will be isolated by controlling for alternative explanations of the relations. For example, the relationship between professionalism and job satisfaction may be due to a high correlation between job satisfaction and organizational commitment. Therefore, organizational commitment will be partialled out when testing the hypothesized relation between job satisfaction and professionalism.
Chapter 4

Methodology

Subjects

Subjects were 511 permanent employees of two medium-size hospitals located in a southern community. A breakdown of the demographics for employees of each hospital are listed in Table 1. Chi-square analyses indicated a few significant (p < .01) differences between the employee groups. Specifically, there are differences in their job titles, $\chi^2(2, n = 302) = 15.08, p < .01$, organization tenure, $\chi^2(5, n = 302) = 53.98, p < .01$, position tenure, $\chi^2(5, n = 302) = 33.86, p < .01$, and income, $\chi^2(5, n = 302) = 24.65, p < .01$.

Only 45% of the respondents were Registered Nurses from Hospital A, whereas 66% of the respondents were Registered Nurses from Hospital B. One explanation for this difference is that Hospital A has fewer Registered Nurses (37%) in its entire population than Hospital B (52%). Hospital B also had more employees with 10 or more years of tenure with the employing organization, as well as in their present positions. Tenure is included in the statistical analyses as a control variable. Finally, the salary level for Hospital A employees was lower than that of Hospital B. The dissimilarities in job titles, as well as tenure are possible explanations for this difference.
### Table 1

**Demographic Characteristics of Sample by Hospital**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Hospital A</th>
<th></th>
<th>Hospital B</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Chi-Square</td>
<td>Frequency (%)</td>
<td></td>
<td>Frequency (%)</td>
</tr>
<tr>
<td><strong>Job Title</strong></td>
<td>15.08*</td>
<td>74 (45)</td>
<td>92 (66)</td>
<td></td>
</tr>
<tr>
<td>RN</td>
<td></td>
<td>47 (29)</td>
<td>31 (22)</td>
<td></td>
</tr>
<tr>
<td>LPN</td>
<td></td>
<td>42 (26)</td>
<td>16 (11)</td>
<td></td>
</tr>
<tr>
<td>Nurses’ Aid</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Employment Status</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part time</td>
<td></td>
<td>29 (18)</td>
<td>14 (10)</td>
<td></td>
</tr>
<tr>
<td>Full time</td>
<td></td>
<td>132 (81)</td>
<td>123 (89)</td>
<td></td>
</tr>
<tr>
<td><strong>Hospital Tenure</strong></td>
<td>53.98*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 1 year</td>
<td></td>
<td>36 (22)</td>
<td>21 (15)</td>
<td></td>
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<tr>
<td>1 - 3 years</td>
<td></td>
<td>32 (20)</td>
<td>38 (27)</td>
<td></td>
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<td>3 - 5 years</td>
<td></td>
<td>31 (18)</td>
<td>17 (12)</td>
<td></td>
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<td>5 - 10 years</td>
<td></td>
<td>61 (37)</td>
<td>26 (18)</td>
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<tr>
<td>&gt; = 10 years</td>
<td></td>
<td>2 (1)</td>
<td>37 (27)</td>
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<tr>
<td>Chi-Square</td>
<td>33.86#</td>
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</tr>
<tr>
<td>Frequency (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Position Tenure</td>
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<td></td>
</tr>
<tr>
<td>&lt; 1 year</td>
<td>54 (33)</td>
<td>36 (26)</td>
</tr>
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<td>1 - 3 years</td>
<td>44 (27)</td>
<td>49 (35)</td>
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<td>5 - 10 years</td>
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<td>Sex</td>
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<tr>
<td>Male</td>
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<tr>
<td>Female</td>
<td>146 (90)</td>
<td>133 (96)</td>
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<tr>
<td>Child Care</td>
<td>3.62</td>
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<tr>
<td>Yes</td>
<td>67 (41)</td>
<td>46 (33)</td>
</tr>
<tr>
<td>No</td>
<td>89 (55)</td>
<td>90 (65)</td>
</tr>
<tr>
<td>Type of Shift</td>
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<tr>
<td>Rotating</td>
<td>90 (55)</td>
<td>72 (52)</td>
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<tr>
<td>Straight</td>
<td>67 (41)</td>
<td>67 (48)</td>
</tr>
<tr>
<td>Time of Shift</td>
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<tr>
<td>Day</td>
<td>52 (32)</td>
<td>40 (14)</td>
</tr>
<tr>
<td>Evening</td>
<td>9 (.5)</td>
<td>9 (.6)</td>
</tr>
<tr>
<td>Night</td>
<td>13 (.8)</td>
<td>22 (16)</td>
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(table continues)
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<th>Variable</th>
<th>Hospital A</th>
<th>Hospital B</th>
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<tbody>
<tr>
<td></td>
<td>Chi-Square</td>
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<td>Marital Status</td>
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<td>Married</td>
<td></td>
<td>91 (56)</td>
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<tr>
<td>Single</td>
<td></td>
<td>36 (22)</td>
</tr>
<tr>
<td>Widowed</td>
<td></td>
<td>4 (2)</td>
</tr>
<tr>
<td>Divorced/Separated</td>
<td></td>
<td>30 (18)</td>
</tr>
<tr>
<td>Education</td>
<td>3.74</td>
<td></td>
</tr>
<tr>
<td>&lt; High school graduate</td>
<td>7 (4)</td>
<td>5 (4)</td>
</tr>
<tr>
<td>Completed high school</td>
<td>15 (9)</td>
<td>9 (6)</td>
</tr>
<tr>
<td>Some College</td>
<td>50 (31)</td>
<td>38 (27)</td>
</tr>
<tr>
<td>Completed College</td>
<td>91 (56)</td>
<td>87 (63)</td>
</tr>
<tr>
<td>Age</td>
<td>5.42</td>
<td></td>
</tr>
<tr>
<td>&lt; 25 years</td>
<td></td>
<td>21 (13)</td>
</tr>
<tr>
<td>25 - 29 years</td>
<td></td>
<td>39 (24)</td>
</tr>
<tr>
<td>30 - 34 years</td>
<td></td>
<td>35 (21)</td>
</tr>
<tr>
<td>35 - 39 years</td>
<td></td>
<td>24 (15)</td>
</tr>
<tr>
<td>40 - 49 years</td>
<td></td>
<td>26 (16)</td>
</tr>
<tr>
<td>&gt; 50 years</td>
<td></td>
<td>18 (11)</td>
</tr>
</tbody>
</table>

(table continues)
### Variable Chi-Square Hospital A Hospital B

<table>
<thead>
<tr>
<th>Gross Income</th>
<th>Chi-Square</th>
<th>Frequency (%)</th>
<th>Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; $5,000</td>
<td>24.64*</td>
<td>7 (4)</td>
<td>2 (1)</td>
</tr>
<tr>
<td>$5,000 - 7,499</td>
<td></td>
<td>11 (7)</td>
<td>8 (6)</td>
</tr>
<tr>
<td>$8,000 - 9,999</td>
<td></td>
<td>25 (15)</td>
<td>5 (4)</td>
</tr>
<tr>
<td>$10,000 - 14,999</td>
<td></td>
<td>33 (20)</td>
<td>15 (11)</td>
</tr>
<tr>
<td>$15,000 - 19,999</td>
<td></td>
<td>19 (12)</td>
<td>19 (14)</td>
</tr>
<tr>
<td>$20,000 - 24,999</td>
<td></td>
<td>68 (42)</td>
<td>90 (65)</td>
</tr>
<tr>
<td>Total No. Employees</td>
<td></td>
<td>810</td>
<td>759</td>
</tr>
<tr>
<td>No. Questionnaires</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distributed</td>
<td></td>
<td>287</td>
<td>224</td>
</tr>
<tr>
<td>Response Rate</td>
<td></td>
<td>178 (62)</td>
<td>140 (62)</td>
</tr>
</tbody>
</table>

* p < .01
There were no significant differences between the groups in terms of response rates, employment status, sex, childcare responsibilities, type and time of shifts, marital status, age, and education. Given these more meaningful similarities, the two groups were collapsed into one sample.

Of the 511 questionnaires distributed, 318 (62%) were returned. Sixteen were returned without answering the question pertaining to job title, so they were eliminated from further analyses. According to Krejcie and Morgan (1970), this sample size is adequate to be representative of the given population (i.e., \(N = 555\) requires a sample size \(n = 226\)).

The sample included Registered Nurses (55%), Licensed Practical Nurses (25%), and Nurses’ Aids (19%). Ninety-two percent of the respondents were female, and 60% were married. Approximately one-half of the sample was under 35 years of age. Sixty-three percent of the respondents had been in their present job between one and ten years, 30% less than one year, and 7% ten years or over. Approximately 13% of the sample had been with the same hospital for ten years or over, and 19% less than one year.
Data Collection Methods

Data related to professionalism, career commitment, perceived career opportunities within the employing organization, job satisfaction, organizational commitment and perceived ease of movement were collected by questionnaires.

Prior to the distribution of questionnaires, the researcher met with the Directors of Nursing, as well as various Supervisors and Head Nurses to explain the purpose of the study. At this meeting a handout (see Appendix A) was distributed explaining the administration procedures for the questionnaire. These procedures were explained orally, and questions were answered. Additionally, it was stressed that (a) participation was voluntary, but encouraged; (b) employee confidentiality was guaranteed; and (c) only group-level and companywide results would be reported to the individual hospital administrations.

A letter (see Appendix B) was attached to each survey outlining the purpose of the study and assuring employee confidentiality. Each survey was enclosed within a self-addressed envelope so that it could be returned through the U.S. mail if the respondents so desired. Otherwise, they could be returned through the respective internal hospital mail services.

All Head Nurses were contacted one week after the meeting to follow up on the distribution and return of questionnaires.
Turnover data were collected from hospital records six months after the questionnaires were distributed. The hospitals made lists available of those persons who were no longer employed at the hospitals, and the reasons for their departures. Of 302 respondents in the sample, 45 were no longer employed (15% rate). Of this 45, all were recorded by the hospitals as voluntary (reasons cited for leaving: leaving the area, obtaining alternative employment, health reasons, furthering education). There was no differential turnover rate between respondents to the survey and non-respondents, \( \chi^2 (1, n = 95) = 2.74, p = \text{ns} \).

**Measures**

With the exception of perceived career opportunities, the measures used in the study were adapted from those developed by previous researchers (see Appendix C). Adaptations involved changing the wording of items to make them more suitable to the present study. For example, the names of the hospitals were substituted in the organizational commitment scale. The professionalism scale was largely adapted to be consistent with the results of a factor analysis and to avoid an overlapping of items with the career commitment instrument. The measures, items, and instrument reliabilities are reported below:
**Turnover.** Peters and Sheridan (in press) note that if the time period for measuring turnover is too long, a larger portion of the sample may leave for reasons other than those under investigation. For example, today's society is quite mobile and is composed of many dual career couples. Therefore, it is realistic to expect a portion of employees to leave an organization for reasons independent of their work environment.

Price and Mueller (1981) suggest that a six month interval is appropriate for collecting independent and dependent measures in turnover studies. They reason that fewer extraneous changes are likely to occur within an organization during this as compared to a longer time period, thereby increasing explained variance. Turnover was assessed for a six-month interval for this study. Both turnover data and reasons for departure were collected from hospital records.

**Career commitment.** Career commitment was measured using a scale adapted from Blau (1985b; alpha = .84). A five-point scale (1 = strongly disagree, 5 = strongly agree) was used to measure career commitment. Respondents were asked to indicate attitudes toward the following statements describing their profession:

1. If I could get another job different from my present profession that pays the same amount, I would probably take it. (Reverse-scored.)
2. I definitely want a career for myself in the profession in which I am presently working.

3. If I could do it all over again, I would choose to work in the same profession in which I am currently working.

4. If I had all the money I needed without working, I would probably still continue to work in my present profession.

5. I like my vocation too well to give it up.

6. This is the ideal vocation for a life’s work.

7. I am disappointed that I ever entered my present profession. (Reverse-scored.)

8. I spend a significant amount of personal time reading journals or books related to my profession.

Professionalism. Bartol's (1979a & 1979b) professionalism scale served as a measure of overall professionalism. Responses were collected on a five-point scale and summed in such a way that higher scores correspond to higher professionalism. Response options ranged from 1 = strongly disagree to 5 = strongly agree. Bartol's measure is comprised of the following items:

1. I would stay in this profession even if I made a lot less money.

2. I feel that I should have a lot to say about which projects I work on.
3. My work in this field should be evaluated mainly by my peers.

4. I feel that I should not allow my own self interests to interfere with providing the best possible professional service.

5. I systematically read the professional journals.

6. The judgment of people above me in the hierarchy should count most heavily in evaluating my performance in this field. (Reverse-scored.)

7. I regularly attend professional meetings at the local level.

8. The major satisfaction in my life comes from doing a good job in my area of specialty.

9. People should just tell me about a problem and then leave me to solve it.

10. My fellow professionals are in the best position to judge my competence.

11. In my view, professional organizations are of little benefit to the average member. (Reverse scored.)

12. If I were offered a much higher paying job in another line of work, I'd be inclined to take it. (Reverse scored.)

13. I feel I should not let personal feelings get in the way of doing the best job possible.

14. I should be given considerable latitude to pursue work goals I feel are important.
15. Service to the people who utilize my expertise is my most important priority.

16. I regularly attend continuing education programs.

17. For all practical purposes, I should be allowed to be my own boss.

18. I don't care what quality work other people in this field do as long as it doesn't interfere directly with me. (Reverse scored.)

19. My own personal career concerns deserve attention ahead of the interests of clients and users. (Reverse scored.)

20. I believe that the professional organization(s) should be supported.

Bartol categorizes the scale's 20 items into five subscales: (a) Autonomy—items 2, 9, 14, 17; (b) Collegial Maintenance of Standards—items 3, 6, 10; (c) Ethics—items 4, 8, 13, 15, 19; (d) Professional Commitment—items 1, 12, 18; and (e) Professional Identification—items 5, 7, 11, 16, 20. Since Bartol's scale is relatively new and unexplored, a factor analysis involving all respondents was conducted to derive factors for use in this study. Additionally, because career commitment was measured independently with another scale, the overlapping items in Bartol's professional commitment subscale were eliminated from the factor analysis.
The 17 remaining items comprising the overall professionalism scale were factor analyzed using the Statistical Package for Social Sciences (Nie et al., 1975). Following conventional practice, and that of Bartol, the principal factoring with iterations solution and varimax rotation was employed (Kim, 1975).

The initial factor analysis, forcing no specific number of factors, did not support the existence of the four subscales reported by Bartol, as indicated in Table 2. However, there was reasonable congruence between two of the factors derived and Bartol's subscales. Subsequent factor analyses were performed forcing four and then three factors. The three factor solution yielded reasonable congruence between two of the factors derived and Bartol's subscales. Four ethics items loaded on the first factor, and the four professional identification items loaded on the second factor (See Table 3). Factor eigenvalues were 2.297 and 1.08, respectively (Cliff, 1988). All items loaded .40 or higher on both subscales. The coefficient alpha for the revised professionalism scale was .68, and the subscales were moderately correlated ($r = .40$). Following Bartol's procedure, these subscales were collapsed to measure professionalism. Specific items for these two subscales are as follows:
### Table 2

Factor Analysis of 17 Professionalism Items: Six-Factor Solution

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>A1: Shld hv. say about pat.</td>
<td>.152</td>
</tr>
<tr>
<td>A2: Shld tell prob. &amp; leave.</td>
<td>.152</td>
</tr>
<tr>
<td>A3: Shld be given latitude.</td>
<td>.504</td>
</tr>
<tr>
<td>A4: Shld be own boss.</td>
<td>.053</td>
</tr>
<tr>
<td>CM1: Work eva l. by peers.</td>
<td>.106</td>
</tr>
<tr>
<td>CM2: Sup. judgmt. counts.*</td>
<td>-.275</td>
</tr>
<tr>
<td>CM3: Peers judgmt. counts.</td>
<td>.332</td>
</tr>
<tr>
<td>E1: Self int. doesn't interf.</td>
<td>.331</td>
</tr>
<tr>
<td>E2: Sat. from good job.</td>
<td>.444</td>
</tr>
<tr>
<td>E3: Pers. feelgs not imp.</td>
<td>.543</td>
</tr>
<tr>
<td>E4: Service most important.</td>
<td>.500</td>
</tr>
<tr>
<td>E5: Own career most impnt.*</td>
<td>.073</td>
</tr>
<tr>
<td>PI1: Read prof. journals.</td>
<td>.453</td>
</tr>
<tr>
<td>PI2: Attend prof. meetings.</td>
<td>.386</td>
</tr>
<tr>
<td>PI3: Prof. org. not impnt.*</td>
<td>.221</td>
</tr>
<tr>
<td>PI4: Attend cont. ed. progs.</td>
<td>.575</td>
</tr>
<tr>
<td>PI5: Prof. org. supported.</td>
<td>.540</td>
</tr>
</tbody>
</table>


* = Reverse-worded items were reverse scored prior to data analyses.
Table 3

Factor Analysis of 17 Professionalism Items:  
Three-Factor Solution

<table>
<thead>
<tr>
<th>Item</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1: Shld hv. say about pat.</td>
<td>-.051</td>
<td>.144</td>
<td>.381</td>
</tr>
<tr>
<td>A2: Shld tell prob. &amp; leave.</td>
<td>.046</td>
<td>-.025</td>
<td>.343</td>
</tr>
<tr>
<td>A3: Shld be given latitude.</td>
<td>.390</td>
<td>.195</td>
<td>.275</td>
</tr>
<tr>
<td>A4: Shld be own boss.</td>
<td>-.095</td>
<td>.010</td>
<td>.542</td>
</tr>
<tr>
<td>CM1: Work eval. by peers.</td>
<td>.256</td>
<td>-.175</td>
<td>.333</td>
</tr>
<tr>
<td>CM2: Sup. judgmt. counts.*</td>
<td>-.223</td>
<td>-.153</td>
<td>.099</td>
</tr>
<tr>
<td>CM3: Peers judgmt. counts.</td>
<td>.410</td>
<td>-.094</td>
<td>.408</td>
</tr>
<tr>
<td>E1: Self int. doesn’t interf.</td>
<td>.421</td>
<td>.094</td>
<td>-.230</td>
</tr>
<tr>
<td>E2: Sat. from good job.</td>
<td>.424</td>
<td>.216</td>
<td>-.000</td>
</tr>
<tr>
<td>E3: Pers. feelgs not imp.</td>
<td>.622</td>
<td>.176</td>
<td>-.063</td>
</tr>
<tr>
<td>E4: Service most important.</td>
<td>.593</td>
<td>.088</td>
<td>.066</td>
</tr>
<tr>
<td>E5: Own career most impt.*</td>
<td>.157</td>
<td>.010</td>
<td>-.236</td>
</tr>
<tr>
<td>PI1: Read prof. journals.</td>
<td>.256</td>
<td>.436</td>
<td>.094</td>
</tr>
<tr>
<td>PI2: Attend prof. meetings.</td>
<td>.063</td>
<td>.583</td>
<td>.009</td>
</tr>
<tr>
<td>PI3: Prof. org. not impt.*</td>
<td>.031</td>
<td>.290</td>
<td>-.100</td>
</tr>
<tr>
<td>PI4: Attend cont. ed. progs.</td>
<td>.144</td>
<td>.563</td>
<td>.242</td>
</tr>
<tr>
<td>PI5: Prof. org. supported.</td>
<td>.313</td>
<td>.425</td>
<td>-.056</td>
</tr>
</tbody>
</table>


* = Reverse-worded items were reverse scored prior to data analyses.
1. Ethics
   a. I feel that I should not allow my own self interests to interfere with providing the best possible professional service.
   b. The major satisfaction in my life comes from doing a good job in my area of specialty.
   c. I feel I should not let personal feelings get in the way of doing the best possible job.
   d. Service to the people who utilize my expertise is my most important priority.

2. Professional Identification
   a. I systematically read the professional journals in my area of specialty.
   b. I regularly attend professional meetings at a local level.
   c. I regularly attend continuing education programs.
   d. I believe that the professional organization should be supported.

Perceived career opportunities. A two-item measure was developed to assess jobholder perceptions of career opportunities with the current employer (alpha = .84). Using a five-point scale (1 = strongly disagree, 5 = strongly agree) respondents were asked to indicate their attitudes to the following items:
1. I feel that my present job will lead to future attainment of my career goals.

2. My present job is relevant to the growth and development in my career.

Responses were summed to form a single score in which higher values reflected higher levels of perceived career opportunities.

**Job satisfaction.** The short form of the Minnesota Satisfaction Questionnaire (Weiss, Dawis, England & Lofquist, 1967) served as a measure of overall job satisfaction (alpha = .91). Responses were collected on a five-point scale and summed in such a way that higher scores corresponded to higher job satisfaction. Respondents were asked to indicate their level of job satisfaction for the following aspects of their jobs:

1. Being able to keep busy all the time.
2. The chance to work alone on the job.
3. The chance to do different things from time to time.
4. The chance to be "somebody" in the community.
5. The way my boss handles his/her employees.
6. The competence of my supervisor in making decisions.
7. Being able to do things that don't go against my conscience.
8. The way my job provides for steady employment.
9. The chance to do things for other people.
10. The chance to tell people what to do.
11. The chance to do something that makes use of my abilities.
12. The way company policies are put into practice.
13. My pay and the amount of work I do.
14. The chances for advancement on this job.
15. The freedom to use my own judgment.
16. The chance to try my own methods of doing the job.
17. The working conditions.
18. The way my co-workers get along with each other.
19. The praise I get for doing a good job.
20. The feeling of accomplishment I get from the job.

Organizational commitment. The Porter, Steers, Mowday, and Boulian (1974) scale was used to measure organizational commitment (alpha = .88). Response options ranged from 1 = strongly disagree to 5 = strongly agree. Scores were summed, with a higher score corresponding to higher organizational commitment. The Porter et al. (1974) measure is comprised of the following items:

1. I am willing to put in a great deal of effort beyond that normally expected in order to help (hospital) be successful.
2. I talk up (hospital) to my friends as a great organization to work for.

3. I feel very little loyalty to (hospital).
   (Reverse-scored.)

4. I would accept almost any type of job assignment in order to keep working for (hospital).

5. I find that my values and (hospital’s) values are very similar.

6. I am proud to tell others that I am part of (hospital).

7. I could just as well be working for a different hospital as long as the type of work were similar.
   (Reverse-scored.)

8. (Hospital) really inspires the very best in me in the way of job performance.

9. It would take very little change in my present circumstances to cause me to leave (hospital). (Reverse-scored.)

10. I am extremely glad that I chose this hospital to work for over others I was considering at the time I joined.

11. There is not too much to be gained by sticking with (hospital). (Reverse-scored.)

12. Often, I find it difficult to agree with (hospital’s) policies on important matters relating to employers. (Reverse-scored.)
13. I really care about the fate of (hospital).
14. For me, this is the best of all possible hospitals for which to work.
15. Deciding to work for (hospital) was a definite mistake on my part. (Reverse-scored.)

**Perceived ease of movement.** Perceived ease of movement was measured using a measure adapted from Mowday et al. (1984; alpha = .83). Respondents were asked to indicate the extent to which eight factors would help or hurt their chances of finding a job in another organization. Responses were measured on a five-point scale ranging from "hurt my chances to find a job" to "help my chances to find a job." Responses to the following eight items were summed to form a single score. A higher value indicated a greater perceived ease of movement.

1. My job experience.
2. My education.
3. My sex.
4. My job skills.
5. My performance record.
7. My contacts or friends in other organizations.
8. The job market.

**Behavioral intent.** The measure used to assess intent to leave was adapted from that developed by Price and Mueller (1981; alpha = .86). A five-point scale was used
to measure behavioral intent. Responses were summed to form a single score in which higher values reflected greater intentions to leave. Respondents were asked to indicate their responses to the following questions describing their intentions:

1. Which of the following statements most completely reflects your feelings about your future at (hospital)?
   1. Definitely will not leave.
   2. Probably will not leave.
   3. Uncertain.
   4. Probably will leave.
   5. Definitely will leave.

2. Do you expect to leave (hospital) in the near future? (Reverse-scored.)
   1. I will definitely leave in the near future.
   2. The chances are quite good that I will leave.
   3. The situation is uncertain.
   4. The chances are very slight that I will leave.
   5. I definitely will not leave in the near future.

Demographic data. Demographic data were gathered using the following items:

1. How old are you?
   ( ) Less than 25 years old.
   ( ) 25 to 29.
   ( ) 30 to 34.
2. How much schooling have you had?
   ( ) Some grade school.
   ( ) Completed grade school.
   ( ) Some high school.
   ( ) Completed high school.
   ( ) Some college or other school after high school.
   ( ) Completed college or other higher school.
   ( ) Graduate degree(s).

3. What is your sex?
   ( ) Male.
   ( ) Female.

4. What is the total length of time you have worked for (hospital) in any capacity?
   ( ) Less than one year.
   ( ) Between 1 - 3 years
   ( ) Between 3 - 5 years.
   ( ) Between 5 - 10 years.
   ( ) Over ten years.

5. What is the total length of time you have worked for (hospital) in your present position?
   ( ) Less than one year.
   ( ) Between 1 - 3 years
6. Roughly, what is your total yearly income from (hospital) before deductions are made?

- Less than $5,000.
- $5,000 - $7,499.
- $7,500 - $9,999.
- $10,000 - $14,999.
- $15,000 - $19,999.
- $20,000 - $24,999.
- $25,000 - $34,999.
- $35,000 and over.

7. What is your employment status?

- Full-time.
- Part-time.

8. Do you work on a rotating shift or a straight shift?

- Rotating shift.
- Straight shift.

9. If you work on a straight shift, on what shift do you work?

- Day shift.
- Evening shift.
- Night shift.
- Rotating shift.
10. What is your present marital status?
    ( ) Married
    ( ) Single
    ( ) Widowed
    ( ) Divorced or separated

11. Do you have children for whom you arrange child care?
    ( ) Yes
    ( ) No

Statistical Analyses

Reliability estimates, intercorrelations, and factor analyses were conducted to assess the characteristics of the various measures employed.

Turnover research in general is concerned with the problem of explaining and predicting individual behavior. Within this context, researchers have been faced with situations in which the choice alternatives are limited in number. That is, the alternatives are dichotomous— to stay or leave. Statistical analyses of general population behavior is complicated by the fact that such behavior is best described in probabilistic terms (Judge, Griffiths, Hill, & Lee, 1980). For example, models describing a decision from a limited number of alternatives (e.g., to stay or leave) attempt to relate
the probability of a particular choice being made to various explanatory factors.

The general linear regression model is widely used to estimate the effects of multiple variables usually thought to influence a dependent variable. However, this model requires three assumptions about a model's error term. Namely, that it has an expected value of zero, a constant variance, and a normal distribution. Unfortunately, none of these assumptions can hold with qualitative dependent variables. Consequently, with qualitative dependent variables, regression analysis often leads to an unnecessarily high unexplained variance, misleading estimates of predictor effects, and an inability to make statements about the probability of given responses (Doyle, 1977).

More specifically, consider a general regression model:

\[ Y_i = b_k X_{ik} + u_i \]

where \( Y_i \) is the dependent variable, \( X_{ik} \) is an independent variable, \( u_i \) is unobserved random error, \( b_k \) is an unknown constant, and the subscript, \( i \), denotes the observation from the population \( N \). Problems exist when \( Y_i \) may only take on values of zero or one. (Since \( b_k X_{ik} \) will be written repeatedly in this chapter, \( Z_i \) will be used to represent that expression.) First, if the usual
assumption that the random variable \( u_i \) has mean zero, that is, \( \langle u_i \rangle = 0 \) for all \( i \), then it must be noted that while \( Y_i \) can take but two values, zero and one, the systematic portion of the equation's right-hand side can take any value. This means that \( u_i \) can take only two values given \( X_{ik} \), namely, if \( Y_i = 0 \), then \( u_i = -z_i \) or, if \( Y_i = 1 \), then \( u_i = 1 - z_i \).

Secondly, if \( (u_{i}) \) is to be zero, it must take these values with probabilities \( 1 - z_i \) and \( z_i \), respectively. Since \( z_i \) can take on values greater than one or less than zero, the probabilities may be greater than one or less than zero. Therefore, a description of behavior in probabilistic terms is awkward (Judge et al., 1980).

Given the above results, the assumption that \( u_i \) has a constant variance cannot be maintained. In fact, the variance of \( u_i \) varies systematically with the value of the independent variable (Aldrich & Nelson, 1984).

There is evidence that the logistic function used in logit analysis may be used to minimize these problems (Aldrich & Nelson, 1984; Cornfield, 1983; Judge et al., 1980; Pindyck & Rubinfeld, 1981; Swafford, 1980; Theil, 1970; Walsh, 1987). Logit analysis deals with the identical problem of predicting the level of a dependent variable that is measured on a nominal or ordinal scale. However, logit assumes a logistic distribution about the frequency distribution of a response.
The logistic function, represented by:

\[ P = \frac{\exp(Z_i)}{1 + \exp(Z_i)} \]

where \( P \) is a probability number and \( \exp(Z_i) \) is the natural logarithm of a base number raised to the power of \( Z_i \), transforms \( P \) to eliminate the dichotomous dependent variable constraint. This expression is continuous and can take on any value from zero to one. Also, by specifying a model as non-linear, the statistical properties derived under the linearity assumption (i.e., constant variance and normal distribution) need not hold.

In an attempt to ascertain whether the above-mentioned methodological problem truly exists in turnover research, this study incorporates logit analysis as well as regression analysis to analyze Hypotheses 1 and 6, in which turnover is the dependent variable.

The logistic regression coefficients reported are similar to unstandardized regression coefficients of an ordinary least squares multiple regression equation. Each logistic regression coefficient is a maximum likelihood estimate of the change in the natural logarithm of the odds associated with a dependent variable (e.g., turnover). Such change is associated with a unit change in a focal independent variable, controlling for other independent variables in an equation.
Multiple moderated regression is used to analyze Hypotheses 1 and 6 when behavioral intent is the dependent variable, and also to analyze Hypothesis 7 which incorporates job satisfaction as its dependent variable.

Simple correlation analysis is used to test Hypotheses 2, 3, 4 and 5. Partial correlation analysis is used to test Hypotheses 2a, 3a, 4a, and 5a.
Chapter 5

Results

Descriptive Statistics

The means, standard deviations, reliability estimates, and intercorrelations of all study variables are listed in Table 4.

One important question answered by the correlations concerns what variables in this study are related to turnover itself. In general, the pattern of correlations among the variables was as anticipated. There were four significant predictors of turnover ($p < .05$); behavioral intent ($r = .28$); organizational commitment ($r = -.12$), career commitment ($r = -.12$), and position tenure ($r = -.11$). With the exception of ease of movement, all of the variables were significantly correlated with behavioral intent.

Following Blau's (1985b) procedure, factor analysis was used to test the discriminant validity of measures involving organizational commitment and career commitment. To demonstrate discriminant validity, organizational commitment items should load on a different factor than career commitment items. Table 5 shows this factor analysis. The principal factoring with iterations solution and varimax rotation was employed (Kim, 1975).
Table 4

**Intercorrelations Among Study Variables**

<table>
<thead>
<tr>
<th>Variables</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>Mean</th>
<th>SD</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Organizational commitment</td>
<td>.54</td>
<td>.12</td>
<td>.37</td>
<td>.49</td>
<td>.46</td>
<td>-.04</td>
<td>-.03</td>
<td>-.47</td>
<td>-.12</td>
<td>54.0</td>
<td>9.4</td>
<td>.88</td>
</tr>
<tr>
<td>2. Job satisfaction</td>
<td>.18</td>
<td>.25</td>
<td>.38</td>
<td>.30</td>
<td>-.03</td>
<td>.08</td>
<td>-.33</td>
<td>-.05</td>
<td>71.9</td>
<td>14.3</td>
<td>.91</td>
<td></td>
</tr>
<tr>
<td>3. Ease of movement</td>
<td>.32</td>
<td>.27</td>
<td>.15</td>
<td>.02</td>
<td>.06</td>
<td>-.04</td>
<td>.08</td>
<td>31.6</td>
<td>6.0</td>
<td>.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Professionalism</td>
<td>.44</td>
<td>.49</td>
<td>.01</td>
<td>.05</td>
<td>-.13</td>
<td>.04</td>
<td>30.4</td>
<td>4.7</td>
<td>.68</td>
<td></td>
<td></td>
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<tr>
<td>5. Career opportunity</td>
<td>.59</td>
<td>.02</td>
<td>-.16</td>
<td>-.18</td>
<td>-.07</td>
<td>7.3</td>
<td>2.1</td>
<td>.84</td>
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<tr>
<td>6. Career commitment</td>
<td>-.02</td>
<td>-.08</td>
<td>-.24</td>
<td>-.12</td>
<td>25.8</td>
<td>5.9</td>
<td>.84</td>
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<tr>
<td>7. Labor market classification</td>
<td>-.01</td>
<td>.09</td>
<td>-.00</td>
<td>.55</td>
<td>.49</td>
<td></td>
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<tr>
<td>8. Tenure at organization</td>
<td>-.16</td>
<td>-.08</td>
<td>2.9</td>
<td>1.4</td>
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<tr>
<td>9. Intent to leave</td>
<td>.29</td>
<td>5.0</td>
<td>2.1</td>
<td>.86</td>
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<tr>
<td>10. Turnover</td>
<td>.15</td>
<td>.36</td>
<td></td>
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<td>a</td>
</tr>
</tbody>
</table>

Note. n = 302; for r > .10, p < .05; for r > .14, p < .01.

a Not applicable.
Table 5

Factor Analysis of Professionalism and Career Commitment Items:
Two-Factor Solution

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>OC1. Exert effort for org.</td>
<td>.53</td>
</tr>
<tr>
<td>OC2. 'Talk up' org.</td>
<td>.67</td>
</tr>
<tr>
<td>OC3. Take any job for org.</td>
<td>.48</td>
</tr>
<tr>
<td>OC4. Personal/org. values similar</td>
<td>.62</td>
</tr>
<tr>
<td>OC5. Care about fate of org.</td>
<td>.52</td>
</tr>
<tr>
<td>OC6. Best org. to work for</td>
<td>.64</td>
</tr>
<tr>
<td>OC7. Little loyalty to org.*</td>
<td>.32</td>
</tr>
<tr>
<td>OC8. Proud to be in org.</td>
<td>.63</td>
</tr>
<tr>
<td>OC9. Could work for other orgs.*</td>
<td>.39</td>
</tr>
<tr>
<td>OC10. Org. inspires job performance</td>
<td>.62</td>
</tr>
<tr>
<td>OC11. Ready to leave org.*</td>
<td>.37</td>
</tr>
<tr>
<td>OC12. Glad I chose org.</td>
<td>.54</td>
</tr>
<tr>
<td>OC13. Little to gain with org.*</td>
<td>.51</td>
</tr>
<tr>
<td>OC14. Disagree w/ org. policies*</td>
<td>.45</td>
</tr>
<tr>
<td>OC15. Working for org. a mistake*</td>
<td>.39</td>
</tr>
<tr>
<td>Items</td>
<td>1</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>CC1. Would take diff. job paying same*</td>
<td>.27</td>
</tr>
<tr>
<td>CC2. Want career in present prof.</td>
<td>.13</td>
</tr>
<tr>
<td>CC3. Would choose pres. prof. over again</td>
<td>.14</td>
</tr>
<tr>
<td>CC4. If had all money needed, would continue working in pres. prof.</td>
<td>.12</td>
</tr>
<tr>
<td>CC5. Ideal vocation for a life work</td>
<td>.22</td>
</tr>
<tr>
<td>CC6. Disappointed ever entered prof.*</td>
<td>.17</td>
</tr>
<tr>
<td>CC7. Spend time reading journals</td>
<td>.22</td>
</tr>
<tr>
<td>Eigenvalues</td>
<td>5.75</td>
</tr>
</tbody>
</table>

Note. n = 302. OC = Organizational Commitment Scale. CC = Career Commitment Scale.

* = Reverse-scored items were reverse scored prior to data analyses.
A minimum factor loading of .30 was used as a guideline for considering an item to be part of a factor. These results show organizational commitment (Factor 1; eigenvalue = 5.75) to be operationally distinguishable from career commitment (Factor 2; eigenvalue = 1.64). The scales were moderately correlated (r = .46), indicating that the scales could tap a single general factor. However, this correlation was not unexpected, given the common theme running through the scales' contents (e.g., commitment). Although the scales were not completely independent, they were developed using an explicit conceptual basis, and appear to tap conceptually distinct information. Therefore, further investigation of their usefulness seems warranted.

**Moderated and Logistic Regressions**

The interactions hypothesized in Hypotheses 1, 6, and 7 were tested using standard moderated regression techniques and logit analyses. Full and restricted models assessed the amount of variance owing to interaction effects beyond that amount explained by main effects alone (Arnold, 1982).

The first hypothesis posited that the relationship between ease of movement and turnover would be moderated by labor market classification. Ease of movement was expected to be of greater significance in the turnover decision for primary labor market jobholders than for
secondary. Table 6 presents the results of the traditional moderated and logistic regression models for the entire sample.

In examining this hypothesis, moderated regression analyses were performed for the dependent variables of turnover and intent to leave. This procedure tests the significance of the increment in accountable criterion variance that results from comparing the $R^2$ derived from a regression model that includes two independent variables with the $R^2$ derived from a regression model that includes the two independent variables plus a multiplicative interaction (Vecchio, 1980).

The independent variables of the first (additive) regression model were labor market classification (coded 0 for primary and 1 for secondary) and ease of movement. The second regression model (additive-plus-interactive) was composed of the same two independent variables plus an interaction term (labor market classification x ease of movement). For the additive effects model, $R^2 = .03$, $F(3, 298) = 3.66$, $p < .05$. For additive-plus-interactive effects model, $R^2 = .03$, $F(4, 297) = 2.74$, $p < .05$. The increment in $R^2 (.00)$ resulting from a comparison of these models was not statistically significant ($F$ change = .00, ns).

The additive and additive-plus-interactive effects models were also assessed using intent to leave as the
Table 6
Results of Moderated Regression Analyses for Hypothesis 1

### Dependent Variable

**Turnover**

<table>
<thead>
<tr>
<th>Variable</th>
<th>$R^2$</th>
<th>$\Delta R^2$</th>
<th>df</th>
<th>F</th>
<th>F(change)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenure</td>
<td>0.03</td>
<td>0.03</td>
<td>1,300</td>
<td>8.31*</td>
<td>8.31*</td>
</tr>
<tr>
<td>Ease of Movement (EDM)</td>
<td>0.04</td>
<td>0.01</td>
<td>2,299</td>
<td>5.47*</td>
<td>2.57</td>
</tr>
<tr>
<td>Labor Market Classification (LMC)</td>
<td>0.04</td>
<td>0.00</td>
<td>3,298</td>
<td>3.66**</td>
<td>0.07</td>
</tr>
<tr>
<td>EDM X LMC</td>
<td>0.04</td>
<td>0.00</td>
<td>4,297</td>
<td>2.74**</td>
<td>0.00</td>
</tr>
</tbody>
</table>

### Dependent Variable

**Intent to Leave**

<table>
<thead>
<tr>
<th>Variable</th>
<th>$R^2$</th>
<th>$\Delta R^2$</th>
<th>df</th>
<th>F</th>
<th>F(change)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenure</td>
<td>0.01</td>
<td>0.01</td>
<td>1,300</td>
<td>3.82</td>
<td>3.82</td>
</tr>
<tr>
<td>Ease of Movement (EDM)</td>
<td>0.01</td>
<td>0.00</td>
<td>2,299</td>
<td>2.05</td>
<td>0.28</td>
</tr>
<tr>
<td>Labor Market Classification (LMC)</td>
<td>0.02</td>
<td>0.01</td>
<td>3,298</td>
<td>2.31</td>
<td>2.82</td>
</tr>
<tr>
<td>EDM X LMC</td>
<td>0.02</td>
<td>0.00</td>
<td>4,297</td>
<td>1.77</td>
<td>0.15</td>
</tr>
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</table>

Note. $n = 302$.

*p < .01; **p < .05.
dependent variable. This interaction was also not significant.

Because of the nature of turnover as a dichotomous variable, this analysis was also performed using logit to determine if different results would be obtained. Similar to that of the moderated regression, the results of the logit analysis indicate that the interaction is not significant (see Table 7).

Hypothesis 6 posited that there would be an interaction between perceived career opportunities and career commitment on turnover and intent to leave. That is, jobholders with higher levels of perceived career opportunities and career commitment would exhibit less turnover and intent to leave than individuals with lower levels of perceived career opportunities and career commitment.

In examining Hypothesis 6 (see Table 8), moderated regression analyses were performed for the dependent variables turnover and intent to leave. The independent variables of the first (additive) regression model were tenure, perceived career opportunities and career commitment. The second model (additive-plus-interactive) was composed of the same three independent variables plus an interaction term (perceived career opportunities x career commitment). For the additive effects model, using
Table 7

Results of Logistic Regression Analyses for Hypothesis 1

<table>
<thead>
<tr>
<th>Variable</th>
<th>Reg. Coeff</th>
<th>Stdrd. Error</th>
<th>Coef/S.E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turnover</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tenure</td>
<td>-.18</td>
<td>.06</td>
<td>-2.91*</td>
</tr>
<tr>
<td>Ease of Movement (EDM)</td>
<td>.02</td>
<td>.02</td>
<td>1.03</td>
</tr>
<tr>
<td>Labor Market</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classification (LMC)</td>
<td>-.24</td>
<td>1.07</td>
<td>-.24</td>
</tr>
<tr>
<td>EDM X LMC</td>
<td>.01</td>
<td>.03</td>
<td>.19</td>
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</table>

Note. n = 302.

*p < .01.
Table 8

Results of Moderated Regression Analyses for Hypothesis 6

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th></th>
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turnover as the dependent variable, $R^2 = .05$, $F(3,298) = 4.82$, $p < .01$. For the additive-plus-interactive effects model, $R^2 = .05$, $F(4, 297) = 3.81$, $p < .01$). The increment in $R^2$ (.00) resulting from a comparison of these models was not statistically significant ($F_{\text{change}} = .82$, $p = \text{ns}$).

When using intent to leave as the dependent variable, $R^2 = .08$, $F(3,298) = 8.9$, $p < .01$ for the additive effects model. For the additive-plus-interactive effects model $R^2 = .10$, $F(4,297) = 8.3$, $p < .01$. The increment in $R^2$ (.02) resulting from a comparison of these models was statistically significant ($F_{\text{change}} = 6.03$, $p = .014$). This indicates that a significant interaction exists for the independent variables perceived career opportunities and career commitment on intent to leave.

To determine the direction of the interaction, subgroup analyses were performed, and interactions plotted. McNemar (1969) states that tests between specific groups (i.e., high versus low career commitment groups) are appropriate after a significant overall $F$ value for an interaction term has been found. The following procedure was used (Hunt, Osborn, & Larson, 1975):

1. A regression analysis was run for the total sample.
2. High and low categories for career commitment were created based on the means. These mean split values are best regarded as study specific. The two halves were significantly different ($p < .001$).

3. Regressions for the high commitment group were calculated given high and low levels of perceived career opportunities: $B_1 = a + b(x_{co} + sd) + c(x_{cc} + sd) + d[(x_{co} + sd) * (x_{cc} + sd)]$ for high levels of perceived career opportunities, and $B_1 = a + b(x_{co} - sd) + c(x_{cc} + sd) + d[(x_{co} - sd) * (x_{cc} + sd)]$ for low levels of perceived career opportunities, where:

- $a$ = Constant
- $b$ = Regression coefficient for perceived career opportunities
- $c$ = Regression coefficient for career commitment
- $d$ = Regression coefficient for interaction
- $x$ = mean
- $co$ = perceived career opportunities
- $cc$ = career commitment
- $sd$ = standard deviation.

4. Regressions for the low commitment group were calculated given high and low levels of perceived career opportunities: $B_1 = a + b(x_{co} + sd) + c(x_{cc} - sd) + d[(x_{co} + sd) * (x_{cc} - sd)]$ for high levels of perceived career opportunities and $B_1 = a + b(x_{co} - sd) + c(x_{cc} - sd) + d[(x_{co} -$sd$) * (x_{cc} - sd)]$ for low levels of perceived career opportunities.
sd) * (xcc-sd)} for low levels of perceived career opportunities.

5. The two points for each commitment group were then connected and plotted (see Figure 2).

From the plot of the regression lines it is evident that perceived career opportunities was negatively related to intent to leave for jobholders with a high level of career commitment. That is, higher levels of perceived career opportunities decreased intent to leave only for those jobholders who were highly committed to their careers.

Again, due to the dichotomous nature of the turnover variable, logit analysis was also used. As depicted in Table 9, the interaction term is not significant.

Hypothesis 7 posited that the relationship between perceived career opportunities and job satisfaction will be moderated by labor market classification. That is, perceived career opportunities would be more strongly related to the job satisfaction of primary labor market jobholders than secondary labor market jobholders.

In examining Hypothesis 7 (see Table 10), moderated regression analyses were performed for the dependent variable job satisfaction. The independent variables of the first (additive) regression model were perceived career opportunities and labor market classification (coded 0 for primary and 1 for secondary). The second
Figure 2. Interactions between career commitment and perceived career opportunity on intent to leave.
Table 9

Results of Logistic Regression Analyses for Hypothesis 6

<table>
<thead>
<tr>
<th>Variable</th>
<th>Reg. Coeff</th>
<th>Stnd. Error</th>
<th>Coef/S.E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenure</td>
<td>-.19</td>
<td>.06</td>
<td>-3.03*</td>
</tr>
<tr>
<td>Career Commitment (CC)</td>
<td>-.05</td>
<td>.03</td>
<td>-1.49</td>
</tr>
<tr>
<td>Career Opportunity (CO)</td>
<td>-.08</td>
<td>.11</td>
<td>-1.72</td>
</tr>
<tr>
<td>CC X CO</td>
<td>.00</td>
<td>.00</td>
<td>.69</td>
</tr>
</tbody>
</table>

Note. n = 302.

*p < .01.
Table 10

Results of Moderated Regression Analyses for Hypothesis 7

<table>
<thead>
<tr>
<th>Variable</th>
<th>R^2</th>
<th>ΔR^2</th>
<th>df</th>
<th>F</th>
<th>F(change)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career Opportunity (CO)</td>
<td>.14</td>
<td>.14</td>
<td>1,300</td>
<td>49.71*</td>
<td>49.71*</td>
</tr>
<tr>
<td>Labor Market Classification (LMC)</td>
<td>.14</td>
<td>.00</td>
<td>2,299</td>
<td>25.11*</td>
<td>.58</td>
</tr>
<tr>
<td>CO X LMC</td>
<td>.16</td>
<td>.02</td>
<td>3,298</td>
<td>18.94*</td>
<td>5.80**</td>
</tr>
</tbody>
</table>

Note. n = 302.

*p < .01; **p < .05.
model (additive-plus-interactive) was composed of the same two independent variables plus an interaction term (perceived career opportunities x labor market classification). For the additive effects model, $R^2 = .14$, $F(2, 299) = 25.11, p < .01$. For the additive-plus-interactive effects model, $R^2 = .16$, $F(3, 298) = 18.94, p < .01$. The increment in $R^2 (.02)$ resulting from a comparison of these models was statistically significant ($F$ change = 5.8, $p = .02$). This indicates that a significant interaction exists for the independent variables labor market classification and perceived career opportunities on job satisfaction.

To determine the direction of the interaction, separate bivariate regressions were run for each labor market group where $Y = a + bx$ ($Y = $ job satisfaction; $x = $ some value of perceived career opportunities for each labor market classification; Vecchio, 1980). The two separate regressions are necessary since labor market classification is a true dichotomy. As Figure 3 indicates, from the plots of the regression lines it is evident that for low levels of perceived career opportunities, primary labor market jobholders expressed less job satisfaction. Job satisfaction increased with higher levels of perceived career opportunities for both
Figure 3. Moderating effect of labor market classification on the relationship between perceived career opportunity and job satisfaction.
groups, and this increase was greater for the primary labor market group.

Correlation Analysis

Hypotheses 2, 3, 4, and 5 were each tested using a correlation analysis. When considering a simple correlation, all results were as expected (see Table 11). Professionalism is positively related to organizational commitment ($r = .38, p < .00$; Hypothesis 2). It is also positively related to job satisfaction ($r = .25, p < .00$; Hypothesis 3). However, when controlling for the effects of multicollinearity, different results emerged. As Table 11 indicates, the correlation between professionalism ($p$) and organizational commitment ($o$; Hypothesis 2a) remains significant when job satisfaction ($s$) is held constant ($r_{po,s} = .29, p < .00$); however, the correlation between professionalism and job satisfaction (Hypothesis 3a) is no longer significant when organizational commitment is held constant ($r_{ps,o} = .06, p = ns$). These results suggest that when the effects of organizational commitment are partialled out, the levels of professionalism appear to be similar, regardless of the level of job satisfaction. Overall, however, these results support Bartol's (1979b) contention that there is no conflict between professionals and their employing organizations. Professional attitudes are related to greater, rather than lesser, degrees of job satisfaction and organizational commitment.
### Table 11

**Results of Simple and Partial Correlation Analyses**

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Professionalism</th>
<th>Turnover</th>
<th>Intent to Leave</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( r ) &amp; ( \text{par } r ) &amp; ( r ) &amp; ( \text{par } r ) &amp; ( r ) &amp; ( \text{par } r )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commitment (O)</td>
<td>( .37^* ) &amp; ( .29^* ) &amp; ( .06 )</td>
<td>(S)</td>
<td></td>
</tr>
<tr>
<td>Job Satisfaction (S)</td>
<td>( .25^* ) &amp; ( .06 )</td>
<td>(O)</td>
<td></td>
</tr>
<tr>
<td>Professionalism (P)</td>
<td>( .04 ) &amp; ( .13^* ) &amp; ( -.13^{**} ) &amp; ( -.01 )</td>
<td>(C)</td>
<td></td>
</tr>
<tr>
<td>Career Commitment (C)</td>
<td>( -.12^{**} ) &amp; ( -.17^* ) &amp; ( -.24^* ) &amp; ( -.21^* )</td>
<td>(P)</td>
<td></td>
</tr>
</tbody>
</table>

**Note.** \( n = 302 \). Variables held constant are denoted within parentheses.

*\( p < .001 \); **\( p < .01 \).
There is virtually no relation found between turnover and professionalism ($r = .05; p = \text{ns};$ Hypothesis 4), while there is a significant relation between turnover and career commitment ($r = -.12, p < .02; $ Hypothesis 5). Different results emerged when controlling for the effects of multicollinearity. Specifically, the relationship between turnover ($t$) and professionalism ($p$) (Hypothesis 4a) becomes significant when career commitment ($c$) is partialled out ($r_{tp.c} = .13, p < .01$). However, the relationship between career commitment and turnover (Hypothesis 5a) was also strengthened when controlling for professionalism ($r_{tc.p} = -.17, p < .00$).

When analyzing the relationship of intent to leave with professionalism, the results were mixed. Intent to leave was significantly related to professionalism ($r = -.13, p < .01$), and to career commitment ($r = -.24, p < .01$). However, the relationship between professionalism and intent to leave was no longer significant when career commitment was held constant ($r_{ip.c} = -.01, p = \text{ns}$). Thus indicating that when career commitment is held constant, the levels of intent to leave remain constant, regardless of the level of professionalism. The relationship between intent to leave and career commitment remained significant when professionalism was held constant ($r_{ic.p} = -.21, p < .00$).
Overall, these findings lend support to the proposition that although career commitment may be incorporated as only one of the multidimensions of professionalism, its individual relation to turnover and intent to leave should not be overlooked.
Discussion

Drawing on various theoretical models of the turnover process and related research, this study sought to clarify discrepancies in research and to further analyze neglected variables. Specifically, this study: (a) examined both the relation of ease of movement to turnover and intent to leave and the relation of job satisfaction to perceived career opportunities, as moderated by labor market classification; (b) tested the relation of professionalism to organizational commitment, job satisfaction, turnover and intent to leave; and (c) examined the relations of perceived career opportunities to turnover and intent to leave, as moderated by career commitment. The stated hypotheses were examined by correlation analyses and moderated and logit regression models.

A secondary purpose of this study was to ascertain if the results of logit analysis would be different from the results of traditional regression analysis. Given the dichotomous nature of turnover, logit analysis should be the preferred method.

The results of the reported correlation analyses were similar to much of the current literature. A notable exception, however, was the low, nonsignificant relation
between turnover and job satisfaction. An explanation for this may be the unusually high unemployment (17%) rate in the area at the time of the study. The Muchinsky and Morrow (1980) model predicts that the relation between job satisfaction and turnover is strong during periods of low unemployment and weak during periods of high unemployment. Carsten and Spector’s (1987) meta-analysis of the unemployment, job satisfaction, turnover relationships indicates that the job satisfaction-turnover relation becomes weaker as the unemployment level increases. They suggest that an unemployment rate of approximately 10% or more is associated with a depressed economy. Similarly, the correlation between behavioral intent and turnover may have been attenuated by the high unemployment rates.

Dalessio et al. (1986) have found discrepancies between turnover studies using various turnover models. One reason for these mixed results may be that the models are too general to consistently describe the turnover process for any single group. Dalessio et al. suggest that attention be given to possible differences in the turnover process among members of different groups within an organization. Thompson and Terpening (1981) increased the variance explained in their turnover model by dividing their sample into primary and secondary labor market groups. This study explored the usefulness of this
categorization in determining the relationship between ease of movement and turnover, between ease of movement and intent to leave, and between perceived career opportunities and job satisfaction.

The moderating effect of labor market on the relation between ease of movement and turnover and intent to leave is not consistent with Hypothesis 1. Thompson and Terpening (1981) suggest that without the skills necessary to advance, the secondary jobholder would find external opportunity less attractive in the stay/leave decision. However, the collected data do not support their findings. Indeed, ease of movement and labor market classification are not even significantly correlated with turnover in the present study.

In line with these findings, Steel and Griffeth (1987) have noted that attempts to link employee turnover to perceptual measures of employment opportunity have consistently met with limited success. They postulate three methodological issues which may account for these nontrivial relationships: (a) restricted variance due to the use of intraoccupational samples; (b) suboptimal turnover base rates; and (c) unsophisticated measures of perceived opportunity.

Specifically, Steel and Griffeth (1987) state that behavioral science and psychological turnover research commonly utilize homogenous occupational samples to
estimate the impact of perceived employment opportunity on turnover decisions. This practice underestimates the variation of variables attributable to different occupations. Thus, the range and variance of perceived opportunity are restricted and, in turn, the correlation between the measures is attenuated.

Steel and Griffeth (1987) also suggest that given the dichotomous nature of turnover criteria, an optimal turnover base rate would be .50. However, their meta-analysis of turnover studies produced an average turnover base rate of .23. They contend that the impact of the turnover base rate on the magnitude of perceived opportunity-turnover correlations contributes to weak results in this area.

Finally, Steel and Griffeth (1987) propose that the general practice of operationalizing perceived opportunity as an ad hoc univariate measure by turnover researchers may also operate to attenuate results.

Although labor market classification does not moderate the relation between turnover and ease of movement, it is significant in moderating the relationship between perceived career opportunities and job satisfaction, as posited in Hypothesis 7. Perceived career opportunities is positively related to job satisfaction for all jobholders, but the effect is more pronounced for primary labor market jobholders. Because
job satisfaction has been found to be consistently related to turnover during good economic times, a better understanding of the conditions which predict job satisfaction is helpful. Indeed, these findings suggest that perceptions of career opportunities within one's present organization is positively related to job satisfaction, and this relationship is also moderated by the type of position one holds.

The present study also sought to clarify Mobley et al.'s (1979) discussion of the inconclusive relationship between career opportunity and turnover. Drawing from the work of Porter and Steers (1973) and Jauch et al. (1980), the interacting effects of career commitment and perceived career opportunities on turnover and intent to leave were assessed (Hypothesis 6). The effect of this interaction for the reported data is not significant when turnover is used as the dependent variable. However, this interaction effect is significantly related to intent to leave. When levels of perceived career opportunities and career commitment are high, there is less intent to leave. These findings suggest that increasing career opportunities from low to high has the most impact on reducing intent to leave when career commitment is high, and little or no impact when career commitment is low.

Because an understanding of the precursors to intent to leave may be more helpful to discouraging employee
turnover than a knowledge of what causes turnover itself, these results may be quite useful to the practicing manager. For example, these results suggest that when attempting to decrease intent to leave, organizational resources should be expended on increasing career opportunities only when jobholders are highly committed to their careers.

Cotton and Tuttle (1986) note that while models such as Mobley et al.'s (1979) and Price and Mueller's (1981) acknowledge professionalism as a determinant of turnover, this factor is almost never examined. In response to Cotton and Tuttle's call for more research in this area, this study analyzed the relationship of professionalism to turnover, intent to leave, job satisfaction, and organizational commitment. There is also evidence which suggests that one of the dimensions of professionalism - career commitment - may be specifically related to turnover and intent to leave. Therefore, this study also analyzed career commitment as a determinant of turnover.

Analyses of the reported correlations indicate a significant positive relation between professionalism and organizational commitment (Hypothesis 2) and between professionalism and job satisfaction (Hypothesis 3). Although partial correlation analysis indicates that the
relation between professionalism and job satisfaction may be due to multicollinearity, overall, the results support Bartol's (1979b) contention that there is not an inherent conflict between professionals and their employing organizations.

The present data also provide evidence that career commitment should be considered as a construct separate from overall professionalism when predicting turnover. (Hypotheses 4 and 5). Unexpectedly, partial correlation analysis reveals that professionalism accounts for a significant amount of variance when controlling for the effects of career commitment (Hypothesis 4a). This finding supports the advisability of testing for the effects of common method variance. However, career commitment explains almost twice as much variance when professionalism is held constant (Hypothesis 5a), thus suggesting the usefulness of examining the individual dimensions of professionalism in turnover research.

The second purpose of this study was to determine if different results would be attained using logit rather than traditional regression analysis, which is typically used in turnover research. Although neither of the hypotheses which utilized logit analysis were supported by the data, and the outcomes of logit and moderated regression were very similar, a comparison of the results is informative.
The size of the independent variable coefficients in relation to each other was identical between moderated and logistic regression analyses in examining Hypotheses 1 and 6. For example, in examining the analyses results of Hypothesis 1, organization tenure had the greatest effect on turnover, followed by labor market classification, present position tenure, ease of movement, and finally, the interaction term for both moderated and logistic regression. Although a direct comparison of the moderated and logistic regression coefficients cannot be made (Aldrich & Nelson, 1985), it is interesting to note the predicted probability for turnover based on the coefficient estimates.

A comparison of the turnover probabilities based on the analyses of Hypotheses 1 and 6 is presented in Table 12 (See Appendix C for calculations). The effect of labor market classification changes the probability of turnover by .01 and .02 according to the moderated and logistic regressions, respectively. The effect of career commitment changes the probability of turnover by .11 and .13 according to the moderated and logistic regressions, respectively. Although the effects for these variables are very similar given each analysis, the probabilities are slightly lower when the regression coefficient estimates are used. This indicates that the
Table 12

A Comparison of Turnover Probabilities for Moderated and Logistic Regression Analyses

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Variable</th>
<th>Moderated P(TO)</th>
<th>Logistic P(TO)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Primary Labor Market</td>
<td>.213</td>
<td>.215</td>
</tr>
<tr>
<td>1</td>
<td>Secondary Labor Market</td>
<td>.228</td>
<td>.241</td>
</tr>
<tr>
<td></td>
<td>Change in Probability</td>
<td>.015</td>
<td>.026</td>
</tr>
<tr>
<td>7</td>
<td>High Career Commitment</td>
<td>.140</td>
<td>.168</td>
</tr>
<tr>
<td>7</td>
<td>Low Career Commitment</td>
<td>.246</td>
<td>.301</td>
</tr>
<tr>
<td></td>
<td>Change in Probability</td>
<td>.106</td>
<td>.133</td>
</tr>
</tbody>
</table>
traditional moderated regression analysis may be a more conservative test than the logistic regression analysis. Again, it is noted that this exploratory comparison is based on non-significant findings and, therefore, should be interpreted with caution.

Perhaps the greatest advantage of utilizing logit analysis is the certainty that assumptions generally associated with traditional regression are not violated. As stated by Walsh (1987), no other technique will allow the researcher to analyze the effects of a set of independent variables on a dichotomous dependent variable with such minimal statistical bias and loss of information.

**Recommendations for Future Research**

This study has examined three different constructs which are all somewhat related to the career concept—labor market classification, professionalism and career commitment. Various researchers have called for more research testing the contributions of these factors to the turnover process. The present data indicate that each of these constructs is somewhat different, and their degree of significance to the turnover process varies.

The data suggest that labor market classification is not useful in predicting turnover, yet it does contribute to the prediction of job satisfaction, which is generally related to turnover. Professionalism is not significantly
related to turnover although it is significantly correlated with intent to leave, job satisfaction, and organization commitment—three consistently significant predictors of turnover.

Price and Mueller (1981) offer several suggestions concerning future research of the influence of professionalism on turnover. They recommend that occupations that differ considerably in the extent of professionalism be selected for study. The present study partially followed this recommendation by including nurses' aids and licensed practical nurses as well as registered nurses. Future research should incorporate an even more diverse sample to further understand the contributions of professionalism to turnover prediction.

Price and Mueller (1981) also suggest that a broader definition of professionalism might find it to be a more important determinant of turnover. The use of Bartol's professionalism scale was congruent with Price and Mueller's (1981) suggestion. However, factor analysis results indicate problems with this particular instrument. Additionally, responses to the professionalism items were quite low, thus restricting the range for this measure. Morrow and Goetz (1988) have recently employed the Snizek professionalism scale to assess whether professionalism could be distinguished from various work commitment concepts (e.g., organizational commitment, job involvement). Their results indicate that the measure
of professionalism requires some refinement, but is nonredundant with other forms of work commitment. Despite the measurement problems, Morrow and Goetz (1988) believe the professionalism concept is important for future research. They indicate that the interest in professionalism seems to be on the rise, perhaps due to the steady increase in the number of workers who regard themselves as professional and in the number of professional occupations (Cherniss & Kane, 1987).

The present data intimate that career commitment may be a more powerful predictor in the turnover process than overall professionalism. Career commitment is significantly, and more strongly, related to turnover, as well as to intent, job satisfaction, and organizational commitment than professionalism. Blau's (1985b) measure of career commitment is new and relatively unexplored, yet it seems to be a worthwhile instrument. Therefore, it is recommended that future research include this variable, and when possible, use Blau's measure.

Blau (1985b) further advises that future research assess the importance of situations and individual difference variables in predicting career commitment. These analyses may aid organizations in influencing turnover. For example, Taylor and Covaleski (1985) suggest that if organizations are unwilling or unable to provide outcomes (e.g., career opportunities), then
recruitment and selection systems should be developed to allow employers to select employees who are better matched to an organization's outcomes.

Still another line of research (Lachman & Aranya, 1986) recommends that career or professional commitment and organizational commitment be perceived as related in some conditions and unrelated in others. For example, Lachman and Aranya's (1986) findings suggest that differences in relations between the two commitments may result from differences in the encouragement of professional values and behavior provided in an organizational setting. They contend that other contingent factors ought to be studied, again stressing that a more complete understanding of "commitment" would aid in the prediction of turnover.

Although logistic regression analysis is employed less commonly in turnover research than other analyses (Wolpin & Burke, 1985), there is evidence that its use is increasing (e.g., Wolpin & Burke, 1985; Mossholder, Bedeian, Norris, Gies, & Feild, in press). However, it is questionable whether logit analysis is really understood and taken seriously. For example, one author (Walsh, 1987) presents a simplified framework for teaching and understanding logit, and there are conflicting explanations between his discussion and that of others.
Walsh (1987) suggests that the Pearson chi-square (calculated by SPSSX) should be interpreted in such a way that a higher chi-square value represents a better fit of the model. However, the SPSSX User's Guide (SPSS, Inc., 1986) clearly states that this statistic is not interpretable for logit analysis. This, thus, represents one conflict.

Secondly, Aldrich and Nelson (1985) present a formula for calculating a Psuedo $R^2$ for logit analysis. That is, $Psuedo\ R^2 = C/(N+C)$, where $C$ is the overall chi square value and $N = sample\ size$. They warn that this summary measure should be used with extreme caution, if at all. Walsh, however, suggests quite matter-of-factly that $Psuedo\ R^2$ is a quite useful summary measure. He likewise gives an illustration of how to generate this statistic using the results of SPSSX. The conflict is that the chi square statistic used in SPSSX is not the same as that employed by Aldrich and Nelson. Recall that the SPSSX program uses the Pearsons goodness of fit chi square, which according to the User's Guide (SPSS, Inc., 1986) is "incorrect" and not a "meaningful measure" for logistic regression. The chi square statistic for overall fit utilized by Aldrich and Nelson is based on the likelihood ratio principle.

Finally, Aldrich and Nelson suggest that the $t$ statistic used in logit is used just as in the usual
regression case. In fact, they compare the significance of the logit $t$ test to that of the traditional regression analysis $t$ test and draw conclusions from this analysis. Walsh, on the other hand, states that no significance levels of the $t$ test are given in SPSSX because the "Coeff/SE" is only analogous to $t$. He conservatively states that the $t$ values should not drop below 2.0 in order to consider a variable a useful one. Using Walsh's approach might limit research findings as opposed to actually determining the significance of the $t$ statistic given the appropriate degrees of freedom. For example, when degrees of freedom are greater than or equal to 120, a $t$ value of less than two would be significant at the .025 level (Berenson, Levine, & Goldstein, 1983).

Cornfield (1983) used a $t$ value of 1.65 as a cutoff in his study of layoff among employees.

Given these conflicts and the similar outcomes of the moderated and logistic regressions in this study, researchers should engage in more comparative research between the two techniques before using logistic regression exclusively in turnover studies. For example, it has been suggested that logistic regression may only be appropriate in turnover research when the turnover base rate is extremely high or extremely low.
Additionally, it is recommended that researchers develop an understanding of logit analysis before applying it half-heartedly. The use of logistic regression is increasing in the social sciences, and its benefits should not be undermined. However, it is hoped that those who use it do not abuse it.

The current literature continues to offer research suggestions that may improve understanding and prediction of turnover. For example, Dalton, Krackhardt, and Porter (1981) suggest that distinguishing between avoidable and unavoidable turnover may improve the understanding of the manner in which actual withdrawal decisions are made. Abelson's (1987) research examines this taxonomy, and his findings suggest an expanded taxonomy. Abelson recommends that researchers examining turnover determine whether their data differentiates stayers and unavoidable leavers from avoidable leavers on the variables of interest (e.g., demographic variables, satisfaction, organizational commitment, career commitment, etc.). If unavoidable and avoidable turnovers respond differently to the variables, then these different leaver categories should be segmented in further analysis.

As noted previously, Steel and Griffeth (1987) have recently examined methodological factors which may account for the weak correlations between perceived opportunities
ease of movement) and turnover. They make three specific suggestions for reducing these effects:

1. Sampling across a much greater diversity of jobs and occupations may enhance interoccupational variance.

2. Lengthening the lag time between survey administration and criterion development may enhance turnover base rates. As noted previously, however, if the time lag is too long, other problems may arise (Arnold & Feldman, 1981; Peters & Sheridan, in press; Price & Mueller, 1981). For example, increasing the time between when the dependent and independent variables are measured allows for greater organizational change to occur.

3. Using multivariate instruments to measure perceived opportunities may enhance the rigor and stability of this variable.

Finally, current researchers (Kemery & Dunlap, 1987; Peters & Sheridan, in press) suggest that correlations between turnover and various independent variables may be distorted by the use of point-biserial correlations, which are commonly employed in turnover research. This distortion is likely to occur if the proportion of subjects in the top (i.e., leavers) and lower (i.e., stayers) categories of the dependent variable are extremely uneven. Estimated point-biserial correlations reach their maximum value when the proportion of stayers
to leavers is 50:50 (Peters & Sheridan, in press). Departures in either direction from this 50:50 split should result in diminished observed correlations (Peters & Sheridan, in press). This suggests that the reported correlations for this study may be distorted due to an uneven split between stayers (85%) and leavers (15%). Kemery and Dunlap suggest the use of a procedure (Kemery, Dunlap, & Griffeth, in press) for estimating what the correlation would have been under an even split. This procedure is particularly useful when comparing reported correlations between studies.

Conclusion

This study has striven to extend turnover research by attempting to clarify some noted discrepancies among turnover models and related research, and by examining constructs which have been neglected in prior research. The significant and nonsignificant findings presented should aid academicians in further developing models of the turnover process. Indeed, dissertation studies are useful in that they provide a vehicle for reporting nonsignificant effects. As noted by Cotton and Tuttle (1986), reviews of literature are usually limited to published studies; and the analyses are generally biased in that published studies tend to be those that report significant effects (Greenwald, 1975). It is also hoped
that the results and discussion presented in this study will aid practicing managers in influencing employee turnover.

A recent article states that the employee turnover problem has become so pervasive that a new slang term has been included in the English language to describe the phenomenon: the Revolving Door Syndrome (Blakeslee, Suntrup, & Kernaghan, 1985). These authors profess that many managers accept the problem as a necessary evil of contemporary business, and do not actually realize the tremendous cost associated with employee turnover. On the other hand, Peters & Sheridan (in press) contend that employee turnover should not be regarded as being either inherently good or bad. Recent turnover literature has pointed to many of the benefits of turnover (e.g., Dalton & Todor, 1982; Hollenbeck & Williams, 1986; Staw, 1984). For example, while it may be dysfunctional to have a large number of top performers leave during a particular calendar year, it may be constructive to have the same number of low performers leave during that same time period.

The vast amount of research on turnover is evidence that academicians are acutely aware of this phenomenon and its benefit and cost. Although the development and testing of theories and models is a slow and sometimes frustrating process, the search must not end. The bits and pieces of research presented by various researchers
will continue to aid in the search for a better model for predicting and managing turnover.
Bibliography


Appendix A

Letter to Administrators
DATE: November 5, 1986

TO: * supervisors and Head Nurses

FROM: Laynie Pizzolatto, Research Coordinator

SUBJECT: LSU Personnel Research Program, in conjunction with a Doctoral Dissertation.

Enclosed you will find questionnaires to be distributed to all RNs, LPNs, and Nurses' Aids in your department. The questionnaires were developed in order to learn how employees at TCHC feel about their jobs, their work, and other aspects of their professions. Analyses will be conducted to determine how the employees' feelings relate to their turnover. We hope that the results of these analyses will help you in managing your subordinates in the future.

We are depending on your help to get a 100 percent response from you and your subordinates. Obviously, the greater the response, the more meaningful the data will be. Please use the following guidelines in distributing and collecting these questionnaires.

1. A greater response should be achieved if these questionnaires are distributed at your next staff meeting. The nurses and aids should be given time to complete the questionnaires at the meeting. Please note that there is a questionnaire for you to complete also. Let your subordinates know that you, too, are participating in the survey.

2. Please review the cover letter with the nurses and aids. Be sure to stress the fact that their (and your) answers will be completely confidential. Also stress the importance of giving honest replies. This is of the utmost importance if the results are to be helpful in improving employee satisfaction.

3. Each questionnaire is enclosed in an individual envelope. Instruct your subordinates to place their completed questionnaires in the envelopes provided and seal these envelopes before returning. This is to again ensure anonymity.

4. Place the sealed envelopes in the manila envelope provided. Once all questionnaires have been collected, seal the manila envelope and bring it to nursing services where I will collect them. (Please return any unused questionnaires also.)

Your time and cooperation is deeply appreciated. I do hope that the results of the survey will prove to be helpful to you.

If you have any questions, or would like for me to attend your staff meeting, please call me at 981-4448.

Again, thank you for your participation and help.

Sincerely,

Laynie Pizzolatto
Doctoral Candidate, LSU

Note. * denotes Hospital Name
Appendix B

Letter to Survey Participants
Dear Survey Participant:

This questionnaire was prepared by organizational researchers at Louisiana State University in order to learn how employees in this hospital feel about their jobs, their work, and other aspects of their profession. We are trying to learn what you like and dislike about your work. This is not a test. The only right answers to the questions are your honest and thoughtful replies. The information obtained will be used to better understand job satisfaction and hospital employee turnover.

Although this survey is being conducted with the cooperation of SLHC's administration, the responsibility for the direction of this survey rests with the research group from Louisiana State University.

PROTECTION OF PRIVACY

Public Law 93-579, entitled the Privacy Act of 1974 requires that all individuals be informed of the purposes and uses to be made of the information which is solicited. The following is furnished to explain why the information is requested and the general uses to which that information may be put.

PURPOSE: The purpose of this survey is to better understand job satisfaction and hospital employee turnover.

USES: The survey data will be used for research and analysis purposes only. Individual responses are confidential.

We would like to assure you that your answers to this questionnaire will be completely confidential. No one other than the LSU Research Group will see your individual answers. If the survey is to be helpful in improving the job satisfaction of employees here, it is important that you provide honest and candid answers, and that you "tell it like you see it."

When you are finished, please check through the questionnaire to see that you have answered all questions. Your cooperation is sincerely appreciated.

Sincerely,

Allayne Pizzolatto
Allayne Pizzolatto
Doctoral Candidate
Department of Management
Appendix C

Survey Questionnaire
Note. * denotes Hospital Name

INSTRUCTIONS: Listed below are a number of statements which involve possible feelings about your job at Terrebonne General Medical Center. With respect to your own feelings, please indicate the extent of your agreement or disagreement by circling the number that most closely corresponds to your point of view. There are no right or wrong answers.

1 = strongly disagree
2 = disagree
3 = neutral
4 = agree
5 = strongly agree

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am willing to put in a great deal of effort beyond that normally expected in order to help be successful</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. I talk up * to my friends as a great organization to work for</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3. I would accept almost any type of job assignment in order to keep working for *</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4. I find that my values and * values are very similar</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5. I really care about the fate of *</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6. For me, this is the best of all possible hospitals for which to work</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7. I feel very little loyalty to *</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8. I am proud to tell others that I am part of *</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9. I could just as well be working for a different hospital as long as the type of work was similar</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>10. * really inspires the very best in me in the way of job performance</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>11. It would take very little change in my present circumstances to cause me to leave *</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>12. I am extremely glad that I chose * to work for over others I was considering at the time I joined</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>13. There is not too much to be gained by sticking with *</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>14. Often, I find it difficult to agree with * policies on important matters relating to employees</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>15. Deciding to work for * was a definite mistake on my part</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>16. If I could get another job different from my present profession that pays the same amount, I would probably take it</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>17. I definitely want a career for myself in the career in which I am present working</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>18. If I could do it all over again, I would choose to work in the same profession in which I am currently working</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>---</td>
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<td>---</td>
</tr>
<tr>
<td>19. If I had all the money I needed without working, I would probably still continue to work in my present profession.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>20. Mine is the ideal vocation for a life's work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>21. I am disappointed that I ever entered my present profession.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>22. I spend a significant amount of personal time reading journals or books related to my profession.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>23. I feel that my present job will lead to future attainment of my career goals.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>24. My present job is relevant to the growth and development in my career.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>25. I would stay in this profession even if I made a lot less money.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>26. I feel that I should have a lot to say about which patients I work on.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>27. My work in this field should be evaluated mainly by my peers.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>28. I feel that I should not allow my own self interests to interfere with providing the best possible professional service.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>29. I systematically read the professional journals in my area of specialty.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>30. The judgment of people above me in the hierarchy should count most heavily in evaluating my performance in this field.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>31. I regularly attend professional meetings at a local level.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>32. The major satisfaction in my life comes from doing a good job in my area of specialty.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>33. People should just tell me about a problem and then leave me to solve it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>34. My fellow professionals are in the best position to judge my competence.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>35. In my view, professional organizations are of little benefit to the average member.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>36. If I were offered a much higher paying job in another line of work, I'd be inclined to take it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>37. I feel I should not let personal feelings get in the way of doing the best possible job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>38. I should be given considerable latitude to pursue work goals I feel are important.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>39. Service to the people who utilize my expertise is my most important priority.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>40. I regularly attend continuing education programs.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
### Questionnaire:

**INSTRUCTIONS:** Please indicate the extent of your satisfaction or dissatisfaction with the following aspects of your job by circling the number that most closely corresponds to your point of view.

1 = Very Satisfied  
2 = Satisfied  
3 = Neutral  
4 = Dissatisfied  
5 = Very Dissatisfied

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>41. For all practical purposes, I should be allowed to be my own boss</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>42. I don't care what quality work other people in this field do as long as it doesn't interfere directly with me</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>43. My own personal career concerns deserve attention ahead of the interests of others</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>44. I believe that the professional organization(s) should be supported</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Very Satisfied</th>
<th>Very Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>45. Being able to keep busy all the time</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>46. The chance to work alone on the job</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>47. The chance to do different things from time to time</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>48. The chance to be &quot;somebody&quot; in the community</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>49. The way my supervisor handles his/her employees</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>50. The competence of my supervisor in making decisions</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>51. Being able to do things that don't go against my conscience</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>52. The way my job provides for steady employment</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>53. The chance to do things for other people</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>54. The chance to tell people what to do</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>55. The chance to do something that makes use of my abilities</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>56. The way policies are put into practice</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>57. My pay and the amount of work I do</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>58. The chances for advancement on my job</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>59. The freedom to use my own judgment</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>60. The chance to try my own methods of doing my job</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>61. The working conditions</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>62. The way my co-workers get along with each other</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>63. The praise I get for doing a good job</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>64. The feeling of accomplishment I get from my job</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
INSTRUCTIONS: On a scale of 1 to 5, to what extent would the following factors HURT your chances to find a job in another organization (1) or HELP your chances to find a job in another organization (5). Please circle the number that most closely corresponds to your point of view.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Hurt</th>
<th>Help</th>
</tr>
</thead>
<tbody>
<tr>
<td>65. My job experience</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>66. My education</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>67. My sex</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>68. My job skills</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>69. My performance record</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>70. My age</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>71. My contacts or friends in other organizations</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>72. The job market</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

INSTRUCTIONS: Please circle the number that most closely corresponds to your point of view.

73. Which of the following statements most completely reflects your feelings about your future at *?

1. Definitely will not leave.
2. Probably will not leave.
3. Uncertain.
4. Probably will leave.
5. Definitely will leave.

74. Do you expect to leave * in the near future?

1. I will definitely leave in the near future.
2. The chances are quite good that I will leave.
3. The situation is uncertain.
4. The chances are very slight that I will leave.
5. I definitely will not leave in the near future.

75. If I were completely free to choose, I would prefer to continue working at *

1. Strongly Disagree 4. Slightly Agree
2. Moderately Disagree 5. Moderately Agree
3. Slightly Disagree 6. Strongly Agree

76. If I had to quit work for a while, I would return to *

1. Strongly Disagree 4. Slightly Agree
2. Moderately Disagree 5. Moderately Agree
3. Slightly Disagree 6. Strongly Agree

77. I will probably look for a new job with another employer within the next year.

1. Strongly Disagree 4. Slightly Agree
2. Moderately Disagree 5. Moderately Agree
3. Slightly Disagree 6. Strongly Agree
GENERAL INFORMATION

INSTRUCTIONS: Please circle the number by the appropriate answer or fill in the blank with the appropriate information for each of the following items.

1. WHAT IS YOUR JOB TITLE?
   1. REGISTERED NURSE
   2. LICENSED PRACTICAL NURSE
   3. NURSES AID

2. WHAT IS YOUR EMPLOYMENT STATUS?
   1. PART TIME
   2. FULL TIME.

3. HOW LONG HAVE YOU WORKED FOR *
   IN ANY CAPACITY?
   1. LESS THAN 1 YEAR.
   2. BETWEEN 2 - 3 YEARS.
   3. 3 - 5 YEARS.
   4. BETWEEN 5 - 10 YEARS.
   5. TEN YEARS OR OVER.

4. HOW LONG HAVE YOU WORKED FOR *
   IN YOUR PRESENT POSITION?
   1. LESS THAN ONE YEAR.
   2. BETWEEN 1 - 3 YEARS.
   3. 3 - 5 YEARS.
   4. BETWEEN 5 - 10 YEARS.
   5. TEN YEARS OR OVER.

5. WHAT IS YOUR SEX?
   1. MALE. 2. FEMALE.

6. DO YOU HAVE ONE OR MORE CHILDREN
   FOR WHOM YOU ARRANGE CHILD CARE?
   1. YES  2. NO

7. DO YOU WORK ON A ROTATING OR STRAIGHT SHIFT?
   1. ROTATING SHIFT. 2. STRAIGHT SHIFT.

8. IF YOU WORK ON A STRAIGHT SHIFT, ON WHICH
   SHIFT DO YOU WORK?
   1. DAY SHIFT.
   2. EVENING SHIFT.
   3. NIGHT SHIFT.
   4. NOT APPLICABLE, WORK ROTATING SHIFT.

9. WHAT IS YOUR PRESENT MARITAL STATUS?
   1. MARRIED.
   2. SINGLE.
   3. WIDOWED.
   4. DIVORCED OR SEPARATED.

10. HOW MUCH SCHOOLING HAVE YOU HAD?
    1. SOME GRADE SCHOOL.
    2. COMPLETED GRADE SCHOOL.
    3. SOME HIGH SCHOOL.
    4. COMPLETED HIGH SCHOOL.
    5. SOME COLLEGE OR OTHER
        SCHOOL AFTER HIGH SCHOOL.
    6. COMPLETED COLLEGE OR
        OTHER HIGHER SCHOOL.
    7. GRADUATE DEGREE(S).

11. HOW OLD ARE YOU?
    1. LESS THAN 25 YEARS.
    2. 25 TO 29.
    3. 30 TO 34.
    4. 35 TO 39.
    5. 40 TO 49.
    6. 50 TO 59.
    7. 60 YEARS OR OVER.

12. ROUGHLY, WHAT IS YOUR TOTAL YEARLY
    INCOME FROM THE HOSPITAL BEFORE
    DEDUCTIONS ARE MADE?
    1. LESS THAN $5,000.
    2. $5,000 - $7,499.
    3. $7,500 - $9,999.
    4. $10,000 - $14,999.
    5. $15,000 - $19,999.
    6. $20,000 - $24,999.
    7. $25,000 - $34,999.
    8. $35,000 OR OVER.

FOR WHICH DEPARTMENT DO YOU WORK?

WHAT IS YOUR SOCIAL SECURITY NUMBER?
Appendix D

Calculation of Probabilities for Moderated and Logistic Regressions
Probabilities - Hypothesis 1

Logit Coefficients:
- Tenure (Ten) \( -0.184 \times 2 = -0.368 \)
- Ease of Movement (Eom) \( 0.024 \times 2 = 0.048 \)
- Labor Market Classification (Lmc) \( -0.252 \times 2 = -0.504 \)
- Interaction (El) \( 0.006 \times 2 = 0.012 \)
- Intercept \( (3.89 - 5) \times 2 = -2.229 \)

Logistic Equation:
\[
P(Y = 1) = \frac{e^{a + \text{Tenn} + \text{Eom} + \text{Lmc} + \text{El}}} {1 + e^{a + \text{Tenn} + \text{Eom} + \text{Lmc} + \text{El}}}
\]

Where
- \( P(Y = 1) \) is the probability of turnover
- \( \text{Tenn}, \text{Eom}, \text{Lmc}, \text{El} \) = a given variable profile determined by the researcher
- \( a = \) the intercept
- \( e = \) the base of natural logarithms
- \( \text{Tenn} = \) the tenure coefficient multiplied by the given Ten Value (Ten = 1)
- \( \text{Eom} = \) the ease of movement coefficient multiplied by the given Eom value (Eom = 30)
- \( \text{Lmc} = \) the labor market classification coefficient multiplied by the given Lmc value (1 for Primary, 0 for Secondary)
- \( \text{El} = \) the interaction coefficient multiplied by the given Eom * Lmc values

\( P(Y = 1) \) for Primary Labor Market Group:
\[
= \frac{e^{2.22 - 0.184(1) + 0.048(30) + -0.504(1) + 0.012(30*1)}} {1 + e^{2.22 - 0.184(1) + 0.048(30) + -0.504(1) + 0.012(30*1)}}
\]
\[
= \frac{e^{-1.29}} {1 + e^{-1.29}} \approx 0.2747 = 0.215
\]
P(Y = 1) for Secondary Labor Market Group:

\[
\frac{e^{(-2.22 + -.184(1) + .048(30) + -.504(0) + .012(30*0))}}{1 + e^{(-2.22 + -.184(1) + .048(30) + -.504(0) + .012(30*0))}}
\]

\[= \frac{e^{-1.148}}{1 + e^{-1.148}} = \frac{.3172}{1.3172} = .241\]

Regression Coefficients:

- Tenure = -.0447
- Ecm = .005
- Lmc = .028
- El = .00055
- Constant = .123

Regression Equations:

P(Y = 1) for Primary Labor Market Group

= .123 + -.0447(1) + .005(30) + -.028(1) + .00055(30*1)

= .213

P(Y = 1) for Secondary Labor Market Group

= .123 + -.0447(1) + .005(30) + -.028(0) + .00055(30*0)

= .228

Probabilities - Hypothesis 7

Logit Coefficients:

- Tenure (Ten) = -.197 * 2 = -.390
- Career Commitment (Cc) = -.053 * 2 = -.106
- Career Opportunity (Co) = -.08 * 2 = .160
- Interaction (CcCo) = .003 * 2 = .006
- Intercept = (5.98 - 5) * 2 = 1.960

Logistic Equation:

P(Y = 1|TenX, CcX, CoX, CcCoX)

\[= \frac{e^{[\hat{a} + TenX + CcX + CoX + CcCoX]}}{1 + e^{[\hat{a} + TenX + CcX + CoX + CcCoX]}}\]
Where

\( P(Y = 1) \) = the probability of turnover

\( \text{ITenX, CcX, CoX, CccoX}) \) = a given variable profile determined by the researcher

\( a \) = the intercept

\( e \) = the base of natural logarithms

\( \text{TenX} \) = the tenure coefficient multiplied by the given Ten Value (Ten = 1)

\( \text{CcX} \) = the career commitment coefficient multiplied by the given Ec value (32 for High Cc, 20 for Low Cc)

\( \text{CoX} \) = the career opportunity coefficient multiplied by the given Co value (Co = 7)

\( \text{Ccco} \) = the interaction coefficient multiplied by the given Cc x Co values

\( P(Y = 1) \) for High Career Commitment Group:

\[
P(Y = 1) = \frac{e^{(1.96 + \cdot197(1) + \cdot10(32) + \cdot16(7) + \cdot006(32\cdot7))}}{1 + e^{(1.96 + \cdot197(1) + \cdot10(32) + \cdot16(7) + \cdot006(32\cdot7))}}
\]

\[
= \frac{e^{-1.60}}{1 + e^{-1.60}} = \frac{.2019}{1.2019} = .168
\]

\( P(Y = 1) \) for Low Career Commitment Group:

\[
P(Y = 1) = \frac{e^{(1.96 + \cdot197(1) + \cdot10(20) + \cdot16(7) + \cdot006(20\cdot7))}}{1 + e^{(1.96 + \cdot197(1) + \cdot10(20) + \cdot16(7) + \cdot006(20\cdot7))}}
\]

\[
= \frac{e^{-0.83}}{1 + e^{-0.83}} = \frac{.436}{1.436} = .301
\]

Regression Coefficients:

\( \text{Ten} \) = -.0469
\( \text{Cc} \) = -.016
\( \text{Co} \) = -.031
\( \text{Ccco} \) = .001
\( \text{Constant} \) = .69
Regression Equations:
\[ a + \text{Ten}X + CcX + CoX + CccoX \]

\[ P(Y = 1) \text{ for High Career Commitment Group} \]
\[ = .69 + -.0469(1) + -.016(32) + -.031(7) + .001(32\times7) \]
\[ = .140 \]

\[ P(Y = 1) \text{ for Low Career Commitment Group} \]
\[ = .69 + -.0469(1) + -.016(20) + -.031(7) + .001(20\times7) \]
\[ = .246 \]
Vita

Allayne Louise Barrilleaux (Laynie) was born in Thibodaux, Louisiana, on August 31, 1956, the daughter of Cecilia Ann Folse Barrilleaux and Kenneth Anderson Barrilleaux. She completed her early education in Houma, Louisiana, and received a B.S. in Business Education from Louisiana State University in 1978. She received an M.B.A. from Nicholls State University in 1980. In November 1981 she married P. Michael Pizzolatto, and they have one daughter, Emily Celine, born in 1986.

Laynie taught at Nicholls State University throughout her Ph.D. program at L.S.U. She also served as a consultant for various small businesses in Houma during this time. She is presently an assistant professor at Northeast Louisiana University in Monroe, Louisiana. She has articles appearing in the Labor Law Journal and American Business Review. Her hobbies include reading, racquetball, and playing the piano.
Candidate: Allayne Barrilleaux

Major Field: Business Administration, Ph.D.

Title of Dissertation: Employee Turnover: The Effects of Labor Market Classification, Professionalism, Career Commitment, Career Opportunity, Job Satisfaction, Organizational Commitment, and Ease of Movement

Approved:

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Major Professor and Chairman
Dean of the Graduate School

EXAMINING COMMITTEE:

[Signatures]

Date of Examination:

April 5, 1988