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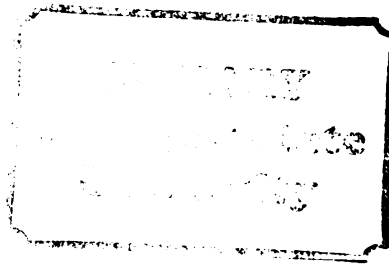
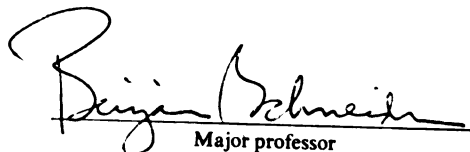This is to certify that the

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Thomas Michael Mitchell

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___a Ph.D.___ degree in _Psychology_

_____
Major professor

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WORK AND CAREER CONSIDERATIONS IN UNDERSTANDING

EMPLOYEE TURNOVER INTENTIONS: DEVELOPMENT OF

THE TURNOVER DIAGNOSTIC

By

Thomas Michael Mitchell

A DISSERTATION

Submitted to

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ABSTRACT

WORK AND CAREER CONSIDERATIONS IN UNDERSTANDING EMPLOYEE TURNOVER INTENTIONS: DEVELOPMENT OF THE TURNOVER DIGNOSTIC

By

Thomas Michael Mitchell

The goal of this research was to develop an instrument composed of items assessing job-related perceptions that would be predictive of turnover intentions. The perceived organization-wide, job, task, and career correlates of turnover intentions were investigated in a sample of 911 employees representing 140 Dictionary of Occupational Title job titles in over 20 organizations. The Turnover Diagnostic instrument was constructed by applying a "criterion-keying" technique to the item validities of 91 items, 49 of which were retained for further analyses. Factor analyzing these 49 items yielded a 31-item, five-factor solution. The five factors were: (1) Work Inhibition, (2) Supervision, (3) Organizational Career Facilitation, (4) Organizational Status, and (5) Training/Skill Utilization.

Stepwise multiple regression analyses revealed that four of the five factors were significantly predictive of turnover intentions in the original sample (R = .545) and three of the five factors were significantly predictive in a validation sample (R = .536). The two factors that were most predictive of turnover intentions were

Organizational Career Facilitation (the extent to which the organization facilitated employee career development by providing career-relevant information and counseling), and Work Inhibition (the extent to which work conditions inhibited employee task performance).

Hierarchical multiple regression analyses revealed that the perceptions-satisfaction and the satisfaction-intentions relationships were of a greater magnitude than the perceptions-intentions relationship, supporting the hypotheses of Fishbein and Ajzen (1975). In addition, hierarchical regression analyses revealed that the Turnover Diagnostic and the Job Descriptive Index (Smith, Kendall, & Hulin, 1969) were not particularly redundant.

The implications of the present findings were discussed regarding the explanation and management of organizational withdrawal behavior. In addition, other issues related to the investigation of organizational withdrawal were addressed (e.g., perceptions versus attitudes as predictors, appropriateness of using turnover intentions as a criterion, and positive and negative consequences of turnover).

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This dissertation could not have been completed if it were not for the help of many people.

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Last, but certainly not least, I want to thank the two most important, most special people in my life. The first is my wife and best friend, Vicki Priddle. She is probably happier to see me finish than

I am. I want to thank her for her patience, moral support, and understanding during the last year. I also want to thank my son, Jonathan Owen Priddle-Mitchell, for existing for the last 10½ months. He will probably never read this dissertation, but he will hear plenty of stories about it.

TABLE OF CONTENTS

Table of Contents, cont.

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

INTRODUCTION

<u>Turnover as a Variable of Interest</u>

Employee turnover is a variable that has been an object of
interest to behavioral scientists, management practitioners, and
personnel researchers for many years. There are several reasons
for this interest. First, turnover is a relatively visible and
quantifiable behavior. Secondly, turnover is generally considered
to be "bad" in the sense that it is costly to organizations (Jeswald,
1974; Lawler, 1973; Mirvis & Lawler, 1977; Wanous, 1980). Higher
turnover is often associated with higher costs for the organization
involving factors such as fringe benefits, severance pay, overtime
pay, underutilization of facilities, administrative/personnel pro-
cessing costs, recruitment costs, and training costs (Jeswald, 1974).
In addition, work force productivity may be lower due to the relatively
larger number of inexperienced employees (Jeswald, 1974; Price, 1977).

Various authors have attempted to estimate the cost of employee
turnover. Lawler (1973) proposes the replacement cost of a manager
at five to ten times that manager's monthly salary. Mirvis and
Lawler (1977) estimated the replacement cost of a bank teller at
$2,522.03. While these figures may not be exact, they do point to
the fact that turnover can be an expensive occurrence for many

1

organizations, especially if turnover rates are high. Parenthetically, it should be noted that annual organizational turnover rates in excess of 100% are not uncommon.

However, not everyone agrees that turnover is always a "bad" phenomenon. For example, Dalton and Todor (1979) noted that individuals, organizations, and society may accrue positive outcomes as a result of turnover. In brief, Dalton and Todor noted that individuals typically have to move from organization to organization in order to increase their income. In addition, growth and development often occur when individuals are exposed to new situations where they are required to use their skills and assume increased responsibility. Furthermore, to the extent that an individual's job may be stressful, leaving that job may enhance the mental and physical health of that individual.

Both Dalton and Todor (1979) and Jeswald (1974) noted that turnover may yield positive outcomes for organizations as well as for individuals. Dalton and Todor emphasized that the transfer of innovation ("new blood" and new ideas) from firm to firm is facilitated by workforce mobility. Absence of workforce mobility within an organization can adversely influence organizational effectiveness (e.g., unproductive tenured faculty in universities). Another positive outcome of turnover is that new employees (replacements) are usually paid less, resulting in personnel costs savings for the organization (Jeswald, 1974).

In regard to the benefits realized by society as a whole, Dalton and Todor (1979) propose that workforce mobility engendered by turnover has the result of reducing inequitable distribution of national income and increasing the net national product.

The arguments of Dalton and Todor and Jeswald do have some merit; low turnover rates may have negative effects on individuals, organizations, and society. However, as Dalton and Todor note, viewing turnover as having strictly positive or negative outcomes is inappropriate. Turnover has both positive and negative outcomes; thus far organizational behavior research has seldom addressed the benefits of turnover. Obviously, organizational effectiveness may be enhanced by some median level of turnover between the extremes of no turnover and massive turnover. The position advanced here is that to a large extent the effects of high turnover within an organization are predominantly negative. The positive organizational outcomes touted by Dalton and Todor (e.g., increased innovation) are phenomena primarily associated with managerial turnover. However, most turnovers occur among workers in the lower organizational echelons; it follows that as turnover rates increase in this population, the organization should realize greater costs and accrue fewer benefits. Identifying the antecedents and causes of turnover may help organizations attain a realistic goal of managing employee turnover.

A considerable amount of effort has been expended in attempts to understand the determinants of organizational participation and withdrawal. At the macro level, economists and sociologists examined the relationship between turnover rates and aggregate level of economic activity, employment levels, vacancy levels, wage levels, organization size, extent of unionization, etc. (Armknecht & Early, 1972; Forrest, Cummings, & Johnson, 1977; Price, 1977). At a micro level, behavioral scientists and personnel researchers have looked at a broad range of variables, concentrating on attitudinal (job satisfaction) and

individual-demographic (biodata) measures. These latter efforts have been based on the assumption that participation/withdrawal behaviors of organizational members can be understood in terms of their satisfaction with the "here-and-now" attributes of the setting or on the basis of their personal characteristics.

However, while there have been a number of major reviews of the turnover literature (Brayfield & Crockett, 1955; Herzberg, Mausner, Peterson, & Capwell, 1957; Mobley, Hand, Meglino, & Griffeth, 1979; Muchinsky & Tuttle, 1979; Porter & Steers, 1973; Price, 1977; Vroom, 1964), the conclusions that can be drawn from these reviews are not particularly illuminating. Mobley et al. (1979) summarized the problem cogently:

> While the economic and job dissatisfaction contributions
> to turnover are well established, they are conceptually
> simplistic and empirically deficient bases for understanding
> the employee turnover process (p. 493).

As noted above, the investigation of turnover has been conducted from a number of vantage points (economics, sociology, organizational theory, psychology). The approach taken here is basically psychological; labor market, socio-economic status, and organization structure features are not the focus of this research. The research approaches to turnover that have been taken by behavioral scientists and personnel researchers have some problems and limitations that have contributed to the lack of understanding of the employee withdrawal process. The distinguishing characteristics and limitations of these research approaches to turnover warrant discussion.

Criticism of Turnover Research

At the outset it should be noted that the term "research approaches to turnover" may be a misnomer because there really has not been an identifiable "research approach". Economists, sociologists, behavioral scientists, and personnel researchers have all investigated withdrawal behavior through their professional blinders. Within single disciplines (e.g., psychology) researchers have usually taken different tacks in examining employee withdrawal behavior. The wide range of variables investigated as correlates of turnover makes it difficult to talk about research approaches to turnover. Fortunately, reviewers of the turnover literature have proposed several categorization schemes for the correlates of turnover. For example, Porter and Steers (1973) proposed a five-category classification system: 1) overall satisfaction, 2) organizational-wide factors, 3) immediate work environment factors, 4) job content factors, and 5) personal factors. Mobley et al. (1979) examined two additional categories: external environment factors and occupational groupings. Unfortunately, no study has appeared in which variables have been systematically sampled from all potential categories.

Wanous, Stumpf, and Bedrosian (1979) described several serious flaws characteristic of the now voluminous turnover literature: 1) a predominance of bivariate studies conducted within single organizations, 2) measurement/methodological problems, and 3) a general absence of model or theory-guided research.

Predominance of Bivariate-Single Organization Studies

The large number of bivariate studies that have examined the correlates of turnover has resulted in the accumulation of an enormous amount of data-often characterized by contradictory or inconclusive findings. In a typical published study, a correlation matrix is presented and then the pattern of relationships between the variables and turnover is discussed. Such a study, characterized by the use of variables unique to that study and confined to a single organization, is commonplace in this literature and, as such, accumulating these studies tends not to facilitate understanding. This is because, first of all, the profusion of variables correlated with turnover makes comparisons across studies difficult. Secondly, when withdrawal behavior is studied within a single organization, the effects of some of the measures may be attenuated due to restriction of range, thus making it difficult to generalize the pattern of results from one organization to another (Wanous et al., 1979).

Furthermore, multivariate analyses have seldom been conducted (Mobley et al., 1979, reviewed only seven multivariate studies between 1973 and 1978). Mobley et al. (1979) and Wanous et al. (1979) advocated the use of multivariate analysis techniques in order to evaluate the relative explanatory contribution of different variables to the prediction of turnover. Such analyses would be helpful in resolving the contradictory bivariate results that have been obtained.

Methodological Limitations

The second criticism that Wanous et al. (1979) directed at the withdrawal literature concerns measurement and methodological limitations common to this research. One problem that has been identified

is one that has plagued the motivation, satisfaction, and performance literatures--the criterion problem. That is, the use of different measures of turnover in different studies and the infrequency with which turnover is precisely defined has made cross-study comparisons of results problematic. For example, some researchers have included both voluntary and involuntary terminations as the turnover criterion.

Other methodological limitations have been noted. Reliance on company records as sources of information about the reasons for termination is one such problem. Mobley et al. (1979) raised time issues as a methodological concern. For example, the time period from instrument (predictor) administration to criterion data collection has ranged from weeks (Newman, 1974) to four years (Marsh & Mannari, 1977). Another temporal issue concerns the effects of tenure. Wanous et al. (1979) noted that the use of cross-sectional designs to a large extent precludes assessment of tenure effects on withdrawal behavior.

In summary, methodological limitations in this research area (lack of standard turnover criteria, reliance on company records, criterion contaminated by temporal issues, predominance of cross-sectional research) have contributed to the current lack of under-standing of employee withdrawal behavior.

General Absence of Models and Theory

In addition to the predominance of bivariate studies and methodological limitations, Wanous et al. (1979) identified a third weakness inherent in the withdrawal literature - a general absence of models or theory-guided research. While over 100 studies have been published with turnover as a criterion, only two models have appeared

that have stimulated much research (March & Simon, 1958; Mobley, 1977). This state of affairs has existed in spite of the fact that March and Simon proposed a model of the organizational participation/ withdrawal over 20 years ago.

March and Simon (1958) proposed a model outlining the factors affecting what they called individuals' "motivation to participate" as organizational members. Two major components of this motivation were postulated: perceived desirability of leaving the organization and perceived ease of movement from the organization. Satisfaction with the job was posited as the primary determinant of perceived desirability of leaving the organization. This relationship between satisfaction and desirability of leaving is moderated, according to March and Simon, by the perceived possibility of intraorganizational transfer. That is, if employees think they can transfer to other units in the organization, they will be less likely to quit. The second component of the decision to participate in the organization, perceived ease of movement, is primarily determined by the number of perceived extraorganizational job alternatives. According to March and Simon, these two components act together to determine actual turnover behavior. However, they may not be correlated. That is, an individual may want to discontinue organizational participation by quitting, but may not leave the organization due to a perception that alternative job opportunities do not exist (i.e., high perceived desirability of leaving and low perceived ease of movement).

Although the majority of published turnover research has appeared since the appearance of the March and Simon model in 1958, relatively few behavioral scientists and personnel researchers have availed

themselves to the model. Indeed, Mobley et al. (1979) reviewed only three studies between 1974 and 1978 which used variables proposed by March and Simon other than job satisfaction. The March and Simon model has generated more interest among economists than among behavioral scientists (see Pettman, 1973, for a non-empirical review of this literature).

More recently, Mobley (1977) proposed a model of the turnover process that has stimulated a moderate amount of research. This model has undergone some changes since its initial appearance; a simplified version of the Mobley (1977) model was presented by Mobley, Horner, and Hollingsworth (1978) and a more elaborate version appeared a year later (Mobley et al., 1979). The 1977 and 1978 models are basically individual-level cognitive models which specify the sequential decisions people make and the behavior they engage in during the withdrawal decision-making process. For example, low job satisfaction is thought to lead to thoughts of quitting, which in turn lead to intention to search for a new job. Intention to search then leads to intentions to quit, and finally the quit/stay decision is made (Mobley et al. 1978).

This model has two significant features. First, Mobley et al. (1978), following Fishbein and Ajzen (1975), and Newman (1974), identify turnover intentions as the immediate precursor of actual turnover behavior. Second, Mobley et al. identify job satisfaction/ dissatisfaction as the "conditional causal agent" in their model. Although job dissatisfaction has consistently been shown to be positively correlated with turnover, the magnitude of this relationship generally has been moderate (Mobley et al., 1979; Porter & Steers,

1973; Price, 1977). In identifying job dissatisfaction as the condi-
tional causal agent in the turnover process, Mobley et al. (1978)
provide an explanation for the attenuation of the dissatisfaction-
turnover relationship by noting that other variables (e.g., thinking
of quitting, intentions to search, intention to quit) mediate that
relationship.

However, neither March and Simon (1958) nor Mobley et al. (1978)
clearly specified what caused or contributed to job dissatisfaction.
This omission is significant in that job dissatisfaction is accorded
such a prominent place in their models of the turnover process.
Subsequently, however, Mobley et al. (1979) presented a more elaborate
version of the original Mobley (1977) model. This new model included
a whole host of new variables, incorporating sociological and
economic/labor market variables, as well as psychological variables
(e.g., centrality of work values, job expectations, job-related
perceptions). The full model is presented in Figure 1.

Significantly, job-related perceptions were proposed as one of
the two primary determinants of job satisfaction (the other being
individual values). However, little emphasis is placed by Mobley
et al. on the importance of job-related perceptions as contributing
factors to withdrawal intentions or behavior. Moreover, the process
through which these perceptions affect job satisfaction and turnover
behavior is not specified. In addition, Mobley et al. (1979) proposed
no hypotheses concerning whether some job-related perceptions would
have a greater effect than others on turnover intentions or actual
turnover. Also, no classification system was proposed to categorize
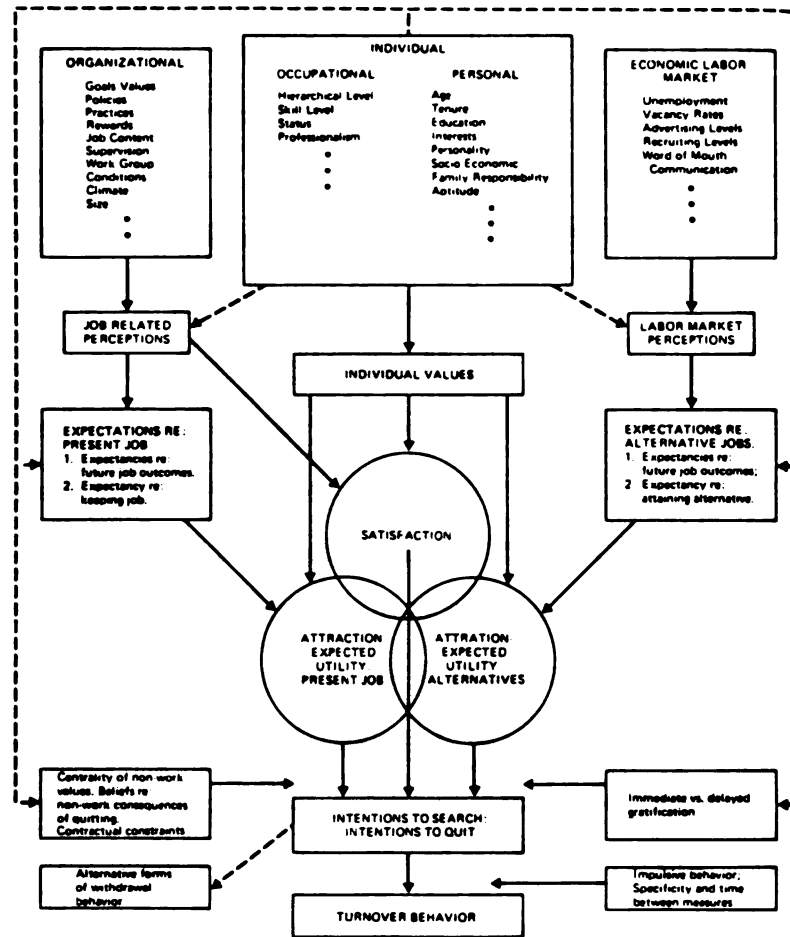
Figure 1. Primary Variables and Process of Employee Turnover

these perceptions in a meaningful fashion. All these omissions are significant in that they limit understanding of the job-related perceptions that contribute to or are associated with employee withdrawal.

The position being advocated here is that a greater emphasis should be placed upon exploring the relationship among job-related perceptions and withdrawal cognitions (turnover intentions) and withdrawal behavior

(turnover) for two reasons, one theoretical and the other practical. From a theoretical standpoint, it seems advisable to focus more on job-related perceptions because many measures used in organizational behavior research are perceptual/descriptive in nature (e.g., organizational climate and task characteristics measures). However, to a large extent, organizational withdrawal research has concentrated on investigating the relationship between attitudinal measures (most typically measures of various facets of job staisfaction) and turnover. Given the fact that perception measures are often used in organizational behavior research, it seems reasonable to devote more attention to the perception-turnover relationship. What little attention that has been devoted to exploring this relationship in organizational withdrawal research has revealed that the track record of perception measures is worse than that of attitudinal measures in predicting turnover. However, in some cases perceptions measures have been found to be positively correlated with turnover (e.g., Marsh & Mannari, 1977). This suggests that job-related perceptions may not be directly linked to turnover; there may be some variables intervening between perceptions and the behavioral criterion of turnover.

Fishbein and Ajzen (1975) proposed a model that can be used to explain the pattern and magnitude of the relationships among job-related perceptions, job-related attitudes, and turnover. Their conceptual framework linked beliefs, attitudes, behavioral intentions, and overt behavior. Beliefs, as defined by Fishbein and Ajzen (cognitions about the attributes of an object, event, entity, or condition), can be

considered synonomous with job-related perceptions as defined by Mobley et al. (1979). The Fishbein and Ajzen framework is relevant to the present research in that the relationship between beliefs and the other components of the model is given explicit treatment. This framework will be discussed in more detail in next section. The reasons why job-related perception and attitudinal measures often have low magnitude relationships with a behavioral criterion such as turnover can be better understood when these relationships are viewed in the context of the Fishbein and Ajzen model. In addition, reference to their framework may help organizational behavior researchers increase their ability to predict behavioral criteria when using perception and attitudinal measures as predictors.

The second reason that more emphasis should be placed on job-related perceptions as they are related to behavioral criteria such as turnover has a practical basis. Although attitudinal variables such as satisfaction often are more strongly correlated with turnover than job-related perception variables, attitudinal measures are less "actionable" than perception measures. That is, knowing that employees in general are dissatisfied with supervision provides relatively little information upon which action can be taken to make changes. In contrast, job-related perception measures provide <u>descriptive</u> information about organizational practices, procedures, events, and conditions. Thus, it is easier for practitioners to make interventions and change attempts when descriptive rather then evaluative measures are used. For this reason, it seems potentially useful to focus on the relationships between job-related perceptions and withdrawal cognitions and behavior.

Beliefs, Attitudes, Intentions, and Behavior

The relationship between attitudes and behavior has been investigated by psychologists for many years. The accumulated research evidence indicates that attitudes (in the way that they are typically measured) are not consistently related to behaviors and the magnitude of the attitude-behavior relationship is seldom large (Wicker, 1969). Indeed, Wicker concluded on the basis of his review that it was more likely that attitudes would be unrelated or only slightly related to overt behaviors than that attitudes would be strongly related to behaviors. Although organizational researchers have not been so pessimistic, they too have lamented the low to moderate correlations between attitudes such as job satisfaction and behaviors such as turnover (e.g., Mobley et al., 1979).

The Fishbein and Ajzen Model

Fishbein and Ajzen (1975) took exception to Wicker's (1969) pessimistic conclusion and proposed a theoretical framework relating beliefs, attitudes, behavioral intentions, and behavior. Their model is presented in Figure 2.
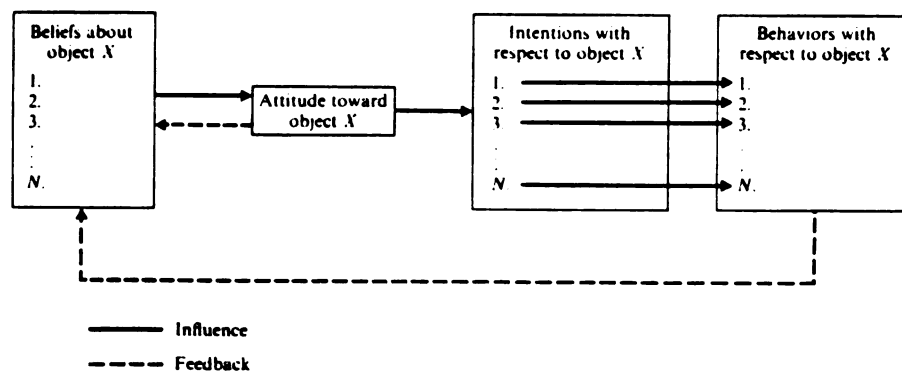
Figure 2. Relationship Among Beliefs, Attitudes, Intentions, and Behaviors with Respect to a Given Object.

Basically, Fishbein and Ajzen proposed that individuals' beliefs about objects, events, or entities determine their attitudes toward those objects, events, or entities. Beliefs are cognitions concerning the attributes of an object. Attitudes, on the other hand, have an affective component and are a function of the summated positive/ negative evaluations of the attributes an object is believed to possess. For example, a belief that an individual may hold is that a lemon is sour tasting. One's attitude toward lemons is determined by one's evaluation of the attribute of sourness. Beliefs can be determined by direct experience, observation, or information received by outside sources (individuals, media, etc.).

Attitudes toward objects are related to individuals' intentions to perform a variety of behaviors with respect to that object. Correspon-dence and specificity are key concepts in understanding the attitude-intentions relationship and the attitude-behavior relationship. An attitude is viewed as a general disposition toward an object. Thus, on logical grounds, according to Fishbein and Ajzen (1975), a general attitude cannot be expected to be highly correlated with a specific behavioral intention or a specific behavior because of a lack of correspondence between the general attitude and the specific behavior. For example, the expression of a positive attitude toward the object/ entity "my church" may be significantly correlated with a range of church-related behaviors (donating money, attending meetings, attending worship services, etc.), but the probability of being highly correlated with any single specific behavior is not high. A more specific attitude (attitude toward donating money to my church) should be more highly correlated with the corresponding specific overt behavior of donating money (Ajzen & Fishbein, 1977).

Fishbein and Ajzen (1975) propose that intentions (the third element in their framework) should be more highly correlated with behavior than attitudes or beliefs because of a greater degree of correspondence between intentions and behavior. That is, a specific intention (intending to go to Sunday worship service on Sunday, July 19) should be more predictive of attendance (a behavior) than an attitude toward attending worship service, even if that attitude is specific. Fishbein (1973) reported research evidence supportive of this conclusion; the average correlation between intentions and behavior in nine studies was .70, significantly greater than the average attitude-behavior correlation. This finding provides strong support for the utility of using measures of behavioral intentions to predict overt behavior.

In addition to the four components discussed above, Fishbein and Ajzen incorporated a normative beliefs component in their model to facilitate the prediction of overt behavior. Normative beliefs are a function of an individual's perceptions regarding others' expectations of his behavior and his motivation to comply with those expectations (Fishbein and Ajzen, 1975; Newman, 1974). However, the normative beliefs component has played a minor role in organizational withdrawal research and will not be discussed further here.

In summary, Fishbein and Ajzen (1975) proposed a conceptual framework linking beliefs, attitudes, intentions, and behaviors. They postulated a temporal sequence linking the four components of the model such that adjacent components are more highly related than non-adjacent components. An illustration of this: theoretically the intention-behavior relationship (adjacent components) should be of a greater

magnitude than the attitude-behavior relationship (non-adjacent components). This has been demonstrated empirically (Fishbein, 1973).

In their treatment of their model, Fishbein and Ajzen have concentrated on explicating the attitude-behavior and intentions-behavior relationships. They have devoted relatively little attention to the belief-attitude, belief-intentions, and attitude-intentions relationships. This omission is significant in that the usefulness of their theoretical framework in guiding research is limited by the extent to which linkages in their framework are unexplored. The understanding of withdrawal cognitions and behavior may be enhanced by examining more closely the relationships between beliefs (job-related perceptions), attitudes, and intentions.

When viewed in the context of organizational research, utilization of the Fishbein and Ajzen (1975) framework suggests consideration of two important issues that are relevant to the present research. First, under what conditions are beliefs and attitudes most highly correlated with intentions and behavior? Fishbein and Ajzen (1975) reported attitude-behavior correlations ranging from zero to .85. Obviously under some conditions attitudes (and beliefs) can be highly predictive of behavior. Secondly, under what conditions are intentions most highly correlated with overt behavior? Because intentions are often highly correlated with behavior, researchers may find it fruitful to use measures of behavioral intentions, especially when it is difficult to obtain measures of the overt behavior. However, the correlation between intentions and behavior is not unity.

The first issue is important because organizational researchers typically use measures assessing respondents' perceptions (i.e., beliefs)

of organizational practices and procedures or use measures tapping
affective evaluations (i.e., attitudes) of features of their work en-
vironments. Knowing under what conditions beliefs and attitudes will be
most highly correlated with behaviors could have positive theoretical and
practical implications. For example, diagnosing organizational problems
and taking corrective action should be facilitated by knowing the
moderating effects of various conditions on belief/attitude-behavior
relationships.

The importance of the second issue, factors which moderate the
intentions-behavior relationship, stems from the fact that intentions
are not perfectly predictive of behavior. Researchers and practitioners
would consider using responses to behavioral intentions measures to make
interventions only if they are confident that intentions are or will be
highly correlated with the corresponding behavior. Therefore, knowing
what factors moderate the relationship between intentions and behavior
could be useful in both a practical and theoretical sense.

Moderators of the Attitude-Behavior Relationship

According to Fishbein and Ajzen (1975), in research contexts where
investigators rely on self-report, questionnaire data, the degree of
correspondence between the attitudinal measures and the behavioral
criteria is the most important "moderating" factor. Still, even when
there is correspondence, there are several factors that can moderate the
relationship. For example, Schwartz (1978) noted that the passage of
time is one such moderator. As time passes, attitudes are more likely
to change, thus making it less likely that the originally-held attitude
will correlate highly with the behavioral criterion. Attitudes change
because beliefs are altered as a result of information obtained through

experience or observation. Fazio and Zanna (1981) suggested that attitudes formed as a result of direct experience may be more predictive of overt behavior than attitudes formed in the absence of such direct experience. In addition to the passage of time and direct experience, the extent to which the behavioral criterion is under the volitional control of the individual is a factor that can moderate the attitude-behavior relationship. For example, employees may have negative attitudes toward their organization, but may not leave because of contractual obligations.

Much of the preceding discussion has focussed on attitude-behavior relationships. Previously it was noted that little attention has been paid to the belief-behavior relationship, a relationship that has important implications for organizational behavior research because perceptual/ belief measures are often used in this area. The position proposed here is that the factors that moderate the attitude-behavior relationship should also moderate the belief-behavior relationship. The rationale for this argument is based upon the Fishbein and Ajzen (1975) position that there is a very strong correlation between beliefs about an object and attitudes toward that object. Indeed, according to Fishbein and Ajzen, an individual's attitude toward an object is determined solely by the beliefs that individual holds about that object. Therefore, the degree of correspondence between the belief measures and the behavior, time, direct experience, and extent of volitional control should affect the belief-behavior relationship in essentially the same way they affect the attitude-behavior relationship.

Moderators of the Intentions-Behavior Relationship

A second issue that has important implications concerns the extent to which intentions are predictive of behavior. Although Fishbein (1973) reported an impressive average intentions-behavior correlation of .70, this correlation is obviously less than perfect. Moreover, it should be noted that this .70 average correlation was obtained in nine laboratory experiments where the passage of time and other extraneous influences are minimized or eliminated. In organizational research where extraneous influences may have a greater effect, the average correlation between intentions and behavior should be smaller. Just as they moderate the relationship between attitudes and behavior, the passage of time and the extent to which the behavioral criterion is under the control of the individual may moderate the relationship between intentions and behavior. Of course, correspondence between the intention measure and the behavioral criterion is also important.

Job-Related Perceptions, Job Attitudes, Turnover Intentions, and Turnover

As noted earlier, a wide variety of variables has been investigated in conjunction with turnover by organizational researchers. It would be useful to look at these correlates of turnover from the orientation advocated by Fishbein and Ajzen (1975). The majority of these variables can be classified as either job-related perceptions of a range of organizational and work conditions (beliefs) or satisfaction measures (attitudes). According to Fishbein and Ajzen (1975), the attitude-turnover relationship should be of a greater magnitude than the relationship between job-related perceptions and turnover. The empirical evidence tends to support this position. That is, job-related perceptions (beliefs) such as perceived work group cohesiveness, climate, resource

adequacy, amount of work, and job autonomy generally have non-signifi-
cant or low correlations with turnover (Mobley et al., 1979).

In contrast to belief/perception measures, attitudinal measures such
as satisfaction, in particular overall job satisfaction and satisfaction
with work itself, tend to be significantly correlated with turnover
(Porter & Steers, 1973; Mobley et al., 1979). However, the magnitude of
the attitude-turnover correlations has seldom exceeded .40. The average
correlation between overall job satisfaction and turnover reported in
the Mobley et al. (1979) review for seven studies was .24. The relatively
unimpressive result may be explained by the fact that there is generally
little correspondence between the attitude measure used (overall or facet
satisfaction) and the behavioral criterion (turnover). This is especially
true of the facet job satisfaction measures (where there is little
correspondence between the attitude and the behavior) and can account
for the generally nonsignificant correlations between satisfaction with
pay, promotion, supervision, coworkers and the criterion of turnover.

Although beliefs and attitudes typically are not highly correlated
with behavior, under some conditions beliefs and attitudes can be highly
correlated with behavior even when there is little correspondence between
the measures (e.g., when individuals form their beliefs and attitudes as
a result of direct experience, when the passage of time between predictor
and criterion assessment is minimized, and when the behavioral criterion
is under the volitional control of the individual). These issues vary
in importance in organizational withdrawal research. The first issue,
the effect of direct experience, is of greater concern in social psycho-
logical research than it is in organizational research where most beliefs
and attitudes are formed as a result of direct experience in work

settings. The second and third issues, the magnitude of the time interval between predictor and criterion assessment and the extent to which the criterion behavior is under the volitional control of the individual, assume greater importance in organizational withdrawal research. The second issue is especially important and may account for the wide range of predictor-turnover correlations reported in the literature. The effect of the volitional control issue is difficult to assess and probably varies widely as a function of personality characterists, job type, economic conditions, contractual arrangements, and other factors for which researchers rarely have complete data. Still, the most important factor to consider given the nature of organizational research is the degree of correspondence between the belief/attitude predictors and the behavioral criterion.

According to Fishbein and Ajzen (1975), intentions should be more highly correlated with behavior than attitudes or beliefs because of the greater degree of correspondence between intentions and behavior. Recent turnover research has assessed the magnitude of the relationship between turnover intentions and turnover with generally impressive results. Indeed, a number of studies have shown turnover intentions to be quite highly correlated with actual turnover. For example, the average intentions-turnover correlation for the following five studies was .57 (Hom, Katerbery, & Hulin, 1979 - .67; Miller, Katerberg & Hulin, 1979 - .66, .71; Mobley, Horner, & Hollingsworth, 1978 - .49; Newman, 1974 - .39; Waters, Roach, & Waters, 1976 - .42). This figure is considerably larger than the average satisfaction-turnover correlation of .24 reported above. This finding suggests that focussing attention on turnover intentions as a criterion may be a useful preliminary step toward developing a more comprehensive understanding of the determinants of actual turnover.

In sum, the pattern and magnitude of relationships among job-related perceptions, job-related attitudes (satisfaction), and turnover supports the hypotheses of Fishbein and Ajzen (1975) regarding the relationship among beliefs, attitudes, and behaviors. In general, job-related perceptions are less strongly related to turnover than are satisfaction measures. However, while larger in magnitude, the satisfaction-turnover relationship is generally moderate at best in size. In contrast, researchers have found a consistent and strong relationship between turnover intentions and turnover.

According to Fishbein and Ajzen, the key element that can explain these phenomena is the degree of correspondence between the various measures. The high intentions-turnover correlations that have been reported are primarily due to the high degree of correspondence between the intentions measures and the behavioral criterion of turnover. The low magnitude correlations between belief and attitude measures, according to Fishbein and Ajzen, is due to the lack of correspondence between the belief and attitude measures typically used and the behavioral criterion measures. Although Fishbein and Ajzen were for the most part referring to the social psychological research literature, this lack of correspondence between predictors and criteria plagues the organizational behavior research as well. In a sense this problem is an intractable one, considering the nature of survey/questionnaire research in organizational settings. Fishbein and Ajzen (1975) would recommend ensuring correspondence by assessing individuals' beliefs, attitudes, and intentions regarding turnover, and then correlating these with the behavioral criterion of turnover. However, organizational withdrawal researchers are primarily concerned with the relationship between job-related perceptions and attitudes regarding organizational and job attributes on

one hand, and withdrawal cognitions and behavior on the other. Therefore, following the Fishbein and Ajzen recommendation would not be particularly useful from a practical standpoint. One possible way of dealing with this problem would be to construct research instruments such that individuals would be asked to respond to questionnaire items while in a "turnover response set." Following this procedure could, in a sense, establish correspondence in the minds of the respondents rather than having correspondence built into the measures themselves. No study has been found in the literature which reported adopting this approach to increase the correspondence between predictors and behavioral criteria.

Outline of Research

On the basis of the theoretical propositions of Fishbein and Ajzen and empirical evidence, it seems justified to investigate the correlates of employee turnover intentions in order to contribute to an increased understanding of the factors that are associated with employee turnover. Those job-related perceptions and attitudes that are predictive of turnover intentions should also be predictive of turnover. However, according to Fishbein and Ajzen (1975), those factors that are predictive of turnover intentions should be less predictive of actual turnover. Although a complete test of the Fishbein and Ajzen framework would entail examining the relationship between all four components of their model (beliefs, attitudes, intentions, and behavior), investigating the relationships among beliefs, attitudes, and intentions should yield positive outcomes. Almost no organizational withdrawal research has approached the study of withdrawal cognitions and behavior from a beliefs-attitudes-intentions-behavior framework as advocated by Fishbein and Ajzen. The

utilization of their framework would be a positive step toward increasing an understanding of organizational withdrawal cognitions and behavior.

The questions that need to be answered are: 1) what job-related perceptions are most highly correlated with turnover intentions, and 2) what is the pattern of relationships among job-related perceptions, job-related attitudes (satisfaction), and turnover intentions? As noted earlier, most turnover research has concentrated upon the attitudinal correlates of withdrawal behavior. This research is designed to examine belief/perception correlates of withdrawal cognitions as well as attitudinal correlates. In addition, the research will involve a comparison of the relative predictive power of perceptions and attitudes regarding turnover intentions.

This research initiates exploration of these questions through the development of an instrument designed to detect the job-related perceptions which are most highly predictive of turnover intentions. It is emphasized again that the focus is on turnover intentions in the present research as the dependent variable of interest. This seems justified based both on theory (Fishbein & Ajzen, 1975; Mobley et al., 1979), the consistent finding that such intentions are the strongest correlate of actual turnover (Hom, Katerberg, & Hulin, 1979; Kraut, 1975; Miller, Katerberg, & Hulin, 1979; Mobley, Horner, & Hollingsworth, 1978; Newman, 1974; Waters, Roach, & Waters, 1976), and the fact that in a multi-organization study like the present one, turnover intentions are more likely to have a common meaning than actual turnover. In a sense, then, intentions are more equatable from setting to setting than is turnover because intentions are relatively less contaminated by factors outside the individual's control (e.g., labor market conditions, the passage of time, etc.).

This research is designed to rectify some of the criticisms that Wanous et al. (1979) directed at previous employee withdrawal research. First, Wanous et al. noted that a vast majority of the published organizational withdrawal literature consisted of bivariate, single-organizational studies. The present research will apply multivariate data analysis techniques on a multi-organization sample. Adopting this approach should yield two positive outcomes. First, the use of multivariate analysis should facilitate discovering the relative predictive strength of the various predictor variables and should account for a greater proportion of the variance in turnover intentions. Secondly, capitalizing on a multi-organization sample reduces the problem of range restriction common to single-organization studies.

The second criticism Wanous et al. (1979) raised involved methodological limitations, primarily concerned with how the turnover criterion was measured. Because turnover intentions are the focus of this research, the methodological issues noted by Wanous et al. are less salient here.

Third, Wanous et al. lamented the general absence of theory or model-guided research in the turnover literature. The models of the employee turnover process presented by Mobley and his colleagues (e.g., Mobley, 1977; Mobley et al., 1978; Mobley et al., 1979) have stimulated some research, but are found to have several shortcomings. One shortcoming of the Mobley models is that the focus of these models is on the decisions individuals make during the turnover decision-making process. Obviously, investigating this decision-making process at the individual level of analysis has important theoretical implications. But a somewhat more practical concern is the identification of employees' perceptions

of organizational attributes that are correlated with turnover intentions. Rather than looking inside the person for cognitive processes, then, the logic for the present approach rests heavily on the assumption that because people leave whole organizations rather than just jobs, those organizational attributes correlated with turnover intentions are a necessary and more appropriate foci of research. Too much of the turnover research has had an overly narrow focus on job/task factors (cf. Porter & Steers, 1973).

Social systems theorists (Katz & Kahn, 1978; Schein, 1980) have argued that the behavior of people in organizations can only be fully understood if one considers the nature of the social system in which their behavior is embedded. That is, they would suggest that to understand organizational participation and withdrawal cognitions and behavior, it is necessary to take account of the various attributes of organizations that organizational members experience. Adopting this point of view leads to the conclusion that organizational participation and withdrawal may be most adequately understood by exploring the ways in which organization (system) attributes are related to participation/withdrawal cognitions and behavior.

A second shortcoming of the Mobley turnover models stems from their affective orientation. There is an emphasis on job satisfaction and a relative neglect of job-related perceptions of organizational attributes as contributing factors to turnover intentions and turnover. The present research specifically focusses on these job-related perceptions and relates these perceptions to turnover intentions. However, the contribution of attitudinal factors in affecting turnover intentions will not be neglected. The relationships among job-related perceptions, satisfaction

with several job-related factors, and turnover intentions will be investigated. The extent to which pattern of correlations among these variables conform to the pattern hypothesized by Fishbein and Ajzen (1975) will be assessed.

Another minor deficiency in the Mobley et al. (1979) model concerns the fact that a number of job-related perceptions (e.g., goals-values, policies, practices, rewards, job content, supervision, work group, climate, and work conditions) were listed, but no attempt was made to categorize them in a conceptually or theoretically meaningful way. Proposing a categorization system for these job-related perceptions would rectify this shortcoming of the Mobley et al. model and satisfy the Wanous et al. (1979) recommendation that organizational withdrawal research be guided by a theoretical or conceptual framework.

In brief, then, the present effort focusses on perceived systems correlates of turnover intentions in an attempt to isolate a subset of a relatively comprehensive set of questionnaire measures of organizational functioning. The goal of the effort is the development of a "Turnover Diagnostic", a comprehensive organizational diagnostic keyed ultimately to the prediction of turnover, but focussing at the present on the more proximal criterion of turnover intentions. The organizational diagnostic instrument is designed to assess employee perceptions of the following four levels or types of organization/system attributes: 1) Organization-wide factors, 2) Job factors, 3) Task factors, and 4) Career factors.

As will become clear in the literature review which follows, a major difference between the present effort and past turnover research is that all four of these systmes issues were explored concurrently as potential contributors to understanding turnover intentions. In addition,

the data on which development of the Turnover Diagnostic are based was obtained from a relatively large sample of employees working at many different jobs in many different settings. The introduction of job and systems variance, it was hoped, would yield a measure that would be useful across settings.

CHAPTER II

LITERATURE REVIEW

Potential Systems Correlates of Turnover Intentions

For comprehensiveness, the four systems attributes chosen for research are general organizational level practices and procedures (e.g., management philosophy, reward practices), job factors (e.g., supervision, coworkers), task attributes (e.g., variety, autonomy) and organizational career facilitation practices. The choice of organization, job and task foci was based on the delineation of these by Porter and Steers (1973) as all being correlates of turnover and the seemingly reasonable assumption that these constituted a relatively comprehensive set of potential systems impacts.

The inclusion of organizational career facilitation practices was based upon the assumption that withdrawal decisions are often based upon employees' concerns about their future. Forrest, Cummings, and Johnson (1977), for example, noted that predictors of turnover should reflect anticipations as well as retrospections; they should look toward the future in addition to looking back at the past. Most of the literature on turnover concentrates either on an assessment of the past (job satisfaction) or on person attributes, but turnover appears to be frequently forward-looking (movement to another setting) as well as a response (movement from a setting) to system attributes. While

the assessment of organization, job and task factors addresses the latter, it was felt that capturing people's concerns for the future was also important.

Organization-Wide Factors

Porter and Steers (1973) defined organization-wide factors as "those variables affecting the individual that are primarily determined by persons or events external to the immediate work group" (p. 154-155). Examples of these factors include organizational pay, promotion, and job assignment policies, and structural factors such as centralization, routinization, and size. While relatively little research has examined these variables as correlates of turnover or turnover intentions, some of this research provides support for consideration of these variables as important contributing factors in employee turnover behavior. Apparently there exists a perception that turnover decisions are based upon immediate work context factors rather than on individuals' reactions to general organizational policies and practices. This emphasis may be misplaced to some extent in that terminees leave an entire organization rather than just a job.

DePasquale and Lange (1971), for example, conducted a large-scale survey (N=5,000) of MBA job mobility. Nearly two-thirds of the MBA's who had left their first organization cited company practices that translated into lack of advancement opportunities, inadequate job responsibility, underutilization of MBA training, and inadequate salary growth as the primary causes for quitting. Dunnette, Arvey, and Banas (1973) and Schein (1971) reported similar findings. Apparently, to a large extent, organizational personnel policies concerning job

assignments, promotion/advancement, and compensation for newly hired college graduates result in unmet expectations that translate into dissatisfaction and eventual turnover.

Hall (1976) devoted considerable attention to the issues surrounding the high turnover rates of new employees. Hall, among others, has noted the impact of initial job assignment challenge of new hires on subsequent performance, advancement, and tenure (Berlew & Hall, 1966; Bray, Campbell, & Grant, 1974; Schneider & Hall, 1973).

The effects of organizational reward/compensation policies on the turnover of employees other than MBA's or entry-level managers has also been noted. For example, Farris (1971) found that perceptions of poor organizational provisions for rewarding performance was a strong correlate of turnover. Other researchers have reported a similar relationship (Hellriegel & White, 1973; Hulin, 1966, 1968; Ronan, 1967; Telly, French, & Scott, 1971).

Organizational structure variables have been found to be significantly related to turnover and turnover intentions. Organizational and subunit size has been found to be positively related to turnover (Porter & Lawler, 1965). Centralization, the extent to which decision-making power is concentrated or dispersed among organizational members, has been identified as a correlate of turnover by several researchers (Farris, 1971; Martin, 1979; Price, 1977).

Organizational practices and procedures concerning communication and the transmission of information has also been shown to be related to turnover (Lawler & Rhode, 1976). In particular, the extent to which

information directly related to role performance (instrumental communication) is provided to employees has a significant impact on turnover (Goodman, Salipante, & Paransky, 1973; Wieland, 1969).

Although a number of organization-wide factors have been shown to be related to turnover, there is little consistency in these data. In addition, the relatively small amount of research examining the relationship between these factors and turnover makes it difficult to isolate the competing macro correlates of turnover. Another factor which inhibits uncovering the relationship between organization-wide factors and turnover concerns the nature of organizational research. Wanous et al. (1979) noted that organization-level variables (such as climate or structure) have not demonstrated their superiority to individual level variables in explaining turnover. Wanous et al. hypothesized when turnover is investigated within the boundaries of a single organization, as is usually the case, the effects of organizational level variables may be small due to the restriction of range phenomenon.

Job Factors

The emphasis in turnover research has been on immediate work context issues such as leader behavior and work group factors. Leader behavior/supervision style is the job context factor most frequently addressed in turnover research, and many studies support the hypothesis that leader behavior is a strong correlate of turnover. For example, Fleishman and Harris (1962) and Skinner (1969) found that supervisors who were more considerate had lower turnover rates among their subordinates. Another leader behavior, leader acceptance (the extent to

which subordinate's feel that their supervisor accepts them by demonstrating attention to their needs, divulging job information, being supportive, and allowing self-determination) has been shown to be negatively correlated with turnover (Dansereau, Cashman, & Graen, 1973; Graen & Ginsburgh, 1977). Ross and Zander (1957) reported that those employees whose expectations about receiving feedback and re-cognition from their supervisor were not met were more likely to quit. Satisfaction with supervision has been correlated with turnover (Hellriegel & White, 1973; Hulin, 1968; Telly, French, & Scott, 1971).

However, several studies have reported a non-significant relation-ship between perceptions of leader behavior or satisfaction with super-vision and turnover (Koch & Steers, 1978; Mobley et al. 1978; Newman, 1974; Waters, Roach, & Waters, 1976). A possible explanation for these discrepant results is that leaders may not have an equivalent impact on the attitudes and behavior of each of their subordinates (Dansereau, Graen, & Haga, 1975). Another plausible reason was pro-posed by Kerr and Jermier (1978), who speculated that a number of "neutralizers" or "substitutes" for leadership may exist in work situations. If factors in a work situation neutralize or substitute for leadership (e.g., high ability subordinates, unambiguous and routine tasks, high degree of formalization, highly cohesive work groups), then leader behavior or leadership style may not affect subordinates' attitudes and behavior. Thus, it follows that leader behavior will not be correlated with subordinates' turnover.

A second job context factor that has received a considerable amount of attention in turnover research is the nature of intra-group

relations. A number of studies have shown that satisfaction with coworkers and group cohesiveness are significantly related to turnover (Evan, 1963; Farris, 1971; Hellriegel & White, 1973; Hulin, 1968; Koch & Steers, 1978). An explanation for this relationship is that the work group is a special kind of primary group in the sense that individuals turn to other work group members to reduce stress and obtain social rewards (Evan, 1963).

However, there is conflicting evidence regarding inclusion of work group factors as important correlates of turnover. For example, a number of studies have reported a non-significant relationship between these factors and turnover (Kraut, 1975; Marsh & Mannari, 1977; Mobley et al., 1978; Newman, 1974; Waters, Roach, & Waters, 1976). In way of explanation, it may be possible that for some individuals and/or in some situations, work group factors may not have much of an impact on individuals' beliefs, attitudes, or intentions related to turnover. That is, "substitutes" or "neutralizers" for coworker influence may exist.

Task Factors

Task, or job content, issues consistently have been found to be strong correlates of turnover. A large amount of empirical evidence exists which supports the conclusion that those people who generally feel more positive about the actual work they do are less likely to leave (Koch & Steers, 1978; Kraut, 1975; Mobley et al., 1979). More descriptively, individuals who perceive their work as interesting/ challenging (Bray, Campbell, & Grant, 1974), as having low repetitiveness/high variety (Price, 1977; Wild, 1970), as allowing them to

exercise responsibility and autonomy (DePasquale & Lange, 1971; Marsh & Mannari, 1977), as providing the opportunity to use their abilities (Dunnette et al., 1973; Epko-Ufot, 1976; Hellriegel & White, 1973), and who feel the work they are doing is significant (Ross & Zander, 1957; Wickert, 1951) are all less likely to become turnovers.

It appears, then, that just about all the theoretically important task design dimensions (Hackman & Oldham, 1975) have been implicated as correlates of withdrawal. The most frequently cited explanation for the relationship between these job content factors and turnover was advanced by Hackman and Lawler (1971). They proposed that working on tasks high in variety, autonomy, feedback, and task identity enabled individuals to satisfy their higher order needs (e.g., feelings of accomplishment, personal growth, etc.). If individuals who seek satisfaction of higher order needs are able to satisfy those needs, it is assumed that their satisfaction is manifested in continued organizational participation.

Organizational Career Factors

As noted earlier, organizational withdrawal research has tended to be more concerned with employees' perceptions of the past rather than with their anticipations regarding their work futures (Forrest et al., 1977). Mobley et al. (1979) recognized the importance of this future-oriented dimension of organizational withdrawal by including "expectancies regarding future job outcomes of present/alternative jobs" and "attraction-expected utility of present/alternative jobs" as components in their model. Mobley et al. proposed that if individuals expect that continued employment in their organizations will facilitate the future attainment of their valued personal goals, the attraction-expected utility of their

present jobs should be enhanced and thus the probability of turnover should be reduced.

Although Mobley et al. (1979) did not mention it as a possibility, it follows that organizations could conceivably reduce work force turnover by increasing the attraction-expected utility of their employees' jobs. One way that organizations could accomplish this is through the development and implementation of career development programs. Through participation in such programs, employees could increase their knowledge, skills, and abilities, and thus become more eligible for advancement and salary increases. Assuming that these outcomes are valued by most people, it follows that individuals would perceive their jobs as having a greater attraction-expected utility when their organizations have employee career development programs. If such is the case, turnover should be less likely.

It appears that employees in American organizations are becoming more concerned with the way in which their organizations manage their career development (Driver, 1979; Hall, 1976). Driver offered several reasons for this relatively recent phenomenon: 1) a greater obsolescence rate of knowledge and skills, 2) increased computerization and automation, 3) major changes in individual values concerning the world of work, and 4) fears and insecurities generated by continuing economic problems such as recession and unemployment. In his book on careers, Hall (1976, p. 177) summarizes some of the methods by which organizations can promote or facilitate career development (e.g., periodic job rotation, greater managerial involvement in career planning, human resource accounting, career planning and counseling services, educational leaves, training/retraining, etc.).

While a number of studies have demonstrated a linkage between satisfaction with advancement/promotion and turnover (e.g., Farris, 1971; Hellriegel & White, 1973), there are very few studies that have assessed the role of the organization in facilitating employee career development (i.e., through counseling, placement, training, etc.) as it affects turnover. However, Graen, Orris, and Johnson (1973) and Graen and Ginsburgh (1977) reported that when non-academic university employees were in jobs that they perceived to be relevant to their own work career, then they were more satisfied, better performers, and less likely to leave the organization than those who saw their jobs as unrelated to their work career. Kelleher (1973) found similar results for midlife and over-65 people.

Some research cited earlier supports the notion that organizational career facilitation practices and procedures have an impact on employee withdrawal cognitions and behavior. For example, research investigating the early job experiences and turnover of MBA's and recent college graduates (e.g., DePasquale & Lange, 1971; Dunnette et al., 1973) suggests that when organizations do not facilitate career development of employees by assigning newcomers to challenging jobs and providing rapid advancement, higher turnover rates may be a consequence. Using a different sample (primarily entry-level clerical, service, and blue collar workers), Wanous et al. (1979) reported that participation in a training program (which can be considered a form of career development) was significantly correlated with tenure.

Because career development issues appear to be assuming greater importance for individuals in our society, it seems logical to conclude that an organization which is perceived by employees as facilitating

their career progress would be one that employees would not wish to leave. That is, based on the assumption that career choice implements a person's self-image (Super & Hall, 1978), when an organization is perceived to facilitate such implementation through support of people's career paths, people are likely to remain in that organization. In addition, if career development leads to promotion, individuals may be in a better position to satisfy their needs and thus be more likely to retain their organizational membership due to an increased attraction-expected utility of their jobs.

In summary, several organizational withdrawal theorists have noted that understanding the determinants of turnover requires taking into account the idea that future anticipations as well as past experiences affect withdrawal cognitions and behavior (e.g., Forrest et al., 1977). Individuals' expectancies regarding the extent to which their present jobs vis-a-vis alternative jobs can or will satisfy or fulfill needs, goals, and values may play an important role in the withdrawal decision-making process and in actual withdrawal behavior (Mobley et al., 1979). That is, the attraction-expected utility of the present job as compared to possible alternative jobs in other organizations may be an important determinant of turnover. Organizations may be able to reduce turnover by enhancing the attraction-expected utility of their employees' jobs through career development practices and policies. Research evidence suggests that the failure of organizations to facilitate their employees' career growth and development may increase the likelihood of turnover (e.g., DePasquale & Lange, 1971). Based on these arguments and some research evidence, it seems reasonable to investigate individuals' perceptions of their organizations' career facilitation practices as correlates of turnover intentions.

Summary

The literature is quite clear regarding the role of job and task factors as correlates of turnover; less clear are the roles of more macro general organization-wide practices and procedures (pay, promotion, and job assignment policies; decision-making and communication policies) and specific organizational practices regarding the facilitation of employees' careers (counseling, placement, training, etc.).

The major goal of the present effort is to develop measures of various facets of each of these four issues, to then identify those facets of organizational, job, task and career considerations that are correlated with turnover intentions, and to produce a measure useful for studying turnover intentions in a wide variety of organizations.

A second important research goal is the examination of the relationships among job-related perceptions of organization-wide, job, task, and career factors, satisfaction with those factors, and turnover intentions. According to Fishbein and Ajzen (1975), the magnitude of the satisfaction-intentions relationship and the perceptions-satisfaction relationship should exceed that of the perceptions-intentions relationship. A review of the organizational withdrawal literature revealed no study that systematically investigated withdrawal behavior and cognitions from the perspective advocated by Fishbein and Ajzen. Basing this research on a theoretical framework would be useful in and of itself. In addition, from a practical point of view, understanding of the organizational withdrawal phenomenon may be enhanced by seeing whether the pattern of relationships among job-related perceptions, satisfaction, and turnover intentions conforms to the pattern proposed by Fishbein and Ajzen.

A secondary research goal is to examine the range and magnitude of the correlations among the scales of the Turnover Diagnostic and the scales of the Job Descriptive Index (Smith, Kendall, & Hulin, 1969). Because satisfaction measures (the JDI scales included) have been shown to be predictive of turnover and frequently used and reported in turnover research, it would be fruitful to compare the Turnover Diagnostic and the JDI in terms of the intercorrelations of their scales and their relative predictive power regarding turnover intentions. It is hoped that the development of the Turnover Diagnostic does not result in the "reinvention of the satisfaction wheel." Achieving this goal could be taken as evidence that the Turnover Diagnostic assesses employees' perceptions of dimensions of organizational social systems that the JDI does not. If this can be shown, then the Turnover Diagnostic could be a useful instrument for predicting systems turnover rates, and could be used in conjunction with attitudinal measures such as the JDI.

CHAPTER III

METHOD

The Method chapter is divided into five sections. The first section will describe the development of the Work, Family, and Career Questionnaire (WFCQ), the source upon which the development of the Turnover Diagnostic was based (Schneider & Dachler, 1978b). The second section of the Method chapter will concern the procedure used to develop the Turnover Diagnostic. The third and fourth sections deal with data analysis issues. The last section summarizes this chapter.

Questionnaire Development:
The Work, Family, and Career Questionnaire

Sample

Table 1 summarizes the individual and organizational characteristics of the maximum of the 1703 respondents to the WFCQ. The sample is an "available" rather than random sample, but it appears to be quite representative (cf. Quinn & Shepard, 1974). The sample: represents all sections of the continental U.S.; ranges through private industry; local and federal governments (food processing factories, banks, airline, police department); includes a wide range of occupations and jobs (140 different D.O.T. job codes were represented); has adequate representations of racial, sexual, and educational individual difference variables.

Table 1

Sample Characteristics

Personal Background

Age	$\bar{x}$ = 30	s.d.=13.04
Sex	62% male	38% female
Education	$\bar{x}$ = 13.91 years	s.d.=2.52 years
Tenure	$\bar{x}$ = 5.06 years	s.d.=6.56 years
Part-time	10%	
Married	67%	
Black	10%	
Spanish Surnamed	12%	

Job Information

DOT Job Codes represented	140
Number of Organizations	16 major samples plus one respondent from 112 other organizations

In addition to sixteen major organizational samples, 112 organizations were represented by individuals enrolled in graduate-level business administration classes in universities in all sections of the U.S.A. The large majority of these respondents were full-time employees who were seeking an MBA on their own time. For over 90 percent of the total sample, the response rate exceeded 80 percent. All analyses conducted with respect to turnover intentions had a maximum N of 911. This reduction in sample size from 1703 to 911 occurred because the Career section of the WFCQ (Section 4) was not included in the instrument administered to 792 respondents. Almost all of these individuals were police officers from an Eastern state. The personal, job, and demographic data of the subsample of 911 was essentially the same as that data for the total sample.

Interviews

Interviews were conducted to help specify the exact nature of the work, family, and career issues to be subsequently assessed with the survey methodology (the WFCQ). These interviews were conducted with 45 workers who were employed by two airlines (pilots and mechanics), a public utility company (repair people), and for a major transportation union.

Contacts were established with the personnel people in the organizations and the names of the employees were provided to the research team. All interviews were conducted in the employees' homes. All interviews were taped with the consent of the interviewees. The purpose of taping the interviews was to allow the preparation of typed transcripts; however, the interviews were not transcribed for the purpose of a formal content analysis. The transcriptions served as a basis for writing items

that comprised the WFCQ. In addition, interview information supplemented information uncovered in a literature review of turnover research.

Sections of the WFCQ

There were eight sections in the WFCQ: (1) Description of Your Organization, (2) Description of Your Job, (3) Description of Your Task (s), (4) Description of Your Career, (5) Description of Your Family, (6) Satisfaction with Conditions, (7) Satisfaction with Specific Job Characteristics, and (8) Personal Data. Section 4 (Career issues) was included in the WFCQ for a subsample of 911 respondents; 792 respondents did not have a section about career issues in the surveys they completed. The responses of these individuals will not be included in any of the data analyses. In addition, the data from Section 5 (Description of Your Family) will not be used in any analyses in this research.

For each section of the WFCQ, an attempt was made to capture the general thrust of the then-current (early 1970's) thinking about the important facets relevant to turnover defining each issue (organization-wide, job, task, and career factors) in addition to incorporating information obtained from the interviews.

For example, the items in Sections 1 and 2 were primarily based upon the early organizational climate literature (Campbell, Dunnette, Lawler, & Weick, 1970; Schneider & Bartlett, 1968; Schneider & Hall, 1972) and upon the path-goal theory of supervision (House, 1971). The frame of reference for the 27 Organization section items (Section 1) was oriented toward macro, organization-wide issues. The five a priori Organization scales were Supervision, Job Status/Image, Personnel Practices, Reward Orientation and Goal Clarity. A similar orientation was

adopted for the 30 items in the Job Section (Section 2), but the focus shifted from a broad system emphasis in Section 1 to a more narrow focus on immediate work context issues. The a priori Job Section scales were analogous to the Organization Section scales (identical scale names) and included an additional scale - Coworkers.

The 25 items for the task section (Section 3) were patterned after Hackman and Lawler's (1971) description of the important task characteristics of jobs (the Job Descriptive Survey had not yet appeared when the WFCQ was constructed). The 25 Task Section items had a job content focus and were divided into six a priori scales: Identity, Variety, Autonomy, Feedback, Predictability, and Required Interdependence.

For the Career Section (Section 4), Hall's (1976) work in a pre-publication form provided the guiding themes for how organizational practices and procedures could facilitate or inhibit people's career progress.

Section 5 contained items focussing on family issues, especially as they interfaced with organizational issues. These items were not analyzed as part of this research.

Section 6 was divided into three sections. Section 6a was composed of eight satisfaction items, four of which were used in the present research. These four items assess individuals' satisfaction with their organizations, jobs, tasks, and with organizational conditions for career (career facilitation). The scale points were anchored by the statements: (1) Highly dissatisfied, (2) Moderately dissatisfied, (3) Neither satisfied nor dissatisfied, (4) Moderately satisfied, and (5) Highly satisfied. Before responding to these items, individuals were asked to turn back to previous sections of the questionnaire, review the events and conditions

described in the items in that section, and then respond to the corresponding satisfaction item. Following this procedure, it was hoped, would help accomplish two goals. First, it would help respondents remember the events and conditions impacting upon satisfaction, and thereby ensure more correspondence between the perception items and the satisfaction items. Secondly, it would also serve to reduce halo for the one-item global satisfaction ratings the respondents were being asked to make.

Section 6b was composed of eight items corresponding to the same items in Section 6a. The respondents were asked to rate the importance of each item as if they were thinking about staying in or leaving their present organization. Data from this section will not be utilized in this research.

Section 6c contained two turnover intentions items. The major criterion item for the dependent measure of turnover intentions was included in this section. The item was as follows: "Indicate on the line below how strongly you feel at present about leaving or staying in your organization." The scale points were anchored by the statements: (1) Strongly inclined to leave, (2) Inclined to leave, (3) Don't know whether I want to stay or leave, (4) Inclined to stay, and (5) Strongly inclined to leave. Evidence from earlier analyses and research revealed that this item had good measurement properties (i.e., responses were approximately distributed normally around the mean of 2.58; it correlated reasonably well with another turnover intentions items - $r = .68$).

If this item is examined from a motivational viewpoint, it is assessing only the amplitude facet of motivation to leave and it is not

in any way assessing the directional facet of motivation to leave. That is, analyzing individuals' responses does not give one any indication of why they are leaving. One does not know whether the individuals are leaving their present organization to take a similar job in another organization or whether they are switching occupations or careers.

The second turnover intention item asked respondents to estimate how long they intended to stay in their present organization. This item was not combined with the first turnover intentions item to create a two-item scale for two reasons. First, the first item was on the average more highly correlated with a priori WFCQ factors than was the second (time estimate) item. Second, combining the two items could result in an "apples and oranges" problem. That is, the time estimate turnover intention item is not as comparable across organizations as the first turnover intentions item. For example, being strongly inclined to leave may be associated with different time frames in different organizations; in one organization it may mean intending to leave in six months while in another it may mean two years. This is one of the reasons why it is difficult to investigate turnover across organizations. Relatedly, this is why it is more appropriate to use turnover intentions as a criterion for instrument development rather than turnover.

Section 7 of the WFCQ was the Job Descriptive Index (Smith et al., 1969). This measure assessed satisfaction with five facets of the job: work, pay, supervision, opportunities for promotion, and coworkers. The Job Descriptive Index (JDI) has a number of attractive features: it has percentile norms, it has good stability (Schneider & Dachler, 1978a), and it has been shown to be related to employee turnover in other research (cf. Hulin, 1966; 1968).

Finally, Section 8 contained various kinds of personal, job, and demographic data (age, sex, education, part-time/full-time employment status, tenure, marital status, etc.). In addition, job title was requested permitting coding of respondents by D.O.T. code.

<u>Directions</u>

The general directions were designed to establish a "turnover response set" by asking respondents to reply "as if you were considering staying or leaving your present organization and you were just sitting back to sort of take stock of all the kinds of conditions that exist for you in your present work situation." Following this procedure also was a way of establishing a form of correspondence between predictors and the criterion as advocated by Fishbein and Ajzen (1975). In addition, respondents were asked to be descriptive of what happened to them and around them in their organization rather than report about their feelings. Thus, a clear distinction was made for respondents between description (or belief) and evaluation (or affect) as advocated by Fishbein and Ajzen and by Schneider (1975). The scale points for all organization-wide, job, task, and career items were anchored by the statements: (1) Very infrequently, (2) Infrequently, (3) Sometimes, (4) Frequently, and (5) Very frequently.

Trying to establish a turnover response set in this manner may have caused a respondent reactivity problem and could conceivably result in an artifically inflated predictive power statistic. The use of an independent sample where the same directions are not used can provide an estimate of the extent to which this is a problem.

Administration

All surveys were administered at the respondents' work locations with the exception of the MBA respondents. The WFCQ was administered to these individuals in their classes by colleagues of Schneider and Dachler. In each company, arrangements were made to randomly select respondents from employee pay records. Selected employees were mailed a letter signed in most cases by the VP of Personnel. The letter explained the project, encouraged employees to participate, and noted that supervisors would be unaware of who would be participating. Supervisors also were sent a letter indicating that some of their employees might be requesting time to complete a survey and that they (the supervisors) were to give their permission and not ask questions. Surveys were administered to groups of employees. The purpose of the survey and the general directions were explained by the individual administering the survey (in most cases a member of the research team). Any questions the respondents had were answered. On the average it took respondents from 1 hour and 15 minutes to 2 hours to complete the entire survey.

Questionnaire Development: The Turnover Diagnostic

As stated at the end of the Introduction, the goal of this research was to develop an instrument assessing individuals' perceptions of Organizational, Job, Task, and Career factors that is predictive of turnover intentions. This instrument, to be referred to henceforth as the Turnover Diagnostic, was derived from the items that comprise the WFCQ. Hence, the same sample was used (N = 911).

Criterion-Keying

The questionnaire development technique used to construct the Turnover Diagnostic is analogous to the criterion-keying approach that has been used in a number of areas of psychology (e.g., personality inventories, interest inventories, the Job Descriptive Index, and Biographical Information Blanks). The development of the Minnesota Multiphasic Personality Inventory (MMPI) and the Strong Vocational Interest Blank (SVIB), for example, are both based on the criterion-keying technique (Anastasi, 1976).

In the development of Biographical Information Blanks (BIBs), a series of questions about job applicants' life histories are asked (e.g., high school activities, previous jobs, hobbies, etc.). The responses to these questions are then correlated with some criterion of interest (e.g., turnover, job performance, advancement) at a later point in time. Those BIB items that are significantly correlated with the criterion of interest get "keyed" and future respondents to the BIB receive a criterion "score" based on the "keyed" items. BIBs have been demonstrated to be among the best predictors of future job performance and advancement when they are developed as above (Cambell et al., 1970).

A slightly different criterion-keying procedure was used in the development of a widely used job satisfaction measure, the Job Descriptive Index (JDI). Smith et al. (1969) item-analyzed each of the item responses against a criterion that they felt reflected satisfaction with a job. Respondents were presented with an adjective checklist comprised of 30 to 40 words or short phrases (items) descriptive of their jobs along five dimensions (work itself, pay, promotion, coworkers, and supervision). All respondents were required to describe their present

jobs, the jobs they would most like to have (best job), and the jobs they would least like to have (worst job). All items which failed to show a significant difference in response frequencies from the best to worst jobs were discarded. In this case, items were "keyed" to the criterion of an item's "index of discrimination" between best and worst jobs.

The criterion-keying approach used in this research represents a combination of the BIB and JDI approaches. That is, as in the BIB approach, the correlation between items and the criterion was used to "key" items. However, unlike the BIB approach, a criterion external to the instrument (future performance) was not used. Rather, the criterion was the response to an item embedded in the same questionnaire (similar to the JDI development strategy).

In adapting this methodology to the present effort, the aim was to "key" the longer survey based on the correlations between Organization, Job, Task, and Career items and the turnover intention criterion item in Section 6 of the WFCQ.

To accomplish this criterion-keying strategy, the total sample (N = 911) was randomly split (odd-even) into two subsamples. In each subsample, all item responses were correlated with the turnover intention criterion item. Any item that correlated $\pm$ .15 with this item in both samples was retained for further analysis. The $\pm$ .15 value was chosen in order to ensure that an adequate number of items would be available to construct the Turnover Diagnostic. Admittedly, the $\pm$ .15 value was chosen rather arbitrarily but it was felt that a smaller value, such as a correlation of $\pm$ .11 (the smallest correlation coefficient statistically significant in a sample of 450 at the .01 level) would

yield too many items, and thus not contribute to the goal of developing a comprehensive instrument of manageable length. Choosing a more stringent statistical criterion (e.g., $\pm$ .20) ran the risk of not having enough items to create a comprehensive diagnostic tool.

Validation in an Independent Sample

In a sense, the research strategy employed here involves "validating" the Turnover Diagnostic in the same sample in which it was developed. Following such a procedure capitalizes on chance and may result in spuriously high predictive power (Cureton, 1950). In order to provide an unbiased estimate of the predictive power of the instrument, the Turnover Diagnostic was administered to a sample of employees in an organization not involved in the original development of the instrument. This sample ($N = 288$) was primarily composed of clerical employees (the employing organization was a bank). The turnover intentions criterion item used in this sample was identical to the item used in the WFCQ.

Analyses

Preliminary statistical analyses involved examining scale means, scale intercorrelations, and scale reliabilities for the Turnover Diagnostic and the JDI scales. In addition, correlations among the Turnover Diagnostic and JDI scales and the turnover intentions criterion and the four satisfaction items were examined. Before these analyses were conducted, however, the Turnover Diagnostic scales had to be identified.

Factor Analysis

Of major theoretical interest is the dimensionality or underlying structure of the items comprising the Turnover Diagnostic. Factor

analysis is the statistical technique that enables one to break up the variance of each variable and "redistribute" this variance into a new set of variables (factors) which account for a major proportion of the observed covariation among the original variables (Weiss, 1976).

In order to determine the factor structure of the set of items obtained by the criterion-keying approach, the items were submitted to a principal factors analysis with varimax rotation. Initially the items were submitted to an unrestricted principal factors analysis using the squared multiple correlation of each variable with the remaining variables as the communality estimate. The resulting factors were rotated to a varimax solution. Following this procedure enables one to eliminate variables with low factor loadings and to eliminate factors which are not interpretable on a content basis.

The second phase of the factor analysis involved submitting the remaining items to another principal factors analysis with varimax rotation. Forced four-factor through eight-factor solutions were performed in order to identify the best factor solution. It was decided to begin with a four-factor solution because there were four a priori content areas identified in the literature review. Choosing the "best" factor solution was based upon a comparison of several criteria, including the "Kaiser criterion" (retain factors with eigenvalues greater than 1.00), the "scree criterion" (do not retain those factors whose graphed eigenvalues can be connected by a nearly-horizontal straight line), and the extent to which the factors are interpretable on a content basis. This last criterion was the most important one--a factor must make sense on a content basis before it can be retained, regardless of whether the eigenvalue associated with it is greater than 1.00.

Rotation of factors is done to simplify factor structure. Unrotated factors are often difficult to interpret. Varimax rotation is a method of rotation that produces orthogonal (uncorrelated) factors. Weiss (1976) suggests using the varimax procedure when the research objective is to understand the factor composition of a set of variables, as is the case in this research. Some theorists have criticized the use of orthogonal rotations because few factors (constructs) in the real world are truly independent. However, varimax rotation was used here because orthogonal rotations are usually easier to interpret and there are rarely substantive differences in the number and kinds of factors yielded by orthogonal and oblique rotations (Nunnally, 1967).

The results of the factor analysis were used to create scale scores (not to be confused with factor scores). That is, items loading most highly on each of the resultant factors were summed and divided by the number of valid responses across all respondents to yield scale means for each factor.

The factor analysis and subsequent creation of scale scores were accomplished in such a way that minimized bias and reduced the possibility of capitalizing on chance. The procedure involved randomly splitting the sample in half (odd-even). The principal factors analysis was conducted on one subsample. Then the results were applied to the second subsample, which in effect served as the validation sample. That is, scale scores were created from the item responses in the second subsample; the items defining the scales had been identified by the factor analysis conducted on the item responses in the first subsample. Subsequent analyses (i.e., regression) were conducted using the item responses from the second subsample (the validation sample). While

following this procedure reduced the number of subjects and thus reduced statistical power, it was felt that reducing possible bias outweighed the costs of reducing the sample size. It should be noted that reducing the sample size by one half still yielded a very large sample of approximately 450 respondents.

Regression Analyses

In order to determine the predictive power of the Turnover Diagnostic, stepwise multiple regression analyses were conducted. Recall that in order to reduce bias and minimize the possibility of capitalizing on chance, the regression analyses were conducted on the subsample not involved in the factor analysis and also in an independent sample. The use of stepwise multiple regression reveals the relative contribution of each scale to the prediction of the turnover intentions criterion. In addition, those items that did not load on any factors were included in the regression analyses. The reason that these items were added in the regression equation is that some factors relevant to turnover intentions may not have had enough items available to emerge as multi-item factors. In effect, there may exist some "single-item" factors. If some single items explain variance in the criterion beyond the Turnover Diagnostic scales, scales could be developed around each of these items and used in subsequent research efforts.

The stepwise regression technique used in this research is what Weiss (1976) called an incremental, "bottom-up" procedure. The first predictor variable entered into the regression equation is always that variable with the highest correlation with the criterion. The order in which the remaining variables are added to the equation in subsequent steps depends upon their semipartial correlations with the criterion

(when the variance attributable to the preceding predictor variables has been partialled out). The multiple correlation coefficient (R) is re-computed at each step as each predictor variable is sequentially added to the equation. Judgements about the importance of each predictor are made on the basis of whether the increment in R after each predictor is added is statistically significant. Stepwise regression was used in both the original WFCQ sample and the independent (bank) sample.

The use of stepwise regression procedures has been criticized, especially when the research goal is explanation rather than prediction, primarily because these procedures are quite susceptible to sample-specific error and because many of the decisions in selecting the entry order of predictor variables are based on small differences in beta weights and semipartial correlation coefficients (Cohen & Cohen, 1975; Weiss, 1976). Because linear multiple regression techniques (such as stepwise and hierarchical regression) are "optimization" techniques, multiple regression coefficients obtained in a sample are often artifi-cally inflated compared to the population value because they capitalize on sample-specific group characteristics (Nunnally, 1967; Weiss, 1976). Because of these factors, the cross-sample stability of the entry order of the predictor variables is often poor.

Although these criticisms are valid in some cases, the use of stepwise regression in this research context was considered acceptable when, following Cohen and Cohen (1975): 1) no a priori hypotheses have been made concerning the temporal or causal priority of any of the broad a priori WFCQ categories, 2) the research goal is prediction rather than explanation, 3) the variables to respondents ratio is at least 1/40, and 4) cross-validation is undertaken.

Conditions 1 and 2 were met in this research. Condition 4 was considered to be unnecessary due to the large sample size. With a large sample the beta weights are very stable. Because five factors were identified, condition 3 was met as well.

Regression analyses were also used to investigate the second major research issue. Recall that this issue involved examining the pattern of relationships among job-related perceptions of organization-wide, job, task, and career factors, satisfaction with those factors, and turnover intentions. According to Fishbein and Ajzen (1975), the magnitudes of the satisfaction-intentions relationship and the perceptions-satisfaction relationship should exceed that of the perceptions-intentions relationship. That is, there should be a "direct link" between satisfaction and intentions and an "indirect link" between perceptions and intentions (Miller et al., 1979; Mobley et al., 1978). The extent to which the data conform to this hypothesized pattern can be most appropriately tested through the use of hierarchical multiple regression (Cohen & Cohen, 1975; Miller et al., 1979).

In a hierarchical regression analysis context, support for the pattern proposed by Fishbein and Ajzen (1975) (i.e., a direct linkage between satisfaction and intentions) would be indicated if the satisfaction measures account for a significant increment in the multiple correlation coefficient when added to the job-related perception measures in the prediction of turnover intentions. If job-related perceptions are indirectly linked to intentions, as suggested by Fishbein and Ajzen (1975), then adding these measures to the satisfaction measures should not yield a significant increment in R.

The use of hierarchical regression is particularly appropriate here because the job-related perception variables and the satisfaction measures can be combined to form "sets" that can be entered into the regression equation hierarchically (Cohen & Cohen, 1975). Sets are composed of groups of conceptually similar variables. Thus, it is appropriate to combine the Turnover Diagnostic factors to form a set because all the items are perceptual/descriptive in nature and all were chosen on the basis of being correlated with the turnover intentions criterion item. The satisfaction measure set were composed of the four satisfaction items in Section 6b of the WFCQ (these items are concerned with respondents' satisfaction with their organizations, jobs, tasks, and their organizations' impact on their careers).

In testing the Fishbein and Ajzen framework, a choice had to be made between using these four global satisfaction items or the JDI scales (satisfaction with pay, promotion opportunities, work itself, coworkers, and supervision). The decision to use the four global satisfaction items was based on two factors. First, there is a greater degree of correspondence between the global items and the job-related perception items which comprise the Turnover Diagnostic. Secondly, the JDI items are considered to be less affective and evaluative than the global satisfaction items. Although the JDI items were chosen on the basis of their relationship with an evaluative criterion item, they are still somewhat more descriptive than affective in nature.

Stepwise regression analyses were used to determine how predictive the JDI is of turnover intentions, and thus provided a comparison between the predictive power of the JDI and the Turnover Diagnostic.

Moderator Analyses

A very large number of variables have been identified as correlates of turnover and turnover intentions. Examples include age, sex, organizational tenure, occupation, marital status, pay, education, number of dependents, satisfaction with various facets of work (e.g., coworkers, supervision, etc.), organizational size, etc. (cf. Mobley et al., 1979; Porter & Steers, 1973; Price, 1977). As a number of reviewers of the organizational withdrawal research have noted, the identification of this large number of variables correlated with turnover has not facilitated understanding of the organizational withdrawal process. Understanding may be enhanced by treating some of these variables as moderator variables rather than as correlates. For example, age has been consistently identified as a correlate of turnover; older workers are less likely to quit than younger workers. Being aware of this relationship does not contribute very much to an understanding of withdrawal behavior or help organizations cope with turnover. However, treating age as a moderator may enable researchers to discover the different variables which are correlated with turnover for workers of different ages. Relatively little organizational withdrawal research has been concerned with identifying variables that moderate the relationship between other variables (correlates) and turnover or turnover intentions.

Although a large number of potential moderator variables could be examined, the goals of this research effort make it most appropriate to examine only one of the many potential moderators of the relationship between job-related perceptions and attitudes and turnover intentions. Recall that the major research goal of this effort was to develop an instrument predictive of turnover intentions and eventually turnover in

a wide variety of organizations for a wide variety of jobs. Therefore, it seemed most appropriate to look at variables that were relevant on an organizational or group level of analysis rather than on an individual level of analysis. Thus, potential individual level moderators such as age, sex, and marital status were not examined.

The variable that was examined as a potential moderator of the beliefs-intentions and attitudes-intentions relationship was job category. (Based on their responses to an item in Section 8 of the WFCQ, individuals have been divided into six job categories: (1) upper management, (2) middle management, (3) first-line management, (4) clerical/ administrative, (5) skilled worker, and (6) other.) Investigating job category as a potential moderator was justified on two counts. First, empirical evidence exists suggesting that this variable may be important. Price (1977) reported differential turnover rates among managers and non-mamagers, blue-collar and white-collar workers, and among skilled and unskilled workers. Secondly, Driver (1979) proposed that workers in different job categories may have different career aspirations and different expectations of their organizations' roles in the development of their careers. Because a set of items pertaining to organizations' career facilitation practices and procedures was included in the WFCQ, it seemed appropriate to examine job category as a potential moderator variable, given the evidence cited by Price and the propositions advanced by Driver.

A moderator variable is said to exist in conditions under "which the predictive validity of some psychological measure varies systematically in accord with some other independent psychological variable" (Saunders, 1965, p. 209). The two most commonly used ways to detect

moderators are the use of subgroups analysis and moderated multiple regression. The latter procedure has come to be preferred because it has greater statistical power due to its retention of information that is lost when subgroups analysis is conducted and because using moderated multiple regression provides more detailed information about the nature of main and interaction effects if the hypothesized moderator is ordinal (Champoux & Peters, 1980; Zedeck, 1971).

For the moderated regression analyses, turnover intentions were regressed hierarchically on: (1) the Turnover Diagnostic scales, (2) job category, and (3) the five cross-product (interaction) terms for each Turnover Diagnostic scale and job category. Job category will be operating as a moderator if there is a significant increase in explained variance (i.e., a statistically significant increase in the squared multiple correlation) when the cross-product terms are entered.

Two approaches were taken to assess the potential role of job category as a moderator. One way was to consider job category as measured on a nominal scale of measurement. In this case, all respondents who are assigned the same value are considered to be alike on some attribute. When treating job category as nominal, dummy coding was used such that all management-level respondents were assigned one value and all non-management employees were assigned another value. Job category can also be considered to be measured on a ordinal scale of measurement. Here respondents are ordered from most to least with respect to some attri-bute without any indication of "how much" of the attribute the respondents possess.

Non-Redundancy of the Turnover Diagnostic

Earlier it was noted that a secondary research goal was demonstrating that the Turnover Diagnostic was not "redundant" with the JDI. That is, the Turnover Diagnostic will be useful to the extent that it assesses employees' perceptions of dimensions of organizational attributes not assessed by the JDI.

The extent to which this is true can be assessed through use of hierarchical stepwise multiple regression. If the Turnover Diagnostic does assess perceptions of organizational attributes not assessed by the JDI, then when the JDI is entered into the regression equation after (in a hierarchical sense) the Turnover Diagnostic, it should explain a significant additional and consequently unique (non-redundant) proportion of variance in the turnover intentions criterion beyond what is explained by the Turnover Diagnostic. This was tested by entering the Turnover Diagnostic scales into the regression equation as a set in the first step. Then all five of the JDI scales were entered as a set in the second step. If the incremental increase in the multiple correlation coefficient is significant, this can be taken as evidence suggesting that the Turnover Diagnostic is not a reinvention of the JDI satisfaction wheel.

Summary

The Turnover Diagnostic was developed from the original item pool of the WFCQ (Schneider & Dachler, 1978b). The data used was from a sample of 911 respondents from sixteen major organizational samples and 112 other organizations, and representing 140 D.O.T. job codes. A criterion-keying technique was used to choose items from the WFCQ for

potential inclusion in the Turnover Diagnostic. Items that correlated $\pm$ .15 with a turnover intentions criterion item in both halves of the randomly split sample were retained and submitted to a principal factors analysis. Those items that loaded on factors that were statistically strong and meaningful on a content basis comprised the Turnover Diagnostic. Stepwise multiple regression was used to assess how predictive the Turnover Diagnostic scales and items not loading on any factors were of turnover intentions. In order to obtain an "unbiased" estimate of the predictive power of the Turnover Diagnostic, it was used to predict turnover intentions in a sample not involved in the original development of the WFCQ. The role of job category as a moderator variable was assessed through the use of moderated multiple regression.

Although it would have strengthened the research to have formulated testable hypotheses, the fact that the factor structure of the Turnover Diagnostic was unknown before factor analysis made this virtually impossible to do. Thus, it was impossible to set up a "competitive" test by pitting a Turnover Diagnostic factor against one of the JDI dimensions. However, there was a comparison between the JDI and the Turnover Diagnostic regarding: (1) The amount of redundancy/uniqueness between the two instruments, and (2) their relative predictive power vis-a-vis the criterion of turnover intentions. Hierarchical and step-wise multiple regression, respectively, were used to make these two comparisons.

Although specific hypotheses involving comparisons between the Turnover Diagnostic factors and JDI dimensions were not made, it was possible to formulate more general hypotheses regarding the relative predictive power of beliefs versus attitudes. Based on the propositions

of Fishbein and Ajzen (1975), it was hypothesized that attitudinal variables were more directly related to turnover intentions than belief variables. More specifically, it was hypothesized that the attitudinal variables of satisfaction with organization-wide, job, task, and career factors were more directly related to turnover intentions than the belief variables of job-related perceptions pertaining to those same organization-wide, job, task, and career factors. This hypothesis was tested through the use of hierarchical multiple regression. Because the factor structure of the Turnover Diagnostic was unknown, it was not possible to formulate more specific hypotheses involving direct comparisons of Turnover Diagnostic factors with corresponding satisfaction items.

In sum, then, the goals of this research effort were to develop a measure "keyed" to the criterion of turnover intentions, determine its factor structure, and assess its predictive power with regard to turnover intentions. In addition, the Turnover Diagnostic was compared to satisfaction items pertaining to organization wide, job, task, and career factors in order to assess the relative power of beliefs versus attitudes in the prediction of intentions. Also, the Turnover Diagnostic was compared with the JDI to determine whether the Turnover Diagnostic was redundant with the JDI.

CHAPTER IV

RESULTS

Criterion-Keying Results

A total sample of 911 (all those respondents who were administered the WFCQ with the Organization, Job, Task, and Career sections) was randomly split (odd-even) into two samples and, in each, all item responses (item 1 through item 91) were correlated with the turnover intentions criterion item. Any item that correlated ± .15 with the turnover intentions item in both samples was retained for further analysis. Recall that the ± .15 criterion was chosen in order to insure that an adequate and manageable number of items were available to use in the development of the Turnover Diagnostic. Forty-nine of the 91 items (54 percent) comprising the Organizational, Job, Task, and Career sections of the WFCQ met the ± .15 criterion in both samples. The distribution of these items by sections is presented in Table 2.

In the absence of additional analyses these results suggest that, proportionately, career issues are the more potent ones as far as turnover intentions are concerned, with organizational and job factors being equally important, and task issues least relevant. Interestingly, these preliminary results indicate that individuals' perceptions of career issues and organization-wide factors may be more important in influencing turnover cognitions than previous research has demonstrated. These 49

Table 2

Distribution of Criterion-Keyed Items by
A Priori MFCQ Sections

Section	n of items	n of items retained	% of items retained	items retained
Organization	27	17	63%	1-3,6,7,10,12,15-18, 21-26
Job	30	19	63%	29-32,34,37,39,42,43, 45-50,52,53,56,57
Task	26	5	19%	66,69,71,72,77
Career	8	8	100%	98-105

items were factor analyzed in order to determine the factor structure of the items. The creation of scale scores was based upon the identified factor structure.

Factor Analysis

Factor analysis is the statistical technique that enables one to break up the variance of each variable and redistribute that variance into a new set of variables (factors) which account for a major part of the observed covariation among the original variables (Weiss, 1976). The factor analytic technique chosen for this research was principal factors analysis. It is often recommended that principal factors analysis be used rather than principal components analysis (e.g., Nie, Hull, Jenkins, Steinbrenner, & Bent, 1975; Weiss, 1976).

The procedure that was followed involved submitting the 49 items to two principal factors analyses with varimax rotation. The factor analyses were performed on the item responses of one half of the re-spondents, yielding a respondents-to-items ratio of 20:1 for items 1 through 77 and a 10:1 ratio for items 98 through 105. The second half of the sample was held out as the validation sample. That is, the scales were created in the subsample not involved in the factor analysis.

The original analysis plan called for performing forced four-factor through eight-factor solutions in the first phase of the factor analysis. However, seven-factor and eight-factor solutions were not performed after an examination of the forced six-factor solution revealed that factors were emerging that had few variables (three and four), eigenvalues less than 1.00, and were difficult to interpret on a content basis. Based on these findings, seven-and eight-factor solutions were not performed.

When the four-, five-, and six-factor solutions were compared, the results indicated that the five-factor solution was superior to the other two solutions. In the five-factor solution, the smallest eigenvalue associated with a factor was 1.16. In addition, all factors had an acceptable number of items, an important issue to consider when scale reliabilities are a concern.

The six-factor solution was clearly inferior to the five-factor solution in that the sixth factor did not have any items with factor loadings greater than .35 (this factor had an eigenvalue of .709) and that factors four and five only were composed of four and three items, respectively.

The four-factor solution was superior to the six-factor solution. The fourth factor had an eigenvalue of 1.22. No factor had fewer than five items. However, it is felt that the five-factor solution is superior to the four-factor solution on the basis of three criteria. First, the five-factor solution accounted for slightly more total variance in the items than the four factor solution (39.4 percent as compared to 35.7 percent). Secondly, and more significantly, the four-factor solution had a seven-item factor (items 32, 37, 39, 43, 47, 48, 56) that was rather difficult to interpret on a content basis. In addition, two factors in the five-factor solution disappeared when the four-factor solution was forced. For these reasons, a decision was made to base the rest of the analyses on the five-factor solution.

The purpose of the first phase of the factor analysis was to eliminate items that did not load significantly on a factor and to eliminate factors that were "weak" or not interpretable on a content basis. The criterion for item retention was that an item had to load

at least .35 on a given factor and/or had to have a value on a given factor at least .10 units higher than its loading on any other factor. Based on these criteria, 34 of the original 49 items were retained and submitted to the second phase of the factor analyses. Fifteen variables of the original 49 items were eliminated from the second phase of the analysis because they either had uniformly low loadings (<.30) or they loaded approximately equally on two or more factors.

In the second phase of the factor analysis once again a forced five-factor solution was conducted on the 34 items that were retained after the first phase. This five-factor solution accounted for 44.8 percent of the common item variance. In this phase, in the initial unrestricted principal factors analysis (before rotation), seven factors had eigenvalues greater than the standard criterion of 1.00. However, another criterion that can be taken into account when deciding on the number of factors to extract is the "scree criterion." According to this criterion, the number of factors to be extracted can be determined by finding a "point of inflection" between the eigenvalues of two adjacent factors. The point of inflection is defined as that point where there is a substantial drop between the eigenvalues of two factors. Below the point of inflection the eigenvalues can be connected by a nearly horizontal straight line on a graph. Such a point of inflection occurred between the fifth and sixth factor, suggesting the appropriateness of a five-factor solution. The eigenvalues for the first seven factors are as follows: 8.01, 2.31, 1.88, 1.57, 1.48, 1.13, 1.04. Note the point of inflection between 1.48 and 1.13.

In Table 3 the 31 items are presented along with their factor loadings on each of the five factors. These results are based on the

second phase of the factor analysis. The data in Table 3 are based upon
a maximum sample size of 848 and a minimum sample size of 825 for items
1 through 77 and a sample size ranging from 451 and 466 for items 98
through 105. The differences within the two sets of items are due to
missing data. The differences between the two sets of items are due to
the fact that the career items (98-105) were administered to only 911
of the respondents in the entire sample. The sample splitting of this
group yielded the maximum sample size of 466 for items 98 to 105. Using
the same item retention criteria as in the first phase of the factor
analysis, 31 of the 34 items identified in the first phase of the factor
analysis were retained. The contribution of the 18 items that were
not retained to the prediction of turnover intentions will be examined
through the use of regression analysis.

Factor 1 is called Work Inhibition (INHIB) and contains ten items
that reflect organizational and job events that inhibit, interfere with,
or constrain effective work performance. These include such issues as
the organization hiring people unable to do their work, conditions
existing which do not permit goal accomplishment, confusion on the job,
conflicting work group goals and objectives, and so forth. These items
were all negatively worded and came (with one exception) from the Organ-
ization and Job sections of the WFCQ.

The fact that all the items were negatively worded presents a
potential problem in that the factor may be an artifact of respondents'
tendencies to use one end of a scale regardless of whether the items
are responded to similarly, they will fall out together as a factor
even though the item content may not be similiar. The only way to check
against the possibility of this occurring is to examine the content of

TABLE 3

Rotated Factors and Item Loadings in Second
Phase of Principal Factors Analysis

Factor Names and Items	Factors				
1. Work Inhibition (INHIB)	1	2	3	4	5
17. People in the organization get ahead on who they know not what they know.	43	-13	-18	-16	03
26. Work groups (units, departments) in this organization have conflicting goals and objectives.	43	09	-03	-07	-04
42. Conditions on my job do not permit people to reach their work goals.	62	-14	-03	-05	-01
45. People on the job lack the opportunity to develop new skills and abilities.	53	-04	-15	-08	-21
46. There exists definite "IN" and "OUT" groups on the job.	51	-01	-11	-11	10
52. Employees are not given the opportunity to get special training to help them do their job.	42	-14	-17	-07	-09
53. Supervisors I work with do not know what their people want.	55	-33	01	-05	-09
69. My task does not allow me to find out how I am doing on the job.	43	-13	-06	-07	-06
103. Supervisors I work with inhibit my career progress.	48	-21	-04	01	-11
2. Supervision (SUPERV)					
23. This organization encourages supervisors to communicate the organization's goals to employees.	-27	43	26	26	01
29. Supervisors I have contact with help people get their work done; supervisors facilitate, rather than hinder work accomplishment.	-37	47	01	15	08

Table 3, cont.

Factor Names and Items	Factors				

30. Supervisors I work with use the rewards they have (praise, performance appraisals) to let people know when they've done a fine job. | -31 | 57 | 12 | 06 | 13

34. Employees on the job are informed about how their job fits in with other jobs. | -11 | 37 | 18 | 21 | 12

39. Supervisors I have contact with discuss employee job behaviors with them. | -11 | 53 | 13 | 05 | 09

47. Supervisors I deal with explain to employees the things they can expect from performing in different ways. | -06 | 58 | 10 | 02 | 18

48. In supervising people, bosses I work with take into account how people feel from day to day. | -17 | 58 | 18 | 07 | 08

50. Supervisors I work with share with subordinates information about what is happening in the company. | -28 | 49 | 08 | 04 | 17

3. Organizational Career Facilitation (CAREER)

98. There are opportunities for me to pursue my career interests in this organization. | -27 | 07 | 48 | 09 | 33

99. This organization provides information about how different jobs fit into different career programs. | -15 | 21 | 55 | 14 | 16

100. This organization provides information and counseling about my career. | -03 | 14 | 71 | 13 | 02

101. This organization helps me achieve my personal career goals. | 31 | 08 | 66 | 04 | 33

105. This organization exposes people to jobs that fit into various career patterns. | -02 | 21 | 40 | 14 | 20

Table 3, cont.

Factor Names and Items	Factors				
4. Organizational Status (STATUS)					
2. This organization is considered by others in the field to be a leader.	-07	16	11	43	17
7. The general public considers this organization to be a high status organization.	-15	03	13	68	02
25. People outside the organization think that the people who work here are high caliber people.	-09	09	06	70	17
31. People outside the organization have respect for the kind of job I have.	-19	05	13	43	17
5. Training/Skill Utilization (TRAIN)					
32. People coming on the job get special training that helps them get started.	-06	26	09	17	40
43. New employees on the job are assigned to a specific person who helps them get used to the job.	05	27	05	07	38
66. The tasks I do require updating of skills and abilities.	-03	04	07	12	49
77. Performing my duties requires all the skills I have.	-05	10	16	03	53

NOTE: Maximum N = 853. Decimals omitted. Item numbers denote the items original position in the WFCQ.

the items comprising the factor. Although humans can apparently make sense out of random data, it appears the items in INHIB do have a common theme running through them. INHIB had the largest eigenvalue (8.01) and accounted for 23.6 percent of the total variance.

The second factor represents a supervisory dimension (SUPERV). Items loading most heavily on this factor involve the extent to which supervisors facilitate performance, share job information, give feedback, establish performance-reward contingencies, clarify goals, etc. Seven of the eight items comprising this factor are from the Job section of the WFCQ. This factor had the second largest eigenvalue (2.31) and accounted for 6.8 percent of the total variance.

Factor 3 (CAREER) was composed of five items which involved the extent to which organizational practices, procedures, and policies facilitate the career growth of employees and provide information about career programs and career counseling. All items in this factor were from the Career section of the WFCQ. This factor had the third largest eigenvalue (1.88) and accounted for 5.5 percent of the total variance.

Items loading most heavily on Factor 4 (STATUS) concern respondents' perceptions of the status and image their employing organization is perceived to have in the eyes of outsiders. This factor contained four items, had an eigenvalue of 1.57, and accounted for 4.6 percent of the total variance.

Factor 5 (TRAIN) is somewhat more difficult to interpret on a content basis but it appears to concern job requirements, especially as related to training and skill utilization issues. Two of the items specifically refer to training/help that new employees receive. The

other two items involve skill utilization concerns. This factor had an eigenvalue of 1.48 and accounted for 4.3 percent of the total variance.

Scale Construction

The purpose of the factor analyses was to identify the dimensionality of the items that correlated $\pm$ .15 with the turnover intentions criterion item. The 31 items that were retained after the second phase of the factor analyses are those that comprise the instrument that will henceforth be referred to as the Turnover Diagnostic. To aid further analysis, scales were constructed from those items representing the five factors identified in the factor analysis. Scale scores for each individual for each factor were created by summing item responses to the relevant items and then dividing by the number of valid responses. Each scale score is therefore a mean rather than a sum. Recall that the scales were created in the subsample not involved in the factor and analysis.

Table 4 presents scale means, standard deviations, internal consistency estimates (Cronbach alpha), intercorrelations, and correlations with turnover intentions for the five factor analytically derived scales.

As can be seen, INHIB, CAREER, and SUPERV are the strongest correlates of turnover intentions. The average inter-scale correlation (using the Fisher Z-transformation) is .41. This average inter-scale correlation is somewhat higher than one would like to see. Theoretically, the factor analysis procedure used (principal factors with varimax rotation) should produce orthogonal (uncorrelated) factors, but that would only occur when factor, not unit weights are employed. In any case, in the real world few constructs are truly orthogonal, especially when the

TABLE 4

Scale Means, Standard Deviations, Internal Consistency
Reliability Estimates, and Correlations with
Turnover Intentions

Variables[a,b]	Mean	S.D.	1	2	3	4	5	6
1. INHIB (10)	2.82	.65	(74)					
2. CAREER (5)	2.48	.88	-38	(81)				
3. SUPERV (8)	3.02	.77	-61	49	(83)			
4. STATUS (4)	3.33	.78	-32	37	37	(66)		
5. TRAIN (4)	3.14	.78	-32	42	50	29	(57)	
6. INTENT	3.39	1.24	-39	45	40	35	35	

NOTE: Maximum N = 458. All correlations are significant at $p < .01$.
Decimals have been omitted. Response format for all items is a
5-point scale. Values on the diagonal represent internal con-
sistency reliability estimates.

[a]The numbers in the parentheses represent the number of items in each
of the scales.

[b]INTENT represents the turnover intentions criterion item. This
single item does not have a reliability estimate.

constructs under examination were chosen on the basis of their relation-ship to an external variable. Although multicolinearity is a potential problem when factors or scales are intercorrelated, most texts define multicolinearity as becoming a problem when correlations among indepen-dent variables exceed .70 (e.g., Cohen & Cohen, 1975). In the present research the Turnover Diagnostic scales were not highly intercorrelated ($\bar{r}$ = .41).

The internal consistency reliability estimates for the INHIB, CAREER, and SUPERV are satisfactory. The internal consistency of STATUS (α = .66) is marginal and that of TRAIN (α = .57) is less than desirable.

Predictability of Turnover Intentions

In order to determine the predictive power of the five scales of the Turnover Diagnostic, stepwise multiple regression analyses were conducted. Note that the regression analyses are conducted on the subsample not involved in the derivation of the scales through factor analysis. The use of stepwise multiple regression reveals the relative contribution of each scale to the prediction of turnover intentions.

The results of this regression analysis are presented in Table 5. As can be seen, four of the five Turnover Diagnostic scales in the re-gression equation contribute significantly to the prediction of turnover intentions. Respondents who reported that they intended to remain em-ployed in their organization described their organization as: (1) pro-viding career-relevant information and counseling, (2) having organiza-tional and job conditions that facilitate task performance, (3) being of high status in the eyes of outsiders, and (4) presenting tasks for which training was provided and that required utilization of employee

TABLE 5

Stepwise Regression Results with Turnover Intentions
Regressed on the Turnover Diagnostic Scales
and Items not Retained in Factor Analysis

Step[a]	Variable	BETA	F_{entry}	R	R^2	ΔR^2	F_{mr}
1	CAREER	.195	115.57***	.453	.205	.205	115.57***
	INHIB	-.052	34.29***	.512	.262	.057	79.23***
	STATUS	.124	12.94***	.532	.283	.021	58.54***
	TRAIN	.085	8.37**	.544	.295	.013	46.73***
	SUPERV	.048	0.71	.545	.297	.002	37.50***
2	V10	.137	12.10***	.562	.316	.019	34.05***
	V6	.173	8.48**	.573	.329	.013	30.89***
	V104	-.100	6.73*	.582	.339	.010	28.22***
	V21	-.107	4.43*	.588	.345	.006	25.77***
	14 items			.603	.364	.019	9.93***

NOTE: Maximum N = 458. F_{entry} refers to the F-test associated with the addition or deletion of a variable; F_{mr} is the F-value associated with the multiple R.

[a]This analysis was conducted in a hierarchical fashion. Within steps the variables were entered in a stepwise fashion. Because only 4 of 18 variables not retained in the first place of the factor analysis were significantly predictive of turnover intentions, the statistics for the remaining 14 items are not reported. The addition of these 14 items explains an additional 1.9 percent of the variance in turnover intentions.

*** $\underline{p} < .001$
** $\underline{p} < .01$
* $\underline{p} < .05$

skills. Note that the turnover intentions responses were coded such that a high score indicated the respondent intended to <u>remain</u> employed in the organization. Hence the negative correlations associated with INHIB and the negative beta weight for INHIB. Apparently the scale that assessed perceptions of supervisory behavior (SUPERV) was not related to turnover intentions independently of the other four scales.

In addition, 4 of the 18 items that were not retained in the factor analyses were significantly predictive of turnover intentions independent of the five factor analytically derived scales. These 18 items (items 1, 3, 6, 10, 12, 15, 16, 18, 21, 21, 24, 37, 56, 57, 71, 72, 102, and 104) were entered in a stepwise fashion. Examination of the magnitude of the beta weights revealed that four of the 18 items were significantly predictive of turnover intentions (items 6, 10, 21, and 104). These four items explained an additional 4.8 percent of the variance in turn-over intentions. These results suggest that respondents who reported that they intended to remain employed in their organization described their organization as: (1) providing conditions that gave employees job security (item 10), (2) providing opportunities for employees to develop themselves (item 6), (3) making it easy to change into a different career (item 104), and (4) providing information about what is going on to people at all organizational levels (item 21).

The major reason for including these 18 items in the regression analysis was to determine whether there were any "missing factors" that were represented by a single item. Items 6 and 104 do not appear to represent such potential missing factors; in the first phase of the factor analysis both loaded approximately equally on INHIB and CAREER. Items 10 (job security) and 21 (providing information to people at all

levels) may represent missing factors. Item 10 did not load higher than .23 on any of the five factors. Item 21 had factor loadings distributed fairly equally across INHIB (.25), SUPERV (.27), CAREER (.22), and STATUS (.33).

Of the five factor analytically derived scales, only SUPERV was not significantly predictive of turnover intentions. One possible reason for SUPERV not being predictive of turnover intentions in a regression sense is due to multicolinearity, i.e., SUPERV had a relatively high intercorrelation with the other factors ($\bar{r}$ = .52). Although the magnitude of the simple correlation between SUPERV and turnover intentions (r = .40) was not significantly different from the correlation between INHIB and turnover intentions (r = -.39) and CAREER and turnover intentions (r = .45), when these factors were entered into the regression equation SUPERV made no additional significant contribution.

Examination of Table 4 reveals that SUPERV was most highly correlated with INHIB (r = -.61) and approximately equally correlated with CAREER (r = .49) and TRAIN (r = .50). This pattern of relationships suggests that the substantial redundancy among the predictors is suppressing the magnitude of the contribution of SUPERV in the prediction of turnover intentions. If SUPERV had had a correlation with turnover intentions only slightly larger than that of CAREER, SUPERV would have entered the regression equation first and perhaps CAREER would have been a non-significant predictor of turnover intentions. SUPERV is significantly correlated with turnover intentions (r = .40) but because it is highly colinear with other predictors, it does not emerge as a significant predictor in the stepwise regression analyses. Because of this colinearity, it is difficult if not impossible to make meaningful

statements about independent contribution to variance in turnover intentions. In other samples SUPERV may indeed be an important predictor of turnover intentions.

Another statistical issue that warrants discussion is the statistical power of the regression analyses conducted with these data. Power is defined as the probability of rejecting the null hypothesis when it is not true (Cohen & Cohen, 1975). Using the formulas for determining the power of the multiple regression analysis provided by Cohen and Cohen (1975), it was determined that for the five factor analytically derived scales the power (given the number of predictors - 5; the sample size - 450; and the estimated population effect size (R^2) - .26) for the stepwise regression analysis is in excess of .99. The estimated population effect size (R^2) = .26 was derived from four multiple regression investigations of turnover intentions (Alley & Gould, 1975 - R^2 = .13; Martin, 1979 - R^2 = .40; Parker & Dyer, 1977- R^2 = .22; Price & Bluedorn, 1977 - R^2 = .27). Even when the 18 items not retained in the factor analysis are used (yielding 23 predictors), power is still over .90.

Note that although 31 items were factor analyzed, the combination of these variables into 5 scales effectively reduces the number of independent/predictor variables from 31 to 5. Thus given the large sample size and the relatively small number of independent/predictor variables, we can be very confident that the $\underline{F}$ test associated with the R^2 is significant and that the null hypothesis is rejected.

Another issue of concern in multiple regression analysis is the amount of "shrinkage" in R^2. Shrinkage is an issue because the R^2 obtained in a sample is usually inflated compared to the population R^2.

because multiple regression is an optimization technique that capitalizes on sample specific group characteristics. To determine the amount of shrinkage in R^2 when using stepwise regression, Schmitt, Coyle, and Rauschenberger (1977) recommended using the conservative Darlington (1968) shrinkage formula. Using the Darlington formula with the present data (again with each of the five multi-item scales treated as a single independent variable), the estimated squared population cross validity was .279, indicating a minimal amount of shrinkage (the sample R^2 = .297). With all 23 predictors in the regression equation, the estimated squared population cross validity dropped to .327 from .364. This relatively small amount of shrinkage can be attributed primarily to the large sample size and the small number of predictors used in this research.

Cohen and Cohen (1975) strongly advocated cross-validation as a technique to be used to detect whether the entry order of predictor variables is stable from one sample to another because the order of entry of variables produced in one sample is frequently not replicated in another sample from the same population. Considering the sample size employed in the present research, the small amount of shrinkage, and the relatively small number of independent variables, cross-validation was not considered necessary here. In a sample size of 450, the regression and beta weights can be assumed to be quite stable, and thus yield stability in the order of the entry of the predictors. Examination of the significance level of the F-entry values of the predictors provides support for this position. That is, all predictors that entered the regression equation significantly did so far beyond the .05 level.

Validation in an Independent Sample

As noted earlier, the research strategy employed here involves examination of the Turnover Diagnostic on a sample similar to the one on which the scales were developed; literally the other half of the sample. Cureton (1950) warned against a procedure in which the same sample is used both for instrument development and validation as it capitalizes on chance and may result in spuriously high predictive power. Dividing the sample randomly in half and conducting factor analyses on the data from one subsample and then using the results to create scales in the other subsample (the holdout sample) was an attempt to deal with this issue. A more powerful way of providing an unbiased estimate of the predictive power of the Turnover Diagnostic is to administer it in a sample not involved in its development. Toward that end, a 40-item version of the instrument was administered to a sample of bank employees (N = 288) not involved in the original development of the WFCQ. This 40-item instrument contained 22 items from the WFCQ version of the Turnover Diagnostic. Nine of the 31 items from the WFCQ version were not included because they were not considered relevant in the bank con-text. The remaining 18 items were added to assess employee perceptions of additional aspects of their work settings considered to be relevant to turnover intentions. The results reported below are based upon the 22 items that were common to the WFCQ Turnover Diagnostic and the bank Turnover Diagnostic. As before, scale scores for each individual for each factor were created by summing the item responses for each factor and then dividing by the number of valid responses. The number of items per scale in the bank sample is as follows: SUPERV (six), INHIB (seven), CAREER (three), TRAIN (three), and STATUS (three). The internal

consistentcy reliability estimates for these scales is as follows: SUPERV (.83), INHIB (.65), CAREER (.78), TRAIN (.38), and STATUS (.63). The turnover intentions criterion item used in the bank sample was identical to the one used in the WFCQ. A comparison of the bank sample and the WFCQ sample revealed that there were significant differences among the scale means for SUPERV, STATUS, CAREER, and TRAIN. In each of the four cases, the WFCQ mean was larger. The means for INHIB and the turnover intentions item were not significantly different. There was a significant difference in the scale variances only for the SUPERV scale ($\underline{F}(287,449) = 1.31$, $\underline{p} < .05$). The results of the stepwise regression analysis in the bank sample are presented in Table 6.

The results are encouraging. The multiple R (.536) is virtually identical to the multiple R obtained in the WFCQ sample (R = .545). This indicates that the Turnover Diagnostic is quite predictive in a sample not involved in its development. However, it should be noted that the entry order of the Turnover Diagnostic scales in the bank sample did not parallel the entry order obtained in the WFCQ sample. For example, while CAREER was the most predictive scale in the WFCQ sample, it entered the regression equation third in the bank sample and contributed relatively little to the prediction of turnover intentions independent of the other variables ($\Delta R^2 = .022$). INHIB and TRAIN were significantly predictive of turnover intentions in the WFCQ sample but were not in the bank sample. STATUS was predictive in both samples. The biggest discrepancy between the two samples involved SUPERV. This factor was the only one not predictive of turnover intentions in the WFCQ sample but was the most important predictor in the bank sample. STATUS was the second most important predictor.

TABLE 6

Stepwise Regression Results in the Independent (Bank)
Sample with Turnover Intentions Regressed on
the Turnover Diagnostic Scales

Step	Variable	BETA	F_{entry}	R	R^2	ΔR^2	F_{mr}
1	SUPERV	.269	74.29***	.470	.221	.221	74.29***
2	STATUS	.196	13.81***	.510	.260	.039	45.87***
3	CAREER	.171	7.93**	.531	.282	.022	34.04***
4	INHIB	.064	1.44	.535	.286	.004	25.93***
5	TRAIN	.041	.42	.536	.287	.001	20.78***

NOTE: Maximum N = 458. F_{entry} refers to the F-test associated with the
addition or deletion of a variable; F_{mr} is the F-value associated
with the multiple R.

***$p < .001$
**$p < .01$

Relationships Between Job-Related Perceptions, Job Attitudes, and Turn-over Intentions

A second major research goal involved examing the pattern of relationships among job-related perceptions of organization-wide, job, task, and career factors, satisfaction with those factors, and turnover intentions. According to Fishbein and Ajzen (1975), there should be a direct link between satisfaction and intentions and an indirect link between perceptions and intentions (i.e., the magnitude of the satisfaction-intentions relationship should exceed that of the perceptions-intentions relationship). This hypothesized pattern of relationships can be tested through the use of hierarchical multiple regression. Support for the Fishbein and Ajzen position would be indicated if the satisfaction measures account for a significant increment in the multiple correlation coefficient when added to the job-related perceptions measures in the prediction of turnover intentions. Before the results of the hierarchical regression analysis are presented, it would be useful to examine the correlations among the single-item global satisfaction measures the Turnover Diagnostic scales, and turnover intentions. These results are presented in Table 7.

Several interesting results emerged. First, the average inter-item correlation for the four global satisfaction items is .515. Although this may appear rather high, the fact that this value was obtained even though all the items are found in the same place in the questionnaire indicates that asking the respondents to review their responses to previous sections of the questionnaire before responding to the satisfaction items might have been effective in reducing halo. The second interesting finding was that the average global satisfaction item-

TABLE 7

Means, Standard Deviations, and Intercorrelations Among Turnover Diagnostic Scales, Global Satisfaction Items, and Turnover Intentions

Variables[a]	Mean	S.D.	1	2	3	4	5	6	7	8	9
1. INHIB	2.82	.65									
2. CAREER	2.48	.88	-38								
3. SUPERV	3.02	.77	-61	49							
4. STATUS	3.33	.78	-32	37	37						
5. TRAIN	3.14	.78	-32	42	50	29					
6. OSAT	3.17	1.09	-50	43	54	41	31				
7. JSAT	3.43	1.07	-41	38	39	43	38	58			
8. TSAT	3.46	1.00	-39	38	40	25	46	43	64		
9. OCCSAT	2.80	1.10	-44	52	44	30	30	54	50	37	
10. INTENT	3.39	1.24	-39	45	40	35	35	61	56	49	48

NOTE: Maximum N = 458. All correlations are significant at $p < .01$. Decimals have been omitted. Response format for all items is a 5-point scale. Reliability estimates for INHIB, CAREER, SUPERV, STATUS, and TRAIN are reported in Table 4. OSAT, JSAT, TSAT, OCCSAT, and INTENT are single items and have no reliability estimates associated with them.

[a] OSAT = Global Organizational Satisfaction; JSAT = Global Job Satisfaction; TSAT = Global Task Satisfaction; OCCSAT = Global Satisfaction with Organizational Conditions as they impact an individual's Career; INTENT = Turnover Intentions.

turnover intentions correlation ($\bar{r}$ = .54) is significantly higher ($\underline{t}$ = 5.01, $\underline{p}$ < .001) than the average Turnover Diagnostic scale-turnover intentions correlation ($\bar{r}$ = .39). This finding is supportive of the Fishbein and Ajzen (1975) hypothesis. Another possible explanation for this finding involves the magnitude of the standard deviations of the satisfaction items and the Turnover Diagnostic scales. As can be seen in Table 7, the standard deviations of the satisfaction items are significantly greater than the Turnover Diagnostic scale standard deviations ($\underline{p}$ < .01). With more available variance, it is not surprising that the satisfaction items are more highly correlated with turnover intentions. The results of the hierarchical regression analysis to test the Fishbein and Ajzen (1975) hypothesis are presented in Table 8.

As can be seen, the combination of the Turnover Diagnostic scales and the global satisfaction items explains almost 50 percent of the shared variance in turnover intentions. The results also provide support for the position of Fishbein and Ajzen (1975) in that there is an indirect link between perceptions and intentions and a direct link between attitudes and intentions. This is indicated by the significance test for ΔR^2 value ($\underline{F}$ (4,448) = 40.59, $\underline{p}$ < .001). This F-value was calculated using the formula provided by Cohen and Cohen (1975, p. 135) to test the significance of the increment in R^2 when a set of variables is added to the regression equation in a hierarchical sense. The addition of the satisfaction variables explains an additional 18.7 percent of the variance in turnover intentions beyond what is explained by the job-related perceptions assessed by the Turnover Diagnostic. Within the global satisfaction item set, it appears that overall satisfaction with organizational conditions as they impact individuals' careers

TABLE 8

Hierarchical Regression Analysis with Turnover Intentions
Regressed on Turnover Diagnostic Scales and
Global Satisfaction Items

Step	Variable	BETA	F_{entry}	R	R^2	ΔR^2	F_{mr}
1	INHIB	-.018	12.63***				
	TRAIN	.045	6.11*				
	STATUS	.071	9.78**				
	CAREER	.131	29.12***				
	SUPERV	.061	.71	.545	.297	.297	37.50***
2	JSAT	.190	13.72***				
	OCCSAT	.075	2.66				
	TSAT	.129	7.31**				
	OSAT	.324	42.64***	.696	.484	.187	45.83***

NOTE: Maximum N = 458. F_{entry} refers to the F-test associated with the
addition or deletion of a variable; F_{mr} is the F-value associated
with the multiple R.

$^a \Delta R^2$ = .187, F (4,448) = 40.59, $p < .001$.

***$p < .001$

**$p < .01$

*$p < .05$

are most strongly related to turnover intentions. Overall satisfaction with the job appears to be the next most important variable, followed by overall satisfaction with tasks. Overall satisfaction with organizational conditions as they affect the career was not significantly related to turnover intentions in this regression analysis.

In another attempt to examine the perceptions-attitudes-intentions relationship, another hierarchical regression analysis was performed entering the satisfaction items as a set first and then entering the Turnover Diagnostic scales as a set on the second step. The results of this analysis indicated that job-related perceptions (the Turnover Diagnostic scales) add little to the prediction of turnover beyond what is predicted by attitudinal measures. The ΔR^2 value was .020 which is a significant increase ($\underline{F}$ (5,448) = 3.47, $\underline{p}$ < .01). However, adding the perception measures to the satisfaction items only explains an additional two percent of the shared variance in turnover intentions whereas adding the satisfaction items to the Turnover Diagnostic scales explains an additional 18.7 percent of the variance.

Moderator Analyses

It was proposed that job category/level be investigated as a potential moderator of the perceptions-intentions and attitudes-intentions relationship. Moderated multiple regression was the technique used to assess whether job category was a moderator variable. Two approaches were taken to explore this issue because there are two ways to conceptualize job category as it was measured in the WFCQ. The first way is to consider job category as being measured on a nominal scale of measurement. When variables are considered nominal, all objects/

people assigned the same value are considered to be alike with respect to some attribute. In a sense, the objects/people are being identified rather than measured (Nunnally, 1967). The second way is to consider job category as measured on an ordinal scale of measurement. An ordinal scale is one in which objects or people are ordered from most to least with respect to same attribute with no indication of "how much" of the attribute the objects or persons possess.

Moderated multiple regression is a form of hierarchical regression in which the predictor variables are entered in the first step, the hypothesized moderator is added in the second step, and the multiplicative predictor variable-moderator variable interaction terms are added in the last step. A variable is considered to be acting as a moderator if the addition of the interaction terms yields a significant increment in the R^2 value. The specific moderating effect can be determined by examining the magnitude of the $\underline{F}$-entry values for the interaction terms.

When job category was considered as nominal variable, dummy coding was used in the moderated multiple regression analyses. Upper management, middle management, and first-line management were coded as 1 (N = 115) and skilled worker and clerical/administrative were coded 0 (N = 253). Those individuals whose job category had been coded "other" (N = 89) were excluded from the moderator analyses (resulting in a maximum sample size of 368). The moderated regression analysis indicated that job category, when considered as a nominal variable, did act as a moderator variable (ΔR^2 = .016). Using the Cohen and Cohen (1975, p. 135) formula for testing the significance of the incremental increase in R^2 resulting from the addition of a set of variables, an $\underline{F}$-value of 3.36 was obtained. With 5 and 336 degrees of freedom, the $\underline{F}$-value

required for significance at the .01 level is 3.08. This means that the relationship between the five Turnover Diagnostic scales and turnover intentions depends upon the value of the moderator variable, in this case job category. However, although the F-value was significant, none of the job category-Turnover Diagnostic scale interaction terms was statistically significant (as indicated by the F-entry values). This makes it difficult to interpret how job category is operating as a moderator. That is, if there were a significant CAREER-job level interaction term, one could report that career facilitation factors had a greater impact on the turn-over intentions of managers than on non-managers. Examination of the magnitude of the beta weights of the interaction terms is not helpful either in terms of detecting the moderating effect of job category. Because the interaction terms are so highly intercorrelated ($\bar{r} > .70$), it is basically impossible to make meaningful statements about the relative importance of interaction terms (Cohen & Cohen, 1975; Darlington, 1968). In any case, using job category as a nominal level moderator variable explains a relatively trivial amount of additional variance in turnover intentions ($\Delta R^2 = .016$). This finding should not be considered surprising in light of the statements made by Schmidt and Hunter (1978), White (1978), and Schneider (1978).

When the job category was treated as an ordinal variable (with clerical/administrative recoded as a "5" and skilled worker recoded as a "4"), the hierarchical regression analysis again revealed that job category was operating as a moderator. Specifically, there was a significant increase in the amount of shared variance in turnover inten-tions with the addition of the Turnover Diagnostic scale-job category interaction terms ($\Delta R^2 = .015$, F (5,333) = 3.22, $p < .01$). Again there

were no significant interaction terms, making interpretation of the moderator effect of job category difficult for the reasons explained above.

Non-Redundancy of the Turnover Diagnostic with the JDI

A secondary research goal was to examine the range and magnitude of the correlations among the scales of the Turnover Diagnostic and the Job Descriptive Index (JDI), a commonly-used and popular job satisfaction instrument. It was thought that a comparison of the two instruments in terms of the intercorrelations of their scales and their relative pre-dictive power regarding turnover intentions would serve to demonstrate that the development of the Turnover Diagnostic did not result in the "reinvention of the JDI satisfaction wheel." Results of the correlation analysis of the two instruments are presented in Table 9.

The average inter-scale correlation (using Fisher's Z-transforma-tion) for the JDI dimension was .45, slightly though not significantly higher (z = .72) than the average inter-scale correlation for the Turn-over Diagnostic ($\bar{r}$ = .41). The average JDI dimension-turnover intentions correlation was .32, a value that is somewhat less though not signifi-cantly so (z = 1.13) than the average Turnover Diagnostic scale-turnover intentions correlation ($\bar{r}$ = .39). Encouragingly, the average inter-scale correlation between the JDI and Turnover Diagnostic was .303. This value is not excessively high considering the common method bias problem inherent in survey data. The average inter-scale correlation among the JDI and Turnover Diagnostic scales is significantly less than both the average inter-scale correlation for the JDI scales ($\bar{r}$ = .45, z = 2.58, p < .01) and the average inter-scale correlation for the Turnover Diagnostic scales ($\bar{r}$ = .41, z = 1.88, p = .06). This finding suggests

TABLE 9

Means, Standard Deviations, and Intercorrelations of the
Turnover Diagnostic and Job Descriptive Index Scales

Variable[a,b]	Mean	S.D.	1	2	3	4	5	6	7	8	9	10
1. INHIB	2.82	.65										
2. CAREER	2.48	.88	-38									
3. SUPERV	3.02	.77	-61	49								
4. STATUS	3.33	.78	-32	37	37							
5. TRAIN	3.14	.78	-32	42	50	29						
6. PAYSAT (33)	2.09	.81	-25	20	26	12	13					
7. PEERSAT (33)	2.82	.85	-50	29	50	22	25	38				
8. PROMSAT (52)	2.06	.87	-44	45	40	22	31	38	44			
9. WORKSAT (33)	2.58	.74	-41	37	39	32	39	46	54	49		
10. SUPSAT (36)	2.79	.91	-33	19	27	16	10	36	60	34	47	
11. INTENT	3.39	1.24	-39	45	40	35	35	24	34	41	42	19

NOTE: Maximum N = 458. All correlations are significant at $p < .01$.
Decimals have been omitted. Response format for PAYSAT, PROMSAT,
WORKSAT, WORKSAT, and SUPSAT is a 3-point scale.

[a]Job Descriptive Index Scales: PAYSAT = satisfaction with pay. PEERSAT =
satisfaction with coworkers; PROMSAT = satisfaction with promotion
opportunities; WORKSAT = satisfaction with work itself; SUPSAT =
satisfaction with supervision.

[b]Numbers in parentheses represent percentile satisfaction scores on
the JDI scales for this sample.

that the JDI and Turnover Diagnostic are not particularly redundant. Suggestive as this finding is, a more appropriate way of assessing the relative redundancy of the two instruments involves the use of hierarchical multiple regression analysis.

To assess the degree of redundancy using hierarchical regression analysis, the Turnover Diagnostic scales were entered as a set in the first step and the JDI scales were entered as a set in the second step. Because perceptions are hypothesized to temporally precede attitudes (Fishbein & Ajzen, 1975), this entry order is justified on theoretical grounds. The results of this analysis are presented in Table 10.

As can be seen, the addition of the JDI scales to the Turnover Diagnostic scales explains an additional 4.2 percent of the shared variance in turnover intentions. Using the Cohen and Cohen F-test (1975, p. 135), this is a significant increase (ΔR^2 = .042, F (5,447) = 5.68, p < .01). This result is interpreted as indicating that the Turnover Diagnostic and JDI are not redundant. That is, if the two instruments were redundant, the JDI would not explain any additional variance in turnover intentions beyond that explained by the Turnover Diagnostic.

Another way of assessing redundancy involved entering the JDI scales first, followed by the Turnover Diagnostic scales. Adding the Turnover Diagnostic scales to the regression equation after the JDI scales have been entered first results in a rather substantial increase in the shared variance of turnover intentions (ΔR^2 = .096, F (5,447) = 12.98, p < .01). Of course, following Fishbein and Ajzen's (1975) model, this can be expected from a "correspondence" perspective. That is, because correspondence between the Turnover Diagnostic items and the turnover intentions criterion was established through the use of the criterion-

TABLE 10

Hierarchical Regression Analyses with Turnover Intentions
Regressed on the Turnover Diagnostic and Job
Descriptive Index Scales

Step	Variable	BETA	F_{entry}	R	R^2	ΔR^2	F_{mr}
1	INHIB	-.107	12.63***				
	TRAIN	.073	6.11*				
	STATUS	.127	9.78**				
	CAREER	.205	29.13***				
	SUPERV	.017	.71	.545	.297	.297	37.50***
2	PAYSAT	.027	.34				
	SUPSAT	-.086	2.93				
	WORKSAT	.125	6.25*				
	PROMSAT	.148	7.22**				
	PEERSAT	.077	1.78	.582	.339	.042	22.53***

NOTE: Maximum N = 458. F_{entry} refers to the F-test associated with the addition or deletion of a variable; F_{mr} is the F-value associated with the multiple R.

[a]ΔR^2 = .042, F (5,447) = 5.68, p < .01.

*** p < .001

** p < .01

* p < .05

keying strategy and the questionnaire directions, it is to be expected that the Turnover Diagnostic should be more strongly related to turnover intentions than should the JDI. There is relatively little correspondence between the JDI items and the turnover intentions criterion and therefore the relationship between the JDI scales and the criterion should be less than that of the Turnover Diagnostic. Even though theoretically satisfaction measures should be more directly linked to intentions, it appears that the amount of correspondence between the various measures may be a more important factor.

CHAPTER V

DISCUSSION

The basic premise of this research effort was that the understanding of withdrawal behavior in organizations, and its precursors such as turnover intentions, is enhanced by assessing employees' perceptions of the various components of the social system in which their behavior is embedded. The primary research goal was to develop an instrument assessing employees' perceptions of organization-wide, job, task, and career factors that would be predictive of turnover intentions in a wide variety of organizations.

The results of this research suggest that the criterion-keying strategy used to develop the Turnover Diagnostic is a viable way of identifying the factors associated with turnover intentions. An instrument that was developed was of reasonable length (31 items), had a relatively clear factor structure, and was reasonably predictive of turnover intentions. One piece of evidence that indicates the criterion-keying strategy was a useful approach is that items from all four of the a priori WFCQ dimensions were included in the Turnover Diagnostic. Although additional validation is needed, it appears that a criterion-keying strategy might be a useful procedure to follow when the research goal is the prediction of other dependent measures of interest in organizational psychology research.

The factor structure of the Turnover Diagnostic was relatively clear; only one factor (TRAIN) could be considered somewhat suspect on

the basis of content and internal consistency reliability. Despite these shortcomings, TRAIN was a significant predictor of turnover intentions. The addition of more items to this scale could improve its psychometric properties. The other four factors appear to be relatively strong on the basis of content and reliability. Three of these four scales (CAREER, INHIB, and STATUS) were significant predictors of turnover intentions. SUPERV was the only one of the five Turnover Diagnostic factors that was not significantly related to turnover intentions independent of the other factors. This finding should not be considered too surprising in light of the fact that supervisor/leader factors have not been consistently related to withdrawal behavior (cf. Porter & Steers, 1973; Mobley et al., 1979).

Nunnally (1967), among others, has warned that factor analysis results can "fool" the researcher into misinterpreting the data. Most salient for the present research are Nunnally's caveats about: (1) placing undue emphasis on small factor loadings, and (2) using heterogenous samples. Regarding the first point, Nunnally cautioned against overinterpreting the meaning of small factor loadings (i.e., less than .40). Because the techniques of varimax rotation tend to maximize factor loadings of items within columns rather than maximizing loadings across rows, factor loadings below .40 may look substantial when in actuality the correlations among the variables defining the factor may be rather low. This does not appear to be a problem in this research because only two variables were retained that had a factor loading below .40 (item 34, factor loading = .37; item 43, factor loading = .38). Fourteen of the 31 variables comprising the Turnover Diagnostic had factor loadings greater than .50.

Nunnally's second caveat involved the dangers of extracting factors that were based on individual difference variables (age, sex, education) rather than on item responses or test performance. This is more likely to occur in situations where the research sample is heterogenous with respect to individual difference variables. Although the sample employed in this research is quite heterogeneous, it is not believed that the factor structure of the Turnover Diagnostic reflects individual differences or group membership for two reasons. First, this sample is so heterogeneous with regard to ethnicity, age, education, work experience, organizational membership, and job type that it is difficult to imagine the factor structure of the Turnover Diagnostic to meaningfully reflect differences with regard to those variables. Secondly, the research participants were asked to describe (and in some cases evaluate) various features of their work environments. Recent theorizing on the relative influence of intra-personal variables versus situational variables on perceptions and behavior, suggests that considering person-situation interactions is an approach that can be used to reconcile the differences between the radical personalist (trait) and situationalist (behaviorism) explanations of the determinants of behavior (Bowers, 1973). Because environmental variables do have a powerful impact on behavior (Mischel, 1977), it is considered improbable that the factor structure of the Turnover Diagnostic reflects the individual difference variable composition of the sample.

Nunnally was referring to research, testing, and assessment situations where individual differences were more likely to be manifested such as laboratory, clinical, and educational settings. Such is not likely to be the case in organizational research where situational effects are apt to be more pronounced.

Summary of the Regression Analyses Results

The predictive power of this multiple regression model ($R = .545$, $R^2 = .297$ for the five Turnover Diagnostic scales; $R = .603$, $R^2 = .364$ for the five scales plus the 18 items) is superior or equal to the predictive power reported in other studies that have taken a multivariate approach to the prediction of turnover intentions (Alley & Gould, 1975 - $R^2 = .13$; Martin, 1979 - $R^2 = .40$; Parker & Dyer, 1977 - $R^2 = .22$; Price & Bluedorn, 1977 - $R^2 = .27$). It should be noted that these studies tended to include a large number of predictors in their regression equations. For example, Martin (1979) used 18 predictors. All these studies appear to have a sociological/structural orientation. The lack of correspondence between these types of predictors and the turnover intentions criterion are an explanation for the relatively low R^2 values. The highest R^2 value was reported by Martin ($R^2 = 40$). However, approximately 2/3 of the variance in turnover intentions was explained by a satisfaction scale in Martin's research.

Two additional points should be noted. First, the R^2 values of .297 and .364 were obtained using only job-related perceptions as predictors. The addition of the global item satisfaction measures to the five Turnover Diagnostic scales increases the R^2 value to .484 (Table 8). Had personal/demographic variables been included in the regression equation, the predictive power undoubtedly would have been modestly increased. Second, the Turnover Diagnostic was equally predictive of turnover intentions in an independent (bank) sample ($R = .536$, $R^2 = .287$) as it was in the multi-organizational sample in which it was developed.

An issue relating to the use of regression procedures that has engendered some controversy involves <u>prediction</u> versus <u>explanation</u> when using multiple regression analyses. That is, even though one may have

high predictive power, this does not necessarily imply equally high explanatory power (Kerlinger & Pedhauzer, 1973). Although Cohen and Cohen (1975) were especially adamant about not using the results of stepwise regression to _explain_ the relationships among variables, for two reasons the present findings inspire confidence about the entry order of the variables and the relative importance of each of the variables in explaining turnover intentions. First, the respondents were employed in multiple organizations in different industries, thus enhancing the generalizability of the pattern of results obtained here. Criticisms of stepwise regression have often centered around the fact that findings obtained in a sample do not generalize to the population from which the sample was drawn. If the population we want to generalize to in this research is the American work force, this sample has to be considered quite representative (see Table 1).

The second reason why these results inspire confidence concerns the issue of the sample size employed. These results were derived from a large sample (N = 450). Warnings against the use of stepwise regression results to explain the relative importance of predictors have stemmed from the inappropriate use of this technique in small samples (Cohen & Cohen, 1975). Such concerns are less salient in large samples and thus are less important in the present case. Another criticism of stepwise regression procedures concerns using these procedures to choose the most important variables out of a large set of predictors (Cohen & Cohen, 1975). Such is not the case here where only five predictors are being entered in the regression equation.

Nevertheless, even with a large sample, researchers should be cautious when using the results of stepwise regression analysis when

describing the contribution of the predictor variables in explaining variance in the criterion. In experimental research where it is possible to maintain orthogonality among the predictors, relatively unambiguous statements can be made about relative contribution of the predictors. In nonexperimental research, the predictors are usually correlated. This nonorthogonality of the independent variables makes it difficult to untangle the independent contribution of the predictors to the variance in the dependent variable (Kerlinger & Pedhauzer, 1973). In fact, some regression theorists state that having correlated predictors makes it impossible to make meaningful statements about "independent contribution to variance" (Darlington, 1968). The fact that the Turnover Diagnostic scales are moderately intercorrelated therefore does present some problems with regard to making exact statements about the importance and independent contribution to variance in turnover intentions of the five scales.

Taking these caveats into account, it is still possible to make some statements with a reasonable degree of confidence about the importance of the Turnover Diagnostic scales given the nature of the sample, the sample size, and the stepwise regression results. Although it is not permissible to say, for example, that INHIB is twice as important as TRAIN, it can be said that some scales are clearly more important than others. Specifically, the most positive outcome of this research was the discovery and identification of two factors that were strongly associated with turnover intentions but apparently have not previously been identified in the organizational withdrawal literature: organizational career facilitation (CAREER) and work inhibition (INHIB).

Organizational Career Facilitation

In the present study organizational career facilitation (CAREER) was the Turnover Diagnostic dimension most strongly related to turnover

intentions. Several researchers have identified constructs such as employee role orientation or perceived career relevance of the job as correlates of turnover (Bartol & Manhardt, 1979; Graen & Ginsburgh, 1977; Graen et al., 1973). In general, the results of these studies suggest that the greater the perceived relevance of the job to the employees' future career, the less likely was job turnover. A review of the relevant literatures, however, revealed no study that demonstrated the effect of <u>organizational</u> policies, practices, and procedures on the retention of employees. The results of this research demonstrated that employee perceptions of having the opportunity to pursue personal career interests, and having the organization help employees achieve their career goals by providing counseling and information about how different jobs fit into different career programs are associated with an increased intention to remain employed in the organization.

The importance of organizational career facilitation as a contributing factor to turnover intentions supports the hypothesis of Mobley et al. (1979) regarding the influence of the attraction-expected utility of a job on withdrawal cognitions and behavior. If organizations can enhance the attraction-expected utility of the present job as compared to possible alternative jobs in other organizations through career development practices, turnover could possibly be reduced. The identification of organizational career facilitation also is supportive of the hypothesis of Forrest et al. (1977) regarding the importance of assessing employees anticipations about the future in addition to assessing retrospections about experiences, events, and conditions. Career issues are future oriented and people's expectancies and expectations about these issues may have an important impact on withdrawal cognitions and behavior.

A question that naturally occurs is why organizational practices, policies, and programs that facilitate career growth and development are associated with lower turnover intentions. One reason that seems plausible is that individuals' careers are central to their self-concepts and self-identities (Van Maanen, 1977). Another way of saying this is that individuals' careers (sequences of work-related experiences) represent their lives in their work settings and therefore assume a great deal of importance (Hall, 1976). Super (1957) viewed organizational choice and career development as the process by which individuals implement their self-concepts. Holland (1973) hypothesized that effective career choices occur when people's personality orientations are congruent with their occupational environment. A conclusion that can be drawn from all these statements is that career factors are important because the career is intimately tied to individuals' views of themselves and their lives. When an organization is perceived as facilitating the implementation of a person's self-image and self-concept by supporting a person's career growth, it makes sense that people are more likely to remain employed in that organization (Super & Hall, 1978).

The identification of organizational career facilitation as a significant predictor of withdrawal cognitions and behavior may have potentially important implications for career research and human resource management in organizations. The present findings suggest that organizations might find it beneficial to devote more effort to the development of career planning and counseling programs in order to retain their employees, especially those employee groups whose withdrawal is the most detrimental (cf. Morgan, 1980). This is especially true for the retention of young professionals such as MBA's. As has been noted

by a number of researchers, turnover is especially high among this group
and is especially costly to organizations (cf. DePasquale & Lange, 1971;
Dunnette et al., 1973; Hall, 1976; Schein, 1971). Another related
issue concerns the attraction and retention of other special employee
groups such as women and minorities. Given the increasing number of
women professionals entering the work force and the existence of federally
mandated legislation directed at augmenting the number and proportion of
women and minority employees in management positions, providing career
counseling for women and minority employees as a technique to retain
these employees should assume heightened importance for organizations
in the years ahead.

Another reason for advocating an increased emphasis on the develop-
ment of career counseling/planning programs concerns the increased
priority that individuals appear to be assigning to advancement as a
preferred job outcome. Several streams of empirical evidence suggest
that career growth and advancement is an important job outcome preference
and may be becoming more desired by both male and female employees
(Bartol & Manhardt, 1979; Driver, 1979; Hall, 1976; Jurgensen, 1978;
O'Leary, 1974; Schein, 1978). For example, Jurgensen (1978) reported
that advancement was consistently ranked the third highest job
preference for males in a sample of over 56,000. For women it ranked
fourth. For people with college degrees, advancement was ranked higher.
Given the significance individuals seem to attach to career growth and
advancement it seems logical to conclude that organization policies
related to career planning and counseling could potentially have a
positive effect on employee retention. Future career related research

clearly could benefit by focusing on the effects of organizational career facilitation practices on career-related outcomes and turnover.

The fact that CAREER is strongly related to turnover intentions also suggests that providing applicants career relevant information (e.g., advancement "histories" of similar applicants, jobs that similar applicants are typically promoted into, proportion of people who do get promoted, promotion timetables, etc.) during the recruitment process might have a moderate effect on post-hiring withdrawal cognitions and behavior. An examination of published and unpublished realistic job preview research literature indicates that realistic career relevant information typically is not provided to applicants. The effectiveness of realistic recruitment techniques in reducing premature turnover might be enhanced in the future by the inclusion of such information. Apparently job applicants do not have realistic expectations regarding their career development opportunities. For example, Dunnette et al. (1973) reported that unrealistic/unmet expectations regarding career growth (advancement) was one of the most important factors related to withdrawal.

It should be noted that career growth and development does not necessarily assume advancement. Employees can strongly desire personal career growth and development without wanting to be promoted up the organizational hierarchy (Driver, 1979). For example, the occupations of law, medicine, and education are ones in which advancement is often not used as a criterion against which career growth/development is judged. Indeed, promotion simply is not an option for many people in these occupations. For these individuals the organization may facilitate career growth by providing challenging work, job rotation (opportunity

to work on a variety of projects), by providing opportunities to acquire
new skills, etc.

In summary, what the organization can do for its employees from a
career development standpoint is clearly related to turnover intentions
in this research. Organizational withdrawal researchers would do well
to focus some more attention of career factors as they relate to with-
drawal behavior and cognitions.

Work Inhibition

The second most predictive variable after organizational career
facilitation, in a multiple regression sense, was work inhibition (INHIB).
In the present research it was shown that the perception of conditions in
the work environment that interfered with successful task performance
was strongly related to turnover intentions. Examples of such conditions
and situational constraints on performance include coworkers being unable
to handle their jobs, goal conflict among work groups and departments,
lacking the opportunity to develop new skills, the existence of "in
groups" and "out groups", supervisors not knowing what their employees
want, etc. There appear to be two inhibition themes here: one related to
performance issues and one related to interpersonal issues.

Although several theorists have noted that situational conditions
can influence motivation and performance (e.g., Schneider, 1978), very
little empirical research has investigated the possible negative effects
of such conditions on affective and behavioral outcome measures. One
exception was a laboratory study which indicated that performance,
satisfaction, and frustration were all influenced by the experimental
manipulation of conditions that facilitated/inhibited task performance
(Peters, O'Connor, & Rudolf, 1980). Specifically, Peters et al. mani-
pulated: (1) the amount of job-related information available, (2)

adequacy of tools and equipment, (3) availability of materials and supplies, and (4) amount of task preparation (training). They found significant differences between the facilitating condition and the inhibiting condition for the dependent measures of work quality and re-ported frustration. Parkington and Schneider (1979) showed that when employees' desires to perform well were facilitated by management, employees experience lower levels of frustration, role conflict and ambiguity, turnover intentions, and higher levels of satisfaction, and in the eyes of customers, actually provide superior service (Schneider, 1980).

The findings reported by Peters et al. (1980) and Parkington and Schneider (1979) are similiar in some regards to the results of the present research. However, the results of this research are somewhat more compelling in that work inhibition (INHIB) was related to a broad range of affective measures (e.g., global organizational satisfaction - $r = -.51$; JDI satisfaction with coworkers - $r = -.50$; JDI satisfaction with work - $r = -.41$) as well as being strongly related to turnover intentions ($r = -.39$). Unfortunately, the fact that indices of perfor-mance were not assessed makes it impossible to examine any work inhibi-tion-performance relationships in this research.

There are several reasons for why one might expect conditions that inhibit or constrain task performance to be associated with lower levels of performance and affective responses as well as with higher levels of withdrawal cognitions and behavior. The reasons will be couched in motivation theory frameworks. First, according to expectancy theory, effort (which is undoubtedly correlated to some degree with actual performance) is a function of effort-performance expectancies, performance-

outcome expectancies, and outcome valences (Campbell & Pritchard, 1976).
The perception of situational constraints and inhibiting conditions in
the work environment may serve to lower effort-performance expectancies,
and thus lower the amount of effort expended with the end result being
lower performance levels. In addition, affective responses such as
lower job satisfaction could result because extrinsic and intrinsic
rewards that are contingent upon performance may not be forthcoming if
performance is hindered because of situational constraints and inhibit-
ing conditions in the work setting.

Reference to equity theory (Adams, 1963) is also useful in explain-
ing the behavioral and affective reactions to inhibiting conditions.
Having to overcome situational constraints on performance by expending
extra effort may be perceived by individuals as having to contribute
extra inputs. If additional outcomes are not forthcoming to assure
equity in the input-outcome ratios, the individuals may eventually
resort to reducing inputs (in a sense throwing in the towel) and being
satisfied with a lower level of outcomes as a way of maintaining equity.

Two other approaches to motivation are applicable in this situation
as well: achievement motivation and competence motivation. McClelland
(1961) and Atkinson (1964) described a motive for achievement that
exists in varying degrees in individuals. People with a high need for
achievement (nAch) are characterized by placing a higher valence on
the attainment of performance objectives, tend to assume responsibility
for individual achievement, be persistent in their pursuit of goals,
seek information to measure their progress, gain satisfaction from goal
accomplishment, and experience frustration as the result of failure
(Filley, House, & Kerr, 1976). Because high nAch individuals are so

concerned with goal achievement, it seems reasonable to con-
clude that situational constraints on performance that inhibit goal
accomplishment would be associated with frustration and other nega-
tive affective responses for these individuals.

In addition to achievement motivation, another motive that is
potentially relevant to the present findings is the effectance motive,
White (1959). The outcome or goal of the effectance motive is to achieve
competence, to achieve mastery over relevant components of the social
and physical environment. Demonstrating competence is considered to be
reinforcing in and of itself independent of outcomes. If situational
constraints and inhibiting conditions are present in individuals' work
environments, competence may be difficult to attain and consequently
negative affective responses may manifest themselves, such as dissatis-
faction and frustration.

The present findings with regard to work inhibition suggest that
achievement and competence motivation among individuals in work settings
are factors that may deserve more research attention in the organiza-
tional psychology literature than they have received so far. A majority
of the achievement motivation research has used managerial and entre-
preneurial samples. The present findings suggest, albeit tentatively,
that achievement and competence motivation may be important for employees
other than managers (respondents at the first-line of management and
above comprised about 25 percent of the sample in this sample). That
is, although many non-managerial employees may not have extremely high
needs for achievement and competence (this is pure speculation in the
absence of any empirical or normative data), the assumption that many

individuals desire to achieve some reasonable level of goal accomplish-
ment (a fair day's work) and demonstrate competence in work activities
seems warranted. Although typically work conditions are not designed
to arouse achievement and competence motivation in individuals, the
present findings imply that when conditions or events in work settings
inhibit, frustrate,and/or interfere with individuals' desires and attempts
to perform effectively, people are less satisfied, more frustrated,
and more likely to think about leaving.

Another consequence of inhibiting factors may be a permanent lower-
ing of effort-performance expectancies for individuals, a result which
almost certainly would have negative implications for motivation, per-
formance, and attitudes. That is, even when inhibiting conditions are
not present in the setting, individuals may still exert less effort
because of a conditioned expectation that barriers to effective perfor-
mance are always present.

Inasmuch as the perception of inhibiting conditions in this re-
search is associated with higher turnover intentions levels and lower
job satisfaction, organizational researchers might be well advised to
investigate the extent to which inhibiting factors are present in work
settings in order to determine whether situational constraints/inhibiting
conditions is a viable construct worthy of continued research attention.
Peters et al. (1980) identified eight "situational resource variables"
relevant to performance: (1) job-related information, (2) tools and
equipment, (3) materials and supplies, (4) budgetary support, (5) re-
quired services and help from others, (6) task preparation, (7) time
availability, and (8) work environment conditions. In their laboratory
study, Peters et al. used only four of the eight (1, 2, 3 and 6) and

did not examine the relative contribution of these factors to the outcome variables they assessed.

To date, no organizational research has investigated the validity of the Peters et al. (1980) situational constraints on performance construct. Researchers who investigate this topic in the future have two tasks confronting them. First, the dimensionality of the construct should be determined. Second, the relative importance of the identified inhibiting factors dimensions in explaining variance in outcomes variables of interest such as performance, satisfaction, role ambiguity, job involvement, organizational commitment, and others should be determined. The importance of these factors may vary across jobs and across people. For example, in more complex jobs (high autonomy, high variety, etc.), job-related information may be the key inhibiting/facilitating situational resource variable that influences affective responses and performance. In addition, the importance of these factors may differ across people. That is, in the same work setting, one person may be stymied by lack of job related information while another is befuddled by a lack of help from coworkers. Conversely, it could be hypothesized that some individuals derive challenge and meaning from their work by overcoming situational constraints. Removing these constraints could make their jobs less challenging and enjoyable.

Organizational decision-makers might help reduce turnover and improve productivity by eliminating inhibiting conditions for employees. Because the importance of the different factors probably varies across settings (as well as across people), efforts designed to reduce the negative impact of these factors would have to be done on a setting-by-setting basis. People within each setting could ask what interferes

with their performance the most. If a consensus emerges that one factor has a particularly pernicious effect, steps could be taken to eliminate that inhibiting factor, if indeed it is controllable (for example, increased budgetary support may simply be impossible to supply). Of course, management may be reluctant to do this out of fear of opening a Pandora's box. However, if done appropriately, useful information could be generated and used in problem-solving.

Organizational Status, Training/Skill Utilization, and Supervision

The other three factors of the Turnover Diagnostic contributed considerably less to the prediction of turnover intentions than did organizational career facilitation and work inhibition. One interesting and unexpected finding was the identification of perceived organizational status and prestige as a significant predictor of turnover intentions. Relatively little research has examined perceived organizational status as a correlate of anything. One exception was Jurgensen (1978), who reported that employment by a company for which you are proud to work was a job outcome preference of moderate importance to individuals (4th for men and 2nd for women). It appeared to be a more important outcome for older workers, less educated workers, and workers in manager-ial and sales jobs. This finding suggests that organizational members may accrue rewards not directly mediated by the organization simply by virtue of their organizational membership, which affect their decisions regarding staying in or leaving their organization. This may mean, for example, that what family and friends think and say about individuals' organizations and their membership in those organizations may exert a significant influence on withdrawal intentions and behavior.

Although little empirical evidence describes this phenomenon, other sources of evidence bolster this hypothesis. For example, organizations

often rely heavily on their reputation and image to recruit new members (Wanous, 1980). If organizational status induces individuals to join organizations, it does not require a major conceptual leap to hypothesize that being employed in a high status organization may induce individuals to remain employed in that organization. However, one would suspect that experiences inside the organization's boundaries would have a more significant effect on individuals' reactions than experiences occurring external to the organization. The stepwise regression results support this interpretation because STATUS is not as an important a predictor as CAREER and INHIB.

It should be noted, however, that the importance of organizational status as a predictor of and contributor to withdrawal cognitions and behavior may vary as a function of type of organization. For example, STATUS was the second most important predictor of turnover intentions in the independent sample. This sample was composed of bank employees, the majority of whom were direct client contact employees (tellers). Organizational status might be more important to these individuals because organizational status might have had a direct bearing on the amount of business their bank branch did and on the quality of their interactions with customers. It is tempting to speculate that organizational status might be a more salient withdrawal correlate for those individuals who: (1) have direct contact with customers, and (2) are employed in organizations who have a well-known and visible competitor.

In terms of controlling turnover, it is hypothesized that organizations will have relatively little leverage in using organizational status. It is hard to manipulate status and even if it could be done, the effect on withdrawal cognitions and behavior would be minimal.

Organizations would have more leverage in using status to attract applicants although if the organization does not live up to its recruitment billing, retention problems could result later (Wanous, 1980).

The fourth Turnover Diagnostic factor (TRAIN) was comprised of items revolving around training/skill utilization issues. It was a significant predictor of turnover intentions although it accounted for only an additional 1.3 percent of the variance in turnover intentions in the WFCQ sample. One possible explanation for TRAIN being significantly predictive of turnover intentions is that employees are more likely to remain on jobs that require them to use skills they perceive as job-relevant and personally important (Epko-Ufot, 1976). Dunnette et al. (1973) reported that employees were more likely to quit when they felt that the organization was not letting them use the knowledge and skills they acquired in college. From a motivational and reinforcement viewpoint, under-utilization of skills may be associated with a smaller chance of demonstrating competence (White, 1959), smaller likelihood of reward, and reduced opportunities for promotion.

Another explanation involves the use of training as a technique to integrate new employees into ongoing patterns of goal-directed behavior. Organizational socialization theorists (e.g., Schein, 1978; Van Maanen, 1976) have noted that the time period immediately after organizational entry can be extremely stressful to new employees. Providing special training or assigning a specific person to newcomers to help them get used to a job could help make the time period immediately after joining an organization less stressful. In addition, helping newcomers get adjusted to their jobs by the two methods mentioned above could help the newcomers "get up to speed" more quickly and reduce the

amount of disruption that would be experienced by others in the same work setting. Wanous et al. (1979) speculated that providing training for newcomers may help "buffer" them from entry stress. That is, being trained or coached may help newcomers become more effectively socialized and assimilated as compared to those newcomers who are simply inserted without any preparation into the work setting (a baptism by fire mode of entry so to speak).

These findings and hypotheses suggest that organizations may be able to manage turnover to some extent in two ways. First, chances of withdrawal behavior might be reduced by insuring that employees receive postentry orientation that involves some form of training/coaching to help buffer newcomers from the reality shock that individuals often experience after entering an organization. Second, turnover might be reduced by consciously trying to match employee skills to job requirements. Wanous (1980) posited that mismatches in this area would primarily be associated with involuntary turnover. However, a mismatch might be associated with voluntary turnover as well. For example, being over-qualified for a position (possessing more skills than is required) or being underemployed (not using all relevant skills) has been shown to be associated with less satisfaction, symptoms of mental illness, and possibly poorer performance (Adams, 1963; Kasl & Cobb, 1971). The effective use of human resources (both with regard to turnover and performance) could be maximized through matching people's skills to job requirements. Taking into account the fact that people may upgrade their skills while job requirements remain static and vice-versa implies that organizations should continually monitor the degree of match in order to avoid turnover problems.

The fifth Turnover Diagnostic scale (SUPERV) concerned supervisory issues. SUPERV was not predictive of turnover intentions in a multiple regression sense in the WFCQ sample (although it was in the bank sample). This finding in the WFCQ sample was surprising considering the fact that SUPERV had the second highest zero-order correlation with turnover intentions (r = .40). One possible reason for SUPERV not being predictive of turnover intentions independent of the other scales is due to its relatively high intercorrelation with the other scales ($\bar{r}$ = .52).

As noted earlier, satisfaction with supervision and perceptions of leadership style have been inconsistently related to turnover. From a theoretical viewpoint, there are two possible explanations why the supervision factor was not related to turnover intentions. First, supervisors may not have much of an impact on the attitudes, cognitions, and behavior of subordinates because of the existence of substitutes or neutralizers of leadership (Kerr & Jermier, 1978). Second, it may be that supervisor behavior has indirect effect on subordinate reactions. That is, the quality of subordinate-supervisor interactions may not influence turnover, but rather what the supervisor does with regard to relevant components of the subordinate's psychological work environment has an important effect on withdrawal. Most organizational withdrawal research has focused on the relationship between turnover and what Mintzberg (1973) calls the traditional "leader" role. It is conceivable that other supervisory roles not involving one-on-one interaction between the supervisor and the subordinate may influence withdrawal (e.g., liaison, monitor, disseminator, resource allocator, negotiator, disturbance handler, figurehead, and so forth). Unfortunately, very little

research has investigated the Mintzberg managerial role taxonomy in any context, let alone an organizational withdrawal research context.

Still, supervisors and managers are considered to have the potential to exert a significant influence on the attitudes, motivation, and behavior of their subordinates (Oldham, 1976). An illustration of how supervisory behavior can influence withdrawal cognitions relatively independently of an interpersonal role involves the supervisor's role in arranging the work setting in ways that are facilitating or inhibiting to work performance. Failure to coordinate the activities of co-workers, not procuring adequate resources, and simply making poor decisions can inhibit subordinate task performance and work unit productivity. Relatedly, working under a supervisor not interested in subordinate development can inhibit career growth and be related to turnover in that manner.

Despite the fact that the supervision factor was not predictive of turnover intentions in this research, it would probably behoove organizations to make use of supervisors in an effort to manage organizational withdrawal. The first-line supervisor is the linking-pin between different levels in the organization. Supervisors serve as representatives of upper-level management to their subordinates and also serve as representatives of their subordinates to the upper echelons of the organization (Katz & Kahn, 1978). In addition, the supervisor serves as a representative and liaison to groups positioned laterally or horizontally in the organizational structure. The transmission of information, the procurement and allocation of resources, and the potential to control rewards and sanctions all serve to facilitate task performance and psychological adjustment of subordinates. In other words,

the supervisor has the capability of making employees' lives easier and therefore can have an influence on withdrawal cognitions and behavior. Technical, career development, and interpersonal skills training of supervisors could be used in an attempt to influence patterns of goal-directed interaction such that the likelihood of turnover could be reduced.

Summary of the Moderator Analyses

A secondary research goal was to determine whether job category was acting as a moderator variable. The results indicated that job category was indeed operating as a moderator but explained only an additional two percent of the variance in turnover intention beyond what was explained by the linear components of the regression equation. This finding provides support to the contentions of Schmidt and Hunter (1978) and Zedeck (1971) who stated that moderator effects are difficult to find and often trivial in magnitude.

Schneider (1978) proposed three reasons why algebraic interaction terms often fail to reach statistical significance or result in rather trivial increments in the amount of variance explained in the criterion. First, extreme scores on the predictors are needed, and these are typically not obtained in organizational field research. As noted earlier, the predictors were perception-based measures and people within work settings tend to agree on their perceptions (Schneider, 1978). Thus when people tend to agree on their perceptions, by definition the variance in their perceptions will be restricted. Hence, extreme scores tend not to exist. Second, the moderated regression procedure utilizes a multiplicative interaction term. As Schneider (1978) noted, multiplying

variable scores to create the interaction term requires a level of measurement not typically found in organizational research. Third, the use of algebraic interaction terms may be conceptually redundant because the predictor variable scores may be a function of a naturally occurring work setting person-situation interactions (Schneider, 1978).

Nonredundancy of the Turnover Diagnostic and the JDI

A secondary research goal involved a comparison of the Turnover Diagnostic and the JDI to determine whether the development of the Turnover Diagnostic was a reinvention of the satisfaction wheel. The extent to which the two instruments were redundant was assessed through the use of hierarchical multiple regression analyses. The results of the analyses revealed that the two instruments were not particularly redundant; adding the JDI to the Turnover Diagnostic explained an additional 4.2 percent of the variance in turnover intentions while adding the Turnover Diagnostic to the JDI explained an additional 9.6 percent of the variance in turnover intentions. If the two instruments were redundant, adding one to the other would not result in an increment in the amount of variance explained in the criterion.

These results provide relatively strong support to the idea that the JDI and Turnover Diagnostic are assessing different aspects of the respondents' work and organizational environments. On an empirical level, the average inter-scale correlation among the scales of the two instruments was not particularly high ($\bar{r}$ = .303). From a conceptual point of view, redundancy should not be expected because the Turnover Diagnostic was developed from items that assessed individuals job-related perceptions while the JDI has a more of an evaluative affective flavor. Somewhat unexpectedly, the Turnover Diagnostic (R = .545) was

equally predictive of turnover intentions as was the JDI (R = .486). This finding is unexpected because theoretically attitudinal measures such as the JDI are supposed to be more highly correlated with intentions than are perception measures such as the Turnover Diagnostic. One explanation for this result is that the criterion-keying strategy ensured a relatively high degree of correspondence between the Turnover Diagnostic items and the turnover intentions criterion. There appears to be relatively less correspondence between the JDI items and scales and the turnover intentions criterion. A further indication of the lack of redundancy between the two instruments is revealed by an examination of the content of the scales. Clearly, the items defining the scales are qualitatively different and tap different content dimensions. In summary, it does not appear that the Turnover Diagnostic and the JDI are particularly redundant. It might therefore be beneficial to use them in conjunction in order to better predict and understand withdrawal cognitions and behavior.

Summary

Taking the findings into account, it appears that the major goal of this research effort has been accomplished. An instrument assessing employee perceptions of organization-wide, job, task, and career factors was developed and was found to be predictive of turnover intentions in a multi-organizational sample and in an independent sample. Four of the five Turnover Diagnostic scales were significantly predictive of turnover intentions in the original WFCQ sample. Three of the five scales were significantly predictive of turnover intentions in the independent bank sample.

Each factor was examined to explain why it was related to turnover intentions. In addition, some suggestions were made concerning how

manipulating the issues involved in each factor could contribute to the control of organizational withdrawal behavior. Of course, the importance (in a predictive sense) of these scales will undoubtedly vary across individuals, work settings, and organizations. For example, organizational career facilitation might be more strongly related to turnover intentions for those individuals who have a strong role orientation (Bartol & Manhardt, 1979; Graen & Ginsburgh, 1977). Relatedly, supervision issues might be more predictive of turnover for those individuals whose supervisors have a great deal of power and influence. In addition, the type of organization may have an effect on the relative importance of the Turnover Diagnostic scales. Previously it was hypothesized that organizational status might be somewhat more important for individuals employed in service organizations where there is a relatively high frequency of direct client contact. The extent to which organizational type influences the importance of the Turnover Diagnostic dimensions will have to be evaluated in future research.

Four recommendations are made regarding the future use of the Turnover Diagnostic. First, it should be administered to employees in additional organizations to determine whether the results obtained here (regarding predictive power and relative contribution of the five factors) vary as a function of organization and job type. Second, the instrument should be expanded by the addition of new items, especially for the STATUS and TRAIN factors. Third, the degree to which the Turnover Diagnostic is predictive of actual turnover should be assessed. While obtaining data on the level of turnover intentions is useful and interesting, actual turnover is considered the ultimate criterion in organizational withdrawal research. Fourth, new scales should be created by

writing additional items to accompany the items that were found to be predictive of turnover intentions independent of the five factor analytically derived scales. Two of these four items (items 6 and 104) appear to be equally related to INHIB and CAREER and could be included in either of those two scales in the future. However, the other two items (items 10 and 21) may represent "missing factors." It is recommended that future research with the Turnover Diagnostic should proceed only after additional items are written to develop scales around item 10 (job security) and item 21 (sharing of relevant information at all organizational levels). Including these two scales with the five scales that exist could increase the predictive power of the Turnover Diagnostic, as well as make it a more useful diagnostic tool.

Independent of the use of the Turnover Diagnostic, future research is clearly warranted regarding the role of organizational career facilitation practices and inhibiting conditions related to task performance as contributing factors to withdrawal cognitions and behaviors among employees. The identification of these factors as the most important predictors of turnover intentions was the most positive outcome of this research. The inclusion of these factors in future organizational withdrawal research is strongly encouraged.

Perceptions and Attitudes as Predictors of Turnover Intentions and Turnover

A second important goal in this research was to examine the pattern and magnitude of the relationships among descriptive measures (job-related perceptions and beliefs), evaluative measures (job-related attitudes such as satisfaction), and intention measures. Specifically, the relationship among job-related perceptions of organization-wide, job,

task, and career factors, satisfaction with those factors, and turnover intentions were analyzed. When the global single-item satisfaction measures were used, the results indicated strong support for the pattern of relationships hypothesized by Fishbein and Ajzen (1975). The same pattern of results was not found for the JDI satisfaction scales, however, possibly because of an absence of correspondence between the JDI scales and the criterion. In a regression context, adding the global satisfaction items to the perception measures resulted in a significant increment (18.7 percent) in the variance of turnover intentions whereas adding the perception measures to the satisfaction measures resulted in only a trivial increase in the amount of explained variance (2.0 percent) in turnover intentions.

This suggests that, temporarly, perceptions may precede attitudes and that perceptions contribute causally to the formation of attitudes. It should be noted that this hypothesis cannot be tested given the nature of the data available. Testing such a hypothesis would require collecting longitudinal data. Of course, attitudes and perceptions may be reciprocally causative (James & Jones, 1980). If one accepts the premise that perceptions procede and contribute to the formation of attitudes, a case could be made for devoting more research scrutiny to descriptive measures (i.e. perceptions) of factors of people's work environments rather than relying on evaluative measures (e.g., satisfaction).

Although Fishbein and Ajzen (1975) predicted that attitudes are more highly correlated with intentions and behavior than perceptions (as was the case in this research for the global satisfaction items), there are several reasons why an increased reliance on descriptive measures such as job-related perceptions might be appropriate. First,

individuals' perceptions of various aspects of their work environments are the most important data for understanding their attitudes, intentions, and behavior (Schneider, Parkington, & Buxton, 1980). Second, people in work settings tend to agree more about perceptions than they do about their affective evaluative reactions to features of their work settings (Schneider et al., 1980). Third, since attitudes are to a very large extent based on perceptions, an understanding of the attitudinal correlates of withdrawal cognitions and behavior will be enhanced by examining those perception/belief factors associated with relevant attitudes. Fourth, the use of perception/belief measures enhances the actionability of the research results if interventions or change attempts are to be based on those results. Fifth, perceptions may be more stable over time than attitudes.

Another important outcome of this research was the demonstration that prediction and understanding is enhanced when all aspects of the experienced organization are taken into account. Individual's perceptions and descriptions of organization-wide, job, task, and career factors were all assessed and used to predict the criterion of interest. Had any of these dimensions of organizational social system not been examined, the predictive power of the regression model would have been reduced.

Turnover Intentions as an Appropriate Criterion

Another important theoretical and practical issue concerns the appropriateness of using turnover intentions as the dependent variable of interest in this research. Obviously from a practical standpoint it would have been more desirable to have used actual turnover as the major

dependent variable. However, the position advocated here is that turn-over intentions are not as shabby as a criterion as some might propose. Based on the writings of Thorndike (1949), Latham and Pursell (1977) proposed several criteria for criteria in organizational research: (1) relevance, (2) reliability, (3) freedom from contamination, and (4) practicality.

For example, the fact that researchers consistently have found a moderately high correlation ($\bar{r}$ = .57) between turnover intentions and turnover points to the relevance of using intentions as a criterion. Bluedorn (1980) has reported that turnover intentions can be measured reliably. Turnover intentions items considered as measures do not appear to be plagued more by contamination than do descriptive, evaluative, or behavioral measures. Finally, assessing turnover intentions may have some very practical pay-offs. For example, the use of intentions measures might permit people to forecast personnel losses with reasonable accuracy (Kraut, 1975). Another potential benefit is that decision-makers might be able to identify problem areas and allow preemptive action to be taken before people actually start leaving (Kraut, 1975).

Beyond these potential manpower planning benefits, the fact that people are reporting that they intend to quit their jobs should be an important piece of information in and of itself. It can be hypothesized that people who have made a decision to quit but have not yet done so may behave differently than those individuals who are intending to remain employed in the organization (Bowen, 1982).

A Question of Emphasis: Process or Antecedents

A number of researchers and theorists concerned with organizational withdrawal have emphasized that understanding of turnover would be enhanced by examining the withdrawal process rather than by continuing the search for additional bivariate correlates of turnover (e.g., Mobley, 1977, 1982; Steers & Porter, 1973). Mobley has been the most vocal advocate of concentrating on research of the withdrawal process. Understanding the organizational withdrawal process certainly is a laudable research goal, but Mobley (1982) almost seems to be advocating that research investigating the antecedents of turnover be abandoned. While a focus on the withdrawal process may be theoretically satisfying, from a practical standpoint a continued investigation of the antecedents of the withdrawal process seems warranted. For example, Mobley identified job satisfaction as the conditional causal agent in his model, but did not specify the factors that contributed to satisfaction/dissatisfaction. It seems appropriate to advocate a continued investigation of the bases of satisfaction as a way of enhancing our understanding of organizational withdrawal.

Organizational Withdrawal Related Research Issues

Organizational withdrawal as a research topic has been attracting more attention in the organizational behavior literature in the last few years. Organizational withdrawal researchers and theorists have raised several interesting issues related to turnover that were not directly addressed in this research. In order to do justice to organizational withdrawal these issues are discussed briefly.

Alternative Ways of Classifying Turnover: Functional versus Dysfunctional; Controllable versus Uncontrollable

Traditionally, it has been assumed the turnover is predominantly dysfunctional to organizations due to increased costs (recruiting, hiring, training, outprocessing, etc.), productivity loss, disruption of social and communication structures, etc. (Jeswald, 1974; Mobley, 1982). Increasingly, however, organizational withdrawal researchers and theorists are questioning this traditional assumption about the general dysfunctional nature of turnover (Dalton, Krackhardt, & Porter, 1981; Dalton & Todor, 1979; Dalton & Todor, in press; Dalton, Krackhardt, & Todor, 1982; Mobley, 1982; Muchinsky & Tuttle, 1979; Staw, 1980; Staw & Oldham, 1978). It should be noted that these authors are not saying that turnover is good, but rather they are implying that the dysfunctional consequences of turnover may have been overstated.

Dalton et al. (1981) and Dalton et al. (1982) have questioned the traditional voluntary-involuntary turnover dichotomy, suggesting that understanding of the consequences of turnover can be enhanced by classifying turnover as functional or dysfunctional and controllable and uncontrollable. They note that turnover can be functional for an organization if poor performing employees quit their jobs. Dysfunctional turnover occurs when high performing or hard to replace employees quit. Dalton and his colleagues further speculate that a substantial proportion of employee turnover can be classified as unavoidable and uncontrollable (e.g., individuals returning to college, spouses being transferred, illness, death, etc.). Unavoidable/uncontrollable turnover is that which no reasonable management intervention could have prevented (Dalton et al., 1982). The conclusion that Dalton and his colleagues draw is that,

>by separating turnover...into dysfunctional and
>functional categories and considering that cer-
>tain turnover, for all practical purposes, is
>unavoidable, one might be able to obtain a more
>responsible estimate of the impact of turnover
>(Dalton et al., 1982, p. 121).

Consequences of Turnover

As has been noted previously, organizational withdrawal researchers

have usually been preoccupied with discovering the antecedents of turn-

over rather than the consequences. One consequence that has attracted

a moderate amount of attention is the monetary cost incurred by the

organization (Dalton & Todor, in press; Mirvis & Lawler, 1977). Rela-

tively little attention has been directed at other negative and positive

outcomes at the organizational and individual level.

For example, potential positive consequences for an organization

include displacement of poor performers, infusion of new ideas and "new

blood", increased internal mobility opportunities, increased satisfaction

among stayers, increased organizational productivity, reduction of en-

trenched conflict, and innovation and adaption (Mobley, 1982; Staw, 1980).

For those who leave, possible negative consequences include loss of

accumulated seniority, disruption of family and social support systems,

transition-related stress, and disruption of career progression (Mobley,

1982). Alternatively, terminating one's employment and finding another

job may result in increased earnings, career advancement, better "person-

organization fit", attainment of nonwork values, and enhanced self-

efficacy perceptions (Dalton & Todor, 1979; Mobley, 1982).

The Role of Performance in the Turnover Process

Another interesting question, and one for which there is little

relevant data, is whether good performers or poor performers are more

likely to leave. Martin, Price, and Mueller (1981) presented some evidence that better performers are more likely to terminate. Contradictory evidence was reported by Seybolt, Pavett, and Walker (1978) and by Wanous et al. (1979). Whether good or poor performers predominate among those who leave obviously has important cost and intervention implications for organizations (and is directly relevant to the functional-dysfunctional dichotomy proposed by Dalton et al., 1982).

Conclusion

In closing, the outcomes of this research have to be considered relatively positive. The criterion-keying strategy employed in this research appears to be a potentially useful approach to instrument development. The Turnover Diagnostic instrument was of a manageable length and had a relatively clear factor structure. In addition, the Turnover Diagnostic was reasonably predictive of turnover intentions. Assessing respondents' perceptions of all the relevant dimensions of their organizational social systems was instrumental in yielding the obtained predictive power of the Turnover Diagnostic. The two most important predictors of turnover intentions (organizational career facilitation and task inhibition) are constructs that have not previously been identified in the organizational withdrawal research literature.

Future research efforts in which the Turnover Diagnostic or modifications of it, are used should be concerned with determining the extent to which the Turnover Diagnostic is predictive of actual turnover. Based on the results of this research, the use of the Turnover Diagnostic appears to be a promising approach to the prediction and the eventual management of turnover.

Finally, to further advance our understanding of the organizational withdrawal phenomenon, in addition to a continued investigation into the antecedents of organizational withdrawal, future research in this area should investigate more fully the cognitive and behavior process individuals go through when they withdraw from an organization, the positive as well as negative consequences of turnover for both organizations and individuals, and the role of performance in turnover.

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APPENDIX

Work, Family, and Career Questionnaire

WORK, FAMILY, CAREER

QUESTIONNAIRE

b. schneider
h. peter dachler

industrial psychology

General Directions For This Questionnaire

This survey is an attempt to find out some of the kinds of things people like yourself might consider when they are thinking about whether they are going to stay with the organization they are currently with. The questions we are asking will help us understand some things about people, like yourself; how you see things that happen in your organization, in your job, in your family and career, and how you feel about these things in terms of remaining with your present organization.

Thus, we want you to answer the following questions as if you were considering whether to stay or leave your present organization and you were just sitting back to sort of take stock of all the kinds of conditions that exist for you in your present work situation.

Note that we do not want you to tell us how much you like things, or how satisfied you are. It is important that you describe the actual conditions that you perceive exist for you, and therefore the conditions you might experience by remaining with your present organization.

There are several sections in this questionnaire. Read each set of directions carefully so you will understand exactly what we are asking. Throughout the survey we want you to try to give us your most typical thought or feeling. We realize that people have "good days" and "bad days" which cause variations in the way they see their worlds. However, it would help us most if you can answer in terms of your most frequent, most customary reaction.

The beginning of the questionnaire deals with a description of your organization (in terms of the entire organization's general characteristics), your job (your immediate work surroundings, includ- ing the people you work with, your supervisor, and other aspects of your work surroundings), and your task (the specific activities you engage in, your duties, and the materials and equipment you use). Later sections will ask you about your family and your career.

We feel that trying to understand what issues are involved when people think about whether they are going to remain with an organiza- tion, may help to create more meaningful work environments in terms of all of the interests and goals people have. We are indebted to you for your help and we hope that you will give this questionnaire your most serious consideration.

Thank you for your cooperation.

SECTION ONE: DESCRIPTION OF YOUR ORGANIZATION. First we would like you to tell us about what conditions exist in your whole organization. Do this by indicating the frequency with which each event or condition listed below occurs in your organization. Please remember to give us your description in terms of how you ordinarily view your organization, not only in terms of how you perceive conditions to be today.

Very Infrequently	Infrequently	Sometimes	Frequently	Very Frequently
A	B	C	D	E
▯	▯	▯	▯	▯

EXAMPLE   Take the following statement:

This company rewards its employees.

If your organization rewards its employees frequently you would fill in the box under D on your answer sheet; if rewards are made very infrequently then you would fill in the box under A on your answer sheet.

ON YOUR ANSWER SHEET INDICATE, BY FILLING IN THE APPROPRIATE BOX, HOW FREQUENTLY EACH CONDITION OCCURS IN YOUR ORGANIZATION

1. This organization encourages supervisors to consider employee ideas in making decisions.

2. This organization is considered by others in the field to be a leader.

3. This organization seeks the best possible people for the jobs it has open.

4. People who work in this organization do not refer to themselves as company people.

5. This organization emphasizes getting the work done.

6. This organization provides employees the opportunity to develop themselves.

7. The general public considers this organization to be a high status organization.

8. New employees find out what this organization is all about.

9. This organization provides opportunities for professional training.

10. This organization provides conditions which give employees security.

11. New people in this organization do not receive a specified amount of supervised experience before they are required to work on their own.

12. This organization directly relates rewards to the employee's performance.

13. This organization has conditions which keep people from getting their jobs done.

14. This organization is flexible (it does not "go by the book") in the way it makes decisions.

15. This organization improves the fringe benefit plans it provides its employees.

16. This organization rewards its employees.

17. People in the organization get ahead on who they know not what they know.

18. This organization's personnel practices result in people who are unable to handle the job.

19. This organization enforces rules and regulations.

20. Promotions in this organization are made on a seniority basis.

21. People at different levels in this organization are informed about what is going on.

22. This organization takes an interest in the well-being of its employees.

23. This organization encourages supervisors to communicate the organization's goal to employees.

24. There is open communication (up and down) between interacting organizational units.

25. People outside the organization think that the people who work here are high caliber people.

26. Work groups (units, departments) in this organization have conflicting goals and objectives.

27. People outside this organization do not think much of what this organization is trying to accomplish.

PLEASE DO NOT WRITE IN THIS BOOKLET

SECTION TWO: DESCRIPTION OF YOUR JOB. In this section, we would like you to describe what conditions exist for you on the job you hold. Again, you can do this by filling in the box on your answer sheet that indicates how frequently each of these conditions or events generally occur on your job.

Very Infrequently	Infrequently	Sometimes	Frequently	Very Frequently
A	B	C	D	E
0	0	0	0	0

ON YOUR ANSWER SHEET INDICATE THE FREQUENCY WITH WHICH THE CONDITION OCCURS ON YOUR JOB

Please be sure you
are at space 28 on
your answer sheet

28. More applicants apply for the kind of jobs I have than the organization can hire.

29. Supervisors I have contact with help people get their work done; supervisors facilitate, rather than hinder work accomplishment.

30. Supervisors I work with use the rewards they have (praise, performance appraisals) to let people know when they've done a fine job.

31. People outside the organization have respect for the kind of job I have.

32. People coming on the job get special training that helps them get started.

33. In their job behavior, people I have contact with take into account what their co-workers want them to do.

34. Employees on the job are informed about how their job fits in with other jobs.

35. The kind of jobs that I am involved in attract people with little skill.

36. People on my job are assigned involuntary overtime.

37. People help each other out on the job.

38. In the job I have, people fail to set their own work goals.

39. Supervisors I have contact with discuss employee job behaviors with them.

40. The employees I work with on the job have a wide range of interests.

41. Each job is given certain specified goals to be attained.

42. Conditions on my job do not permit people to reach their work goals.

43. New employees on the job are assigned to a specific person who helps them get used to the job.

44. The job I am involved in requires people with rare skills.

45. People on the job lack the opportunity to develop new skills and abilities.

46. There exists definite "in" and "out" groups on the job.

47. Supervisors I deal with explain to employees the things they can expect from performing in different ways.

48. In supervising people, bosses I work with take into account how people feel from one day to another.

49. Conditions on my job are confusing.

50. Supervisors I work with share with subordinates information about what is happening in the company.

51. People on the job establish personal friendships.

52. Employees are not given the opportunity to get special training to help them do their job.

53. Supervisors I work with do not know what their people want.

54. People on the job overstate and exaggerate their accomplishments.

55. The job environment allows people to interact.

56. People around here talk about the pride they have in their job.

57. Supervisors I deal with are experts at the jobs they supervise.

SECTION FOUR (a): DESCRIPTION OF CAREER. Another consideration people might take into account when thinking about whether they will remain with their present organization is their career. A person's career consideration might take two forms: (1) their own personal planning of a career, as well as where they feel they are in their career progress, and (2) the extent to which conditions within their organization and in their job affect their career.

First, we would like you to tell us what you think about your career and your job as an aspect of your career. To do this, indicate on your answer sheet how accurate each statement is as a description of your career planning and your career progress.

Not at all Accurate	Marginally Accurate	Somewhat Accurate	Generally Accurate	Very Accurate
A	B	C	D	E
0	0	0	0	0

INDICATE HOW ACCURATE EACH STATEMENT IS CONCERNING YOUR CAREER

Please be sure you
are at space 84 on
your answer sheet

84. I think of my job as being a "stepping stone" to another job.

85. I have realistically planned what I will be doing in the future.

86. I don't give career issues much attention.

87. My job is one I have for reasons beyond my control.

88. The choice of my present job had nothing to do with any career plans.

89. I don't think I have much control over what job(s) I hold in the future.

90. I am just about where I want to be in my career.

91. I have chosen my present job in terms of how much it contributes to my career.

92. I have seriously considered pursuing a number of careers.

93. I pick my jobs as they come, not in terms of any career program.

94. The job I have has little to do with my career.

95. I am not sure what my career plans are.

96. I don't think I will actively continue to pursue the career I am in.

97. I know what training and/or experience I need to advance in my career.

SECTION FOUR (b): DESCRIPTION OF CAREER, CONTINUED. As a second step in understanding how your career may affect your considerations about whether to remain with your present organization, we would like you to indicate the frequency with which organizational and job conditions affect your career. Please do this again by using the response scale provided below and filling in the appropriate space on your answer sheet.

Very Infrequently	Infrequently	Sometimes	Frequently	Very Frequently
A	B	C	D	E
0	0	0	0	0

ON YOUR ANSWER SHEET INDICATE THE FREQUENCY WITH WHICH THE ORGANIZATIONAL CONDITION AFFECTS YOUR CAREER

Please be sure you
are at space 98 on
your answer sheet

98. There are opportunities for me to pursue my career interests in this organization.

99. This organization provides information about how different jobs fit into different career programs.

100. The organization provides information and counseling about my career.

101. This organization helps me achieve my personal career goals.

102. This organization does not take people's career interests into consideration when placing them in various positions.

103. Supervisors I work for inhibit my career progress.

104. The organization makes it difficult for me to change into a different career.

105. This organization exposes people to jobs that fit into various career patterns.

PLEASE DO NOT WRITE IN THIS BOOKLET

SECTION THREE: DESCRIPTION OF YOUR TASK(S). You have already described the organization and the immediate job situation. For this section of the survey we want a description of the specific tasks and duties you perform in your job. Please use the same scale as shown below to indicate how frequently each condition or event occurs.

Very Infrequently	Infrequently	Sometimes	Frequently	Very Frequently
A	B	C	D	E
☐	☐	☐	☐	☐

ON YOUR ANSWER SHEET INDICATE THE FREQUENCY WITH WHICH THE CONDITION OCCURS IN PERFORMING YOUR TASK(S)

Please be sure you
are at space 58 on
your answer sheet

58. People can tell from the outcomes of my tasks and duties that I have performed them rather than some other person.

59. The tasks I work at require me to make different kinds of decisions.

60. Getting my task done in this company requires coordinating the efforts of a number of people.

61. I perform tasks which not many people I work with could accomplish.

62. Supplies needed for my job are available.

63. My task is set up so that I get to see the finished product as the final outcome of what I do.

64. My task requires me to do pretty much the same things over and over.

65. I have to learn difficult skills and abilities in performing my task.

66. The tasks I do require updating of skills and abilities.

67. There is only one way to get my tasks accomplished.

68. My task is set up so that I can determine the procedures for getting the work done.

69. My task does not allow me to find out how I am doing on the job.

70. I find out very quickly whether my task performance is appropriate.

71. I have advance warning (enough time to get ready) before being moved to a new task.

72. The duties I have are set up so that I make decisions about what I will be working at.

73. Tasks are set up here so that from day-to-day I know what I will be working at.

74. The tasks I work at are set up so that I do not work with others.

75. I have responsibility for doing more than one specific task.

76. The equipment and procedures I use in getting my tasks done break down.

77. Performing my duties requires all the skills I have.

78. Other people in this company very much depend on how I accomplish my tasks.

79. I schedule my own work.

80. Making an error in performing my tasks has grave consequences.

81. An important part of accomplishing my task is working with others.

82. I am moved from task to task before being able to completely learn any one task.

83. My general health affects how well I can perform my tasks.

PLEASE DO NOT WRITE IN THIS BOOKLET

SECTION FIVE (a): DESCRIPTION OF YOUR FAMILY. In order to understand how some non-job related things may affect people's decisions about whether to remain with their present organization, we would like to first ask you to describe some aspects of your family. In the second part of this section we will then ask you to indicate to what extent your organization, including your job and task affect conditions and events in your family.

Very Infrequently	Infrequently	Sometimes	Frequently	Very Frequently
A	B	C	D	E
▯	▯	▯	▯	▯

PLEASE INDICATE THE FREQUENCY WITH WHICH THE CONDITIONS OR EVENTS OCCUR IN YOUR FAMILY BY FILLING IN THE APPROPRIATE BOX ON THE ANSWER SHEET

Please be sure you
are at space 106 on
your answer sheet

106. My family worries about (real or possible) expenses for family sickness.

107. My family and I take vacation trips.

108. My family entertains friends.

109. I do not have time to do things with my family.

110. There is no time to take care of personal family business.

111. My family gets together with relatives.

112. Activities of my spouse are interfered with.

113. My family discusses things about my job.

114. My wife (or husband) participates in community and/or other social or religious activities.

115. My family moves from one area of the country to another.

116. My family worries about the schools our child(ren) is (are) in.

117. My family is not free to decide when to do things they want to do.

118. My family lets others know what organization I work for.

119. My wife (or husband) is more involved with raising the children than I.

120. My family pursues leisure time activities.

121. My family puts money in the bank or invests for the future.

122. My family asks to visit my workplace.

123. My family and I work around the house.

124. There are things my family needs that we are not able to afford.

125. My family is restricted in what they can do in this area.

126. My family meets interesting people.

127. My family is isolated from people they enjoy being with.

128. My family tells me I am moody.

129. My wife (or husband) makes important decisions affecting the family by herself (himself).

130. My family discusses moving to another area.

131. My family participates together in leisure and/or community activities.

132. My family discusses with others what I do for a living.

SECTION FIVE (b): You have just described how frequently various events and conditions occur in your family. We would like you to indicate now to what extent your organization, including your job and the tasks you perform, affect the frequency with which the above-mentioned events or conditions occur in your family.

On your answer sheet indicate how much impact your organization (including your job and tasks) has on the frequency of occurrence of each event or condition. Please read the example.

Not at All	Somewhat	Moderate	Considerable	To a great Extent
A	B	C	D	E
☐	☐	☐	☐	☐

EXAMPLE:

Eat lunch at home.

Suppose that you infrequently eat lunch at home. If this is "to a great extent" because of your work, you would fill in the box under E on your answer sheet. However, if your work has a "moderate" affect on how frequently you eat lunch at home, you would fill in the box under C on your answer sheet.

ON YOUR ANSWER SHEET INDICATE THE IMPACT OF YOUR ORGANIZATION, JOB, AND TASKS ON CONDITIONS OR EVENTS IN YOUR FAMILY

Please be sure you are at space 133 on your answer sheet

133. My family worries about (real or possible) expenses for family sickness.

134. My family and I take vacation trips.

135. My family entertains friends.

136. I do not have time to do things with my family.

137. There is no time to take care of personal family business.

138. My family gets together with relatives.

139. Activities of my spouse are interfered with.

140. My family discusses things about my job.

141. My wife (or husband) participates in community and/or other social or religious activities.

142. My family moves from one area of the country to another.

143. My family worries about the schools our child(ren) is (are) in.

144. My family is not free to decide when to do things they want to do.

145. My family lets others know what organization I work for.

146. My wife (or husband) is more involved with raising the children then I.

147. My family pursues leisure time activities.

148. My family puts money in the bank or invests for the future.

149. My family asks to visit my workplace.

150. My family and I work around the house.

151. There are things my family needs that we are not able to afford.

152. My family is restricted in what they can do in this area.

153. My family meets interesting people.

154. My family is isolated from people they enjoy being with.

155. My family tells me I am moody.

156. My wife (or husband) makes important decisions affecting the family by herself (himself).

157. My family discusses moving to another area.

158. My family participates together in leisure and/or community activities.

159. My family discusses with others what I do for a living.

PLEASE DO NOT WRITE IN THIS BOOKLET

SECTION SIX (a): SATISFACTION WITH CONDITIONS. In this section we would like you to tell us how satisfied or dissatisfied you are with the conditions you have described for the organization, your job, your tasks and duties, your family, and your career.

First go back to Section ONE, DESCRIPTION OF YOUR ORGANIZATION, and look at the conditions and events you described. Then tell us how satisfied or dissatisfied in a really general sense those conditions and events make you, and indicate this on your answer sheet. Do the same for Section TWO, DESCRIPTION OF YOUR JOB, for Section THREE, etc.

Highly Dissatisfied	Moderately Dissatisfied	Neither Satisfied Nor Dissatisfied	Moderately Satisfied	Highly Satisfied
A	B	C	D	E
◻	◻	◻	◻	◻

INDICATE ON YOUR ANSWER SHEET HOW SATISFIED OR DISSATISFIED YOU ARE WITH THE CONDITIONS IN EACH AREA

Please be sure you
are at space 160 on
your answer sheet

160. How satisfied I am with the organiza-
tion (Section ONE).

161. How satisfied I am with my job
(Section TWO).

162. How satisfied I am with my task(s)
(Section THREE).

163. How satisfied I am with my career
(Section FOUR a).

164. How satisfied I am with organizational
conditions for my career (Section FOUR b).

165. How satisfied I am with my family
(Section FIVE a).

166. How satisfied I am with the organiza-
tional conditions affecting my family
(Section FIVE b).

167. How satisfied I am with my life in
general.

SECTION SIX (b): IMPORTANCE. You have given us a description and indicated your satisfaction for your organization, job, tasks, family and career. Now we would like you to indicate on your answer sheet how important each of these aspects of your work life are to you when you think about whether to stay with or leave your present organization.

Not at all Important	Somewhat Important	Important	Very Important	Extremely Important
A	B	C	D	E
◻	◻	◻	◻	◻

INDICATE ON YOUR ANSWER SHEET HOW IMPORTANT EACH AREA IS IN DECIDING WHETHER TO REMAIN WITH YOUR PRESENT ORGANIZATION

Please be sure you
are at space 168 on
your answer sheet

168. Organization conditions

169. Job conditions

170. Task conditions

171. Your career considerations

172. Organizational conditions for
your career

173. Considerations concerning your
family conditions

PLEASE DO NOT WRITE IN THIS BOOKLET

SECTION SIX (c): In this section we would like to ask a number of questions about your plans or intentions to remain in your present job, and what you would do if you were to leave your present organization.

174. Indicate on your answer sheet how strongly you feel at present about leaving or staying in your organization.

Strongly inclined to leave	Inclined to leave	Don't know whether I want to stay or leave	Inclined to stay	Strongly inclined to stay
A	B	C	D	E
▯	▯	▯	▯	▯

175. Now indicate how much longer you think you will actually stay with your present organization.

1 year or less	1-2 years	3-4 years	5-10 years	10 years +
A	B	C	D	E
▯	▯	▯	▯	▯

176. If for some reason you were to leave your present organization, how many alternative positions which are at least as desirable as the present position, do you realistically expect you could get. Mark the appropriate box on your answer sheet.

ZERO	ONE	TWO	THREE	FOUR or more
A	B	C	D	E
▯	▯	▯	▯	▯

177. If for some reason you wanted to quit your present job, how many alternative jobs within your present organization which are at least as desirable as your present job, do you realistically expect you could get. Mark the appropriate box on your answer sheet.

ZERO	ONE	TWO	THREE	FOUR or more
A	B	C	D	E
▯	▯	▯	▯	▯

178. Now we would like you to indicate to what extent your special skills and abilities would help or hinder you in obtaining an acceptable alternative job. Indicate on your answer sheet by filling in the box that is closest to your feelings.

Greatly hinder	Somewhat hinder	Neither hinder nor help	Somewhat hinder help	Greatly hinder help
A	B	C	D	E
▯	▯	▯	▯	▯

179. How does your family feel about the organization you work for? Indicate this on your answer sheet.

My family definitely wants me to leave my present organization	My family prefers that I leave my present organization	My family does not care whether I stay or leave	My family prefers that I stay in my present organization	My family wants me to stay with my present organization
A	B	C	D	E
▯	▯	▯	▯	▯

180. If you think about everything you know about your organization and job and the possible events in the foreseeable future, and assuming you want to remain with your present organization, what are your chances of being able to stay with your present organization?

Extremely poor chance of staying	Poor chance of staying	Fair chance of staying	Good chance of staying	Extremely good chance of staying
A	B	C	D	E
▯	▯	▯	▯	▯

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SECTION SEVEN: SATISFACTION WITH SPECIFIC JOB CHARACTERISTICS. In this section we are interested in your feelings about specific aspects of your job. First think about your WORK. What is it like most of the time?

On your answer sheet fill in the appropriate box:

If it describes your work	If you cannot decide	If it does NOT describe your work
A	B	C
▯	▯	▯

Please be sure you
are at space 181 on
your answer sheet

WORK ON PRESENT JOB

181. Fascinating	187. Respected	193. Challenging
182. Routine	188. Hot	194. On your feet
183. Satisfying	189. Pleasant	195. Frustrating
184. Boring	190. Useful	196. Simple
185. Good	191. Tiresome	197. Endless
186. Creative	192. Healthful	198. Gives sense of accomplishment

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Think of the PAY you get now. How well does each of the following words describe your present PAY?

On your answer sheet fill in the appropriate box:

If it describes your pay	If you cannot decide	If it does NOT describe your pay
A	B	C
▯	▯	▯

Please be sure you
are at space 199 on
your answer sheet

PRESENT PAY

199. Income adequate for normal expenses	203. Income provides luxuries
200. Satisfactory profit-sharing	204. Insecure
201. Barely live on income	205. Less than I deserve
202. Bad	206. Highly paid
	207. Underpaid

....

Think of the OPPORTUNITIES FOR PROMOTION that you have now. How well does each of the following words describe these?

On your answer sheet fill in the appropriate box:

If it describes your promotion opportunities	If you cannot decide	If it does NOT describe your promotion opportunities
A	B	C
▯	▯	▯

Please be sure you
are at space 208 on
your answer sheet

OPPORTUNITIES FOR PROMOTION

208. Good opportunity for advancement	212. Good chance for promotion
209. Opportunity somewhat limited	213. Unfair promotion policy
210. Promotion on ability	214. Infrequent promotions
211. Dead-end assignment	215. Regular promotions
	216. Fairly good chance for promotion

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Think of the kind of SUPERVISION that you get on the job. How well does each of the following words describe this SUPERVISION?

On your answer sheet fill in the appropriate box:

If it describes your supervision	If you cannot decide	If it does NOT describe your supervision
A	B	C
☐	☐	☐

Please be sure you are at space 217 on your answer sheet

SUPERVISION ON PRESENT JOB

217. Asks my advice	223. Up-to-date	229. Knows job well
218. Hard to please	224. Doesn't supervise enough	230. Bad
219. Impolite	225. Quick-tempered	231. Intelligent
220. Praises good work	226. Tells me where I stand	232. Leaves me on my own
221. Tactful	227. Annoying	233. Around when needed
222. Influential	228. Stubborn	234. Lazy

....

Think of the majority of the PEOPLE THAT YOU WORK WITH now or the people you meet in connection with your work. How well does each of the following words describe these people?

On your answer sheet fill in the appropriate box:

If it describes the people you work with	If you cannot decide	If it does NOT describe the people you work with
A	B	C
☐	☐	☐

Please be sure you are at space 235 on your answer sheet

PEOPLE ON YOUR PRESENT JOB

235. Stimulating	241. Fast	247. Unpleasant
236. Boring	242. Intelligent	248. No privacy
237. Slow	243. Easy to make enemies	249. Active
238. Ambitious	244. Talk to much	250. Narrow interests
239. Stupid	245. Smart	251. Loyal
240. Responsible	246. Lazy	252. Hard to meet

....

NOW PLEASE REMOVE SECTION EIGHT (PERSONAL DATA) FROM THE ENVELOPE AND COMPLETE IT.

SECTION EIGHT:

(6-7) AGE:____   (8) SEX (check one)

    ____Male
    ____Female

(9) MARITAL STATUS (check all that apply)

    ____Married
    ____Single
    ____Divorced, Separated or Widowed

(10-11) ENTER THE AGE OF YOUR YOUNGEST CHILD (if applicable)_____

(12-13) NUMBER OF CLOSE RELATIVES (UNCLES, COUSINS, ETC.) SEEN ON A REGULAR BASIS_____

(14-15) NUMBER OF YOUR DEPENDENTS (INCLUDE YOURSELF, SPOUSE, CHILDREN, PARENTS, ETC.)_____

(16) RACE (check one)

    ____Black   ____Oriental
    ____Indian   ____White
    ____Spanish-American   ____Other (please specify_____

(17) DO YOU OWN OR RENT WHERE YOU LIVE? (check one)

    _____Own   _____Rent

(18-19) EDUCATION: CIRCLE THE NUMBER INDICATING THE TOTAL YEARS OF SCHOOLING YOU HAVE OBTAINED:

    1 2 3 4 5 6 7 8   9 10 11 12   13 14 15 16 17 18 19 20
        grade school   high school   technical school, business school, college

(20-23) HOW LONG HAVE YOU WORKED IN YOUR PRESENT JOB? ____years ____months

(24-27) HOW LONG HAVE YOU WORKED IN YOUR PRESENT ORGANIZATION? ____years ____months

(28-29) NUMBER OF ORGANIZATIONS YOU PREVIOUSLY WORKED FOR_____.

(30) NUMBER OF COMMUNITY ACTIVITIES/ORGANIZATIONS YOU ARE ENGAGED IN_____.

(31) HAVE ANY OF YOUR RELATIVES HAD A CAREER IN YOUR ORGANIZATION? (check one)

    ____yes   ____no

(32) HOW LONG DOES IT TAKE YOU TO GET TO WORK FROM WHERE YOU LIVE (check one):

    ____less than 10 minutes
    ____between 10 and 20 minutes
    ____between 20 and 30 minutes
    ____more than a half hour but less than 45 minutes
    ____45 minutes or more

(33) DO YOU WORK (check one)

    ____Full time
    ____Part-time

(34) DO YOU GO TO SCHOOL (check one)

    ____Full-time
    ____Part-time   —not at all

(35-37) WHAT PERCENT OF YOUR FAMILY INCOME DO YOU PROVIDE BY WORKING (specify percent)_____

(38) WHICH OF THE FOLLOWING CATEGORIES BEST DESCRIBE YOUR JOB (check one):

    ____Upper Management
    ____Middle Management
    ____First-line Management
    ____Clerical/Administrative
    ____Skilled Worker
    ____Other (specify)_____

(39) WHICH OF THE FOLLOWING IS THE BEST ESTIMATE OF THE SIZE OF YOUR ORGANIZATION (check one):

    ____less than 10
    ____between 10 and 99
    ____between 100 and 499
    ____between 500 and 999
    ____between 1000 and 4999
    ____between 5000 and 14999
    ____more than 15,000

(40-45) IN THIS SPACE WRITE YOUR JOB TITLE_____
_____

(46) IN THIS SPACE WRITE WHAT YOUR ORGANIZATION DOES (please be specific)_____
_____