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VOLUNTARY TURNOVER AND OCCUPATIONAL CHANGE INTENTIONS ASSOCIATED WITH PERSON-ENVIRONMENT MISMATCH

By

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ABSTRACT

VOLUNTARY TURNOVER AND
OCCUPATIONAL CHANGE INTENTIONS
ASSOCIATED WITH PERSON-ENVIRONMENT MISMATCH

By

Linda Sue Kohl

This study examined voluntary turnover and occupational change intentions as a function of the degrees of mismatch between the individual and the organizational environment and between the individual and the occupational environment. A psychological model was developed integrating the research of organizational behavioralists and vocational psychologists in the area of organizational and occupational change. The model hypothesized that voluntary turnover intentions were mainly a function of the degree of person-organizational environment mismatch, followed by the degree of person-occupational environment mismatch and the interaction. It further hypothesized that occupational change intentions were mainly a function of the degree of person-occupational environment mismatch, followed by the degree of person-organizational environment mismatch and the interaction.

Data were collected from 709 business graduates of a large

midwestern university who graduated in the years 1977, 1972, 1967. The questionnaire included scales to measure personality type, intentions to change organizations, intentions to change occupations, and the degree of person-organizational environment mismatch. By comparing the personality type to the present occupation, the degree of person-occupational environment mismatch was determined.

Results indicated that the hypothesized relationships did not exist as predicted. However, the independent variable organizational mismatch was able to account for almost 20% of the variance variance in voluntary turnover intentions and 11% of the variance in occupational change intentions. When the variable job dissatisfaction was added to the analyses, 32% of the variance in voluntary turnover intentions and 21% of the variance in occupational change intentions was explained. It was also found that most individuals did not intend to change their organizations or occupations, even if they were mismatched. Possible explanations were offered to explain this. Again, however, the complete model was not supported because it was found that most individuals did not intend to change their occupations or organizations, even if they were mismatched. Possible explanations were offered to explain this.

The implications of these findings were discussed for both research and practice. It was suggested that future studies of turnover and occupational change include the independent variables: person-occupational environment mismatch and person-organizational environment mismatch. Research designs for voluntary turnover and

occupational change process models should emphasize both linkages between individuals and their occupations and between individuals and their organizations.

To Mom

Thank you for all your
encouragement, love, and prayers
and for being the best mother
a person could ever have.

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CHAPTER ONE

INTRODUCTION

In this chapter, the basic problem and its importance are described. This is followed by a brief summary of past research which addresses this problem. The purpose and contributions of the dissertation are then outlined and the terms conceptually defined. Finally, the remaining chapters are outlined.

BASIC PROBLEM

A general framework for understanding employee turnover and occupational change is proposed which combines research findings from organizational behavior and vocational psychology. This is done in an effort to examine voluntary turnover intentions, as well as occupational change intentions, as an outcome of either an occupational mismatch and/or an organizational mismatch with the employee. In the field of organizational behavior, turnover researchers have long been concerned with how organizational practices and characteristics interact with the employee's behavior and personal characteristics to cause turnover. From this perspective, voluntary turnover is viewed as a rejection of the organization. Vocational psychologists have been concerned with how the individual's characteristics determine the choice of an occupation and subsequent decisions to leave a chosen occupational field. From this viewpoint, voluntary turnover is perceived as a rejection of the

occupation.

In this dissertation, variables from these two fields are combined into a model of voluntary turnover and occupational change which clarifies whether the individual is rejecting the organization, the occupation, or both when voluntary turnover or occupational change occurs. This is done by considering how these two sets of variables affect the individual's decision to leave an organization/occupation. These two dimensions can be grouped as 1) the organizational component of turnover, usually considered by organizational behavioralists, and 2) the occupational and personality factors of vocational change considered by vocational psychologists. The advantage of such a two dimensional model is that it may help researchers and practitioners to better understand the interrelationships among the research findings isolated in the separate disciplines, and, thus, to better understand the causes of turnover.

PAST RESEARCH

Organizational Behavior

With respect to the basic problem outlined above, turnover findings have probably been confounded simply because researchers have not determined whether individuals also left their occupations when they changed organizations. Nor have they determined whether the individual's overriding reason for deciding to leave the organization was the fact that s/he was in the wrong occupation. It is proposed here that more than just organizational factors contribute to one's decision to leave.

While individuals may desire or need certain organizationa characteristics to perform effectively or be satisfied in their work, i they are in the "wrong" occupation these plusses may not be enough t compensate for occupational discontent. Thus, individuals may leave th organization, even though the organizational environment is ideal, t seek a better fitting occupation. As Holland (1976) states, "redesig of jobs, environment, and work organizations requires better models fo predicting and understanding the processes of person-person an person-environment interactions". Similarly, McCormick (1976) in a extensive article on job analysis states that the research field seem to be missing a systematic analysis of the relationship between specifi job characteristics and job satisfaction which takes into account th prevailing aspects of individual differences and individual interests.

Turnover researchers in organizational behavior have focused o improving such organizational factors as job design, organizationa commitment, or supervisory style in order to bring the incidence o voluntary turnover under some degree of control. However, turnover ha almost always been investigated by looking at only one occupationa group at a time which, of course, limits the generalizability an perhaps confounds the results obtained about which organizationa practices and characteristics help decrease the incidence of turnover Research in vocational psychology suggests that employees of the sam occupational group share common personality traits and common copin strategies for work. Therefore, as a group, they may desire job o organizational features different from those desired by othe

occupational groups.

Vocational Psychology

Crites (1969) defines vocational psychology as the study of one's vocational behavior and development through years of choice and adjustment. Research in the field of vocational psychology has focused on how and why people make career decisions. One of the ways to study this is to investigate those who make occupational changes---a behavior which often entails an organizational change as well (i.e. voluntary turnover).

Most of the research on occupational change and occupational stability deals with comparing previous and current occupations without regard to whether the individual left the organization or not (Gottfredson, 1977; Nafziger, Holland, Helms, and McPartland, 1974; Neopolitan, 1980; Parsons and Wigtil, 1974; Robbins, Thomas, Harvey, and Kandefer, 1978; Thomas, 1979). This method of analysis could possibly confound the results obtained because the particular situation/organizational context has not been examined to determine if perhaps the organizational context and environment contributed to the occupational change decision. In addition, there have been a few studies which explicitly considered occupational change when the individual changed organizations (Gilbride, 1973; Wiener and Vaitenas, 1977). Both studies investigated only the relationship among certain personality variables, the occupational environment, and the occupational change decision. Neither investigated the effects of the organization on occupational change. Only one study, by Snyder, Howard, and Hammer (1978) specifically investigated occupational change (from

professor to administrator) within the same organization. This study found that personality characteristics (need for power) and occupational characteristics (need for authority) both contribute to the particular occupational changes under investigation.

Summary

To summarize, just as most turnover researchers have not considered the individual's fit with the chosen occupation as a possible cause of voluntary turnover, so, too, have vocational psychology researchers ignored the possible contribution of specific organizational environment characteristics in the decision to change occupations. Thus, researchers in both areas have confounded the results obtained.

By asking individuals to list their present and previous occupations, turnover researchers may have been able to separate out the possible effects of being in the wrong occupation. It would then be possible to determine what percentage of the variance in voluntary turnover is accounted for by organizational characteristics, as well as by occupational characteristics. Similarly, by asking individuals who have changed occupations if they have also changed organizations, vocational psychology researchers may have been able to separate out the possible effects of being in the wrong organizational environment. In this way, the percentage of variance in occupational change accounted for by organizational and occupational characteristics could be determined separately. These effects are separated out and considered independently, as well as together, as part of the present research project, in order to build a more complete model of voluntary turnover and occupational change.

PURPOSE OF DISSERTATION

The model proposed here combines the findings of these two areas (i.e., organizational behavior and vocational psychology) in an attempt to better explain voluntary turnover and occupational change. The research presented here, though, is limited to considering only voluntary turnover intentions and occupational change intentions, not actual behaviors. Specifically, it is proposed here that turnover intentions occur when there is a mismatch between individuals and organizational characteristics (called person-organizational environment mismatch), when there is a mismatch between individuals and their particular occupational characteristics (called person-occupational environment mismatch), or when both occur (called a total person-environment mismatch). While voluntary turnover research has not used occupational mismatch as an independent variable, research has been done in vocational psychology which clearly demonstrates the fact that some individuals do leave their organizations when they are mismatched to their occupations (Gilbride, 1973; Wiener and Vaitenas, 1977). Thus, the present research is unique in the fact that it proposes that organizational change intentions can be the result of being mismatched to one's occupational environment, even if one is matched only to the organizational environment. By extending the investigation of turnover to both of these environments and their interrelationships with the individual's personality, the proposed model satisfies Lewin's (1955) formula for behavior (the ultimate independent variable of the model):

> "Behavior and development depend upon the state of the person ar
> his environment. B = f(P,E) have to be viewed as variables whi
> are mutually dependent upon each other. In other words, to

> understand or to predict behavior, the person and his environment have to be considered as one constellation of interdependent factors." (pp.239-240)

Similarly, it is proposed that occupational change intentions occur when there is a mismatch between individuals and the occupational environment (person-occupational environment mismatch), when there is a mismatch between individuals and their organizational environment or the organizational characteristics (person-organizational environment mismatch) or when both occur. Again, occupational change research has not considered organizational mismatch as an independent variable affecting decisions to change occupations; thus, the present research extends the field by suggesting that organizational mismatch may be a cause of occupational change.

The model proposed here is not concerned with what factors are in the occupational environment or the organizational environment which cause a mismatch. Rather, the model is psychological in that it posits that individuals have feelings of mismatch when they are mismatched to either or both of the environments. It further suggests that individuals try to determine the source(s) of these feelings and then take steps to alleviate these feelings. The steps taken to reduce or remove feelings of mismatch may be behavioral (leave the situation, increase absenteeism, slack in performance, etc.), intentional (increased intentions to search, leave, etc.), and/or attitudinal (lower satisfaction, lower organizational commitment, etc.). For this dissertation, the response of intention to change is the primary response to be investigated. Figure 1 presents the proposed model and

suggests that there are three basic situations under which individuals are likely to change occupations and/or organizations:

1. An individual is mismatched to the occupational environment and not to the organizational environment.
2. An individual is mismatched to the organizational environment and not to the occupational environment.
3. An individual is mismatched to both the occupational environment and the organizational environment.

In the first situation, individuals may seek alternative occupations within the organization if these alternatives are known and available. If no alternative occupations are available within the organization, the individual is likely to increase organizational turnover intentions while searching for a new occupation. Individuals may also seek a change of both environments when mismatched to their occupations and leave both their organizations and their occupations. Additionally, as

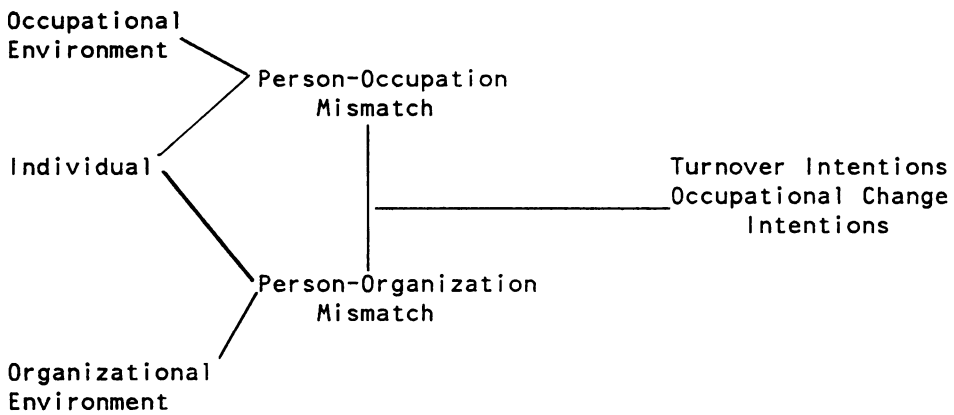

Figure 1. Model of Turnover and Occupational Change Intentions

explained in Chapter Two, there are also a number of other reasons why individuals may increase organizational change intentions when mimsatched to their occupations. Therefore, for the first situation, occupational change intentions and organizational change intentions are the result of being mismatched only to one's occupation.

When individuals are matched to their occupations but mismatched to their organizations (Situation 2), they are likely to increase voluntary turnover intentions. However, occupational change intentions may also occur because of knowledge of the external labor market conditions concerning one's occupation. For example, an astronaut who does not like the organizational environment of NASA may decide to leave NASA; however, in making that decision, s/he must also decide to change occupations. Another example of a situation in which individuals may also change occupations while changing organizations would be that there are specific features associated with the occupation which are not acceptable to the individual, such as typically low pay (e.g. teaching) or working too closely with people (e.g., social work). Similar to the first situation, there are also other reasons (to be explained in Chapter Two) why individuals may increase occupational change intentions when mismatched to their organizations. Thus, being mismatched to one's organization may result in one also changing occupations, as well as changing organizations.

For the third situation, individuals increase occupational change intentions as well as organizational change intentions. In this situation, individuals are mismatched to their work situation for two major reasons: the organizational environment and the occupational

environment. As a result, many individuals consider leaving both the organization and the occupation in order to alleviate feelings of mismatch.

CONTRIBUTION OF PROPOSED RESEARCH

By understanding more completely the reasons why individuals choose to leave their organizations may be ableand occupations, organizations to take precautionary measures which prevent valued employees from leaving, such as modification of organizational characteristics and/or providing vocational guidance and alternative vocational opportunities within the organization. From a theoretical perspective, the need to combine these two areas represents a step toward integrating the organizational behavior and personnel areas of industrial/organizational psychology and toward advancing the knowledge about turnover and occupational change.

Some researchers have voiced a concern that the study of organizational phenomena must be based on an integrative conceptualization. For example, in a recent plea to combine different areas of research, Cummings (1981) concludes that organizational behavior can "best be advanced by focusing on processes that operate across levels of analysis that have been traditional within our field" (p.56). A brief review of the literature concerned with occupational change and organizational change demonstrates the fact that researchers in these two areas have been investigating turnover independently. It must be remembered that all organizational behavior occurs within a context and that there are many environments within which the individual

functions. These environments are the results of the participants in those events, of past, current, and future events, and of the effects of these events on individuals affectively, cognitively, and/or behaviorally. Useful knowledge, which can be applied to the problems of an organization, must be based on and consider the entire context of a problem in order to effectively predict future behaviors and attitudes.

DEFINITION OF TERMS

Since there are a variety of definitions for some of the major variables used in this study, the definitions to be used in the proposed model are specified.

Turnover

Price (1977) defines turnover as "the degree of individual movement across the membership boundary of a social system" (p.9) and, thus, turnover represents both entry to and departure from an organization. However, lay people and most turnover researchers view turnover as being limited to one's departure from an organization. Thus, most researchers who are primarily concerned with turnover have studied those individuals leaving organizations rather than considering also those who enter organizations. These new entrants have usually departed from another organization, unless they are new to the employed labor force. Turnover is considered here as the process of leaving an organization and the subsequent change of membership status, which can be voluntary or involuntary, to another organization. Involuntary turnover is not considered here because, from the organization and the individual's perspective, it is quite often a phenomenon over which neither of the

parties has much control. For example, situational factors such as a career decision by one's spouse may cause involuntary turnover. Consider also the recent economic conditions in which budget cuts in many organizations have forced "layoffs" and permanent terminations.

Turnover Intentions

Some turnover researchers have begun to use intention to quit/stay as the criterion variable in place of actual turnover behavior (Bluedorn, 1980a; Martin, 1979; Spencer, Steers, and Mowday, 1981). The theoretical basis for the use of intention to quit as the dependent variable in turnover research is rooted in Fishbein's (1967) model of attitudes, intentions, and behavior. A major premise of Fishbein's model is that the best predictor of a given behavior is one's intention to engage in that behavior. However, this relationship is moderated by one's belief about and evaluation of the consequences of the behavior and by one' beliefs about and one's motivations to comply with the expectations of others about one's behavior. In nine laboratory studies of Fishbein's hypothesis, the average correlation between behavioral intention and the actual behavior was .7 (see Newman, 1974). Further theoretical support for the use of intentions rather than actual behaviors can be found in Locke's (1968) task motivation model which predicts that the most immediate motivational determinant of one's choice to act (especially with respect to task performance) is one's conscious goal or intention.

Bluedorn (1980a) and Coverdale and Terborg (1980) both present good arguments for the use of intention to quit as a substitute for actual turnover behavior. Bluedorn (1980a) states that "since intent to leave

appears as the immediate precursor of actual turnover behavior, for this reason alone studies of leaving intentions are justified" (p.25). He also presents a summary of 25 studies in which all found significant positive correlations between intention to quit and actual turnover behavior and in which 19 of 20 studies found intention to quit to be the most accurate predictor of turnover for periods up to and exceeding one year later. Coverdale and Terborg (1980) suggest use of intention to quit attitudes as the criterion variable in turnover research mainly because turnover incidents occur across time. In other words, trying to capture the actual behavior is dependent upon when the measurement is taken. At any point in time, there usually are some individuals who have not quit, but, are intending to quit in the near future. Additionally, the current economic conditions make it very difficult to study actual turnover behavior. For these reasons, intention to quit is used as one of the main criterion variables in this research and is defined as "the individual's expressed intention to leave his/her organization voluntarily."

Intention to Change Occupations

Use of intention to change occupations rather than the actual behavior can also be supported by the theoretical models just cited (see Fishbein and Locke above) on the relationship between intentions and actual behavior. Intention to change occupations is then defined as "the individual's expressed intention to change occupations voluntarily."

Occupation

An occupation is all jobs of a general class without regard to organizational lines (McCormick, 1979).

Personality Type

While there are a number definitions of personality, for the purposes of this study Holland's (1966) conceptualization of personality type is used. According to Holland (1966), a personality type is a complex array of personal attributes which are based on one's biological and social heredity and on one's personal history. Each of Holland's six personality types (Realistic, Investigative, Artistic, Social, Enterprising, and Conventional) represents common personality traits and needs and preferred strategies for coping with and functioning within a given occupational environment. Figure 2 presents a brief description of each of the six personality types, including self-perceptions, values, and some representative occupations.

Occupational Environment

The occupational environment is defined as those job aspects or job characteristics which are usually part of the occupation and which are basically similar across organizations. Aspects of the occupational environment include characteristics of the work itself, required skills and abilities, and characteristics of one's coworkers in the same occupation.

Holland (1966) proposed that each occupation placed differentiated demands on and provided differentiated opportunities for the individual to stimulate activity, foster competencies, encourage perceptions, and reward values. Thus, different occupations are associated with

Figure 2

Description of Personality Types

Interests/Competencies	Self-Perceptions	Personality Traits	Sample Occupations
REALISTIC Manual, mechanical agricultural, electricl, technical. Deficit in social-educ. skills.	Mechanical and athletic ability. Values money, power, and status.	Asocial (shy), conforming, frank, genuine, materialistic, persistent, practical, stable.	Laborers, machine operators, aviators, farmers, truck drivers, carpenters.
INVESTIGATIVE Scientific and mathematic. Deficit in persuasive interests and competencies.	Scholarly, intellectually self-confident, lacking in leadership ability.	Analytical, cautious, independent, introverted, pessimistic, rational, unpopular.	Physicists, anthropologists, chemists, mathematicians, biologists.
ARTISTIC Language, art, music drama, writing. Deficit clerical or business competencies.	Expressive, original, introspective, disorderly, nonconforming.	Complicated, disorderly. idealistic, intuitive, nonconforming, impulsive, imaginative.	Poets, novelists, musicians, sculptors, playwrights, composers, stage directors.
SOCIAL Human relations, interpersonal and educational competencies. Deficit in manual/technical competencies.	Liking to help others, having teaching ability. Values social and ethical activities.	Ascendant, cooperative, friendly, generous, helpful, idealistic, persuasive, tactful, understanding.	Clinical psychologists, counselors, foreign, missionaries, teachers.
ENTERPRISING Leadership, interpersonal, and persuasive competencies. Deficit scientific competencies.	Aggressive, popular, self-confident, sociable. Values political and economic achievement.	Acquisitive, adventurous, ambitious, argumentative, dependent, domineering, pleasure-seeking.	Managers, buyers, politicians, lawyers, car salespersons
CONVENTIONAL Clerical, computational and business competencies.	Conforming, orderly and having clerical and numerical ability.	Conforming, conscientious, defensive, inhibited, obedient, persistent, calm.	Cashiers, statisticians, bookkeepers, administrative assistants, post office clerks.

Note: Based on Holland, John L. Making Vocational Choices: A Theory of careers. Englewood Cliffs, N. J.: Prentice-Hall, 1973, pp. 14-18.

different environments. It is also assumed that the nature of the occupational environment emanates from the personality types which dominate that environment, thus reinforcing the traits of the corresponding personality types. Holland's conceptualization of occupational environment has been used extensively in the literature when studying occupational choice processes and occupational success and satisfaction (Christensen and Sedlacek, 1974; Crabtree and Hales, 1974; Cunningham, Alston, Doughtie, and Wakefield, 1977; DeWinne, Overton, and Schneider, 1978; Esposito, 1977; Mount and Muchinsky, 1978; Nafziger, Holland, and Gottfredson, 1975; Orcutt and Walsh, 1979; Reno, 1979; Robbins et al., 1978; Walsh, Horton, and Goffey, 1977). This definition provides a concrete interpretation of the occupational environment that is not based on perceptions and is the definition used in this paper.

Organizational Environment

The organizational environment is defined as those factors which are associated with the particular organization in which one works. Factors specifically related to the immediate work environment include resource adequacy, adequacy of authority, autonomy/responsibility, dealing with others, instrumental communication, supervisory style, pressure, recognition/feedback, role ambiguity, routinization/task repetitiveness, task identity, variety, and support. Factors associated with the entire organizational context include centralization, conflict, differentiation, distributive justice, formalization, integration, pay, promotional opportunity, and size. These variables are examined in more detail in Chapter Two.

Person-Environment Mismatch

As stated previously, individuals may not fit into or match their work environments for two reasons. First, the organizational characteristics which determine the organizational environment may not match the individual's desired or needed organizational characteristics; thus, there is a person-organizational environment mismatch. Alternatively, the occupational environment, made up of common personality types (Holland, 1966, 1973), may not match the individual's personality resulting in a person-occupational environment mismatch. (Rather than use the term person-occupational environment mismatch or person-organizational environment mismatch when individuals do not fit their work environment for either one of these reasons, the terms organizational mismatch and occupational mismatch are used throughout the remainder of this dissertation.) An occupational mismatch is then defined as the extent to which the individual is mismatched to the environmental characteristics of the occupation. An organizational mismatch is the extent to which the individual perceives him/herself (personality, needs, values, etc.) to be mismatched to the environmental characteristics of the organization. The individual who is mismatched to both sets of environments is defined to be in a total person-environment mismatch.

PREVIEW

In the next chapter this model of occupational change intentions and organizational change intentions along with its assumptions and hypotheses are further developed. A review of the major literature related to voluntary turnover and occupational change is also presented.

In Chapter Three the research design, the operationalization of the variables and the procedure are described. This is followed by the data analyses. Finally, discussion of the results, conclusions, implications, and future considerations are addressed in Chapter Four.

CHAPTER TWO

PROPOSED MODEL AND LITERATURE REVIEW

In this chapter an elaboration of the proposed model with assumptions and hypotheses is first presented. This is followed by a review of the current turnover research and of the current turnover models in organizational behavior and how the models compare with the proposed model. Finally, a brief summary of vocational psychology and a review of the literature on Holland's theory of vocational choice are presented and compared to the proposed model.

PROPOSED MODEL OF VOLUNTARY TURNOVER AND OCCUPATIONAL CHANGE

Assumptions

The psychological model proposed here represents a new contribution to the fields of organizational behavior and vocational psychology. The model is not complex, yet it is based on a number of assumptions and hypotheses. This dissertation represents only the first step in testing the validity of this model, and, as such, does not test all the aspects of the model. Although turnover and occupational change are the ultimate independent variables to be predicted, this first test of the model investigates the major hypotheses of the model using turnover intentions and occupational change intentions as the independent variables.

The assumptions are first detailed with brief explanations. These assumptions provide the starting point for the development of the

proposed model and, as such, are not proven or tested but simply assumed to be true. Where possible, supporting research has been cited in order to validate these assumptions.

Assumptions 1 and 2. Holland (1966,1973) has developed a model of vocational choice which is based on the hypothesis that people seek occupational environments which match their personalities and that the occupational environments are determined by the people who populate those occupations. Thus, one is more likely to remain in his/her present occupation and be more satisfied with most aspects of one's job when among people with similar talents, values, and traits (Mount and Muchinsky, 1978). Additionally, Holland (1966, 1973) hypothesizes that different occupations attract different types of personalities.

Holland (1966,1973) further states that different personalities also have different strategies for coping with their work environment, as well as having different needs and values. For example, some personalities may cope with being mismatched to the organizational environment by decreasing organizational commitment; while others may increase intentions to leave or even leave the situation. These hypotheses of Holland have received considerable support and are reviewed later in this chapter; however, the first two assumptions for the proposed research are derived from these hypotheses.

A1: Individuals do want to fit into or match their work world and respond to feelings of mismatch in an attempt to reduce those feelings.

A2: Since similar personality types are attracted to similar occupations, each occupational group shares some common strategies for coping with feelings of mismatch.

Assumptions 3-6. Four more assumptions are found in t hypothesized process of evaluating one's feelings of mismatch. Firs it is assumed that when individuals experience feelings of mismatch work, they assess the degree of matching or congruency and the cause these feelings, which, in turn, determine what responses/consequenc will ensue. For any degree of mismatch, individuals have many possib attitudinal, intentional, and behavioral responses available, such decreased job satisfaction, decreased organizational commitmen intention to search, absenteeism, and sabotage.

While all responses are possibilities for the individual and whi it is recognized that external and situational factors often do modera an individual's behavior, it is assumed here that the responses individual has to a felt mismatch depend primarily on the individu (such as one's value system and past experiences with copi strategies). For example, some individuals may do nothing more than s to themselves, "If things do not get better soon, I'm going to have look for another job" (intention to search/leave). While others m react to feelings of mismatch by increasing absenteeism.

In addition to the assumption that responses depend on t individual, it is also assumed that individuals have their own persor continua of responses to mismatched situations. It is further assum that, for most people in a given occupational group (Assumption 2 there are certain responses which generally occur at lower degrees mismatch and which generally occur at higher degrees of mismatch. other words, certain responses begin to occur at different relati

degrees of mismatch. For example, job dissatisfaction may be a respo that begins at low degrees of mismatch; while change intentions begin at a higher degree, and actual change behavior at an even hig degree. Thus, job dissatisfaction and other responses which occur lower degrees of mismatch may be possible indicators or predictors future change intentions for many individuals experiencing feelings mismatch simply because these are the responses which occur first.

The continuum for responses is not new to the field organizational behavior. For years, researchers have tried to defi continuum of withdrawal behavior (from the organization). The ba assumption behind the continuum concept is that individuals fi exhibit minor forms of withdrawal behavior and eventually progress more serious forms, such as actual turnover (see Bluedorn, 198 However, researchers have usually assumed that individuals fi continuum of responses. In this model, the individual's own contin of responses is acknowledged, and it is assumed that only <u>some</u> respon are commonly exhibited by different occupational groups at simi degrees of mismatch.

Finally, in times of a slumping economy (poor external labor mar conditions), individuals may react to feelings of mismatch by voic resentment, increasing absenteeism, increasing thoughts of intending search for a better situation when the economy improves, etc.; but fe individuals actually quit. There are also other influences which affect an individual's response to mismatched situations. For examp organizational policies, like "absent without pay" certainly can imp one's decision to be absent. Therefore, assumptions three through

become:

A3: The perceived degree and cause of the experienced feelings of mismatch determine what responses follow, and the responses to a perceived mismatch depend primarily on the individual's personal characteristics and past experiences.

A4: Individuals have their own continua of responses to feelings of mismatch, and, thus, there are certain degrees beyond which they intend to leave and beyond which they leave their situation.

A5: For each occupational group, there are certain responses which commonly occur at lower degrees of mismatch, such as job dissatisfaction and certain responses which occur at higher degrees of mismatch.

A6: The responses to a perceived mismatch are moderated by external and situational factors, such as social, economic, and labor market conditions.

Assumption 7. Besides the assumption that responses are moderated by external and situational factors, the responses related to organizational change and occupational change (i.e., intentions and actual behavior) are difficult for individuals even when they realize they do not match their occupations and/or organizations because of such reasons as:

1. the time already invested in the present occupation (such as college) or organization;
2. no perceived opportunity to learn conveniently a new occupation;
3. no convenient opportunity to move to another occupation or organization;
4. the desire not to experience a significant "cut" in pay;
5. the fringe benefits already accrued in one's present organization;
6. the desire not to upend one's life.

Thus, a seventh assumption becomes:

A7: Individuals are often reluctant to change occupations and to change organizations.

This assumption could mean that actual change behavior, and perhaps eve change intentions, occur at higher degrees of mismatch than othe responses (Assumption 5). Coupled with the current economic environmer (Assumption 6), change intentions and behavior are hard to investigate.

Assumption 8. The next assumption proposes the idea tha individuals may misperceive or not acknowledge the true cause of thei feelings of mismatch and, as a result, respond in ways associated wit the wrong cause. In particular, Super's theory (1957) of vocationa development states that one's occupational choice is an attempt t implement one's self-concept. In other words, one's occupation i closely tied to one's feelings about self. Thus, it can be argued tha some people may be hesitant to admit that their occupations are causir feelings of mismatch since such an admission reflects personal failur (e.g., the individual did not choose a congruent occupation, has sper four years of college studying the wrong subject, etc.). As a result in an attempt to alleviate feelings of mismatch, these people ma respond in ways more closely related to the responses associated wit organizational mismatch, such as organizational change intentions o actual organizational change. So, in this sense, some people increas organizational change intentions or actual organizational chang behavior when mismatched to their occupations.

On the other hand, it could also be true that some individuals ma be so loyal or committed to their organizations that the thought o

leaving the organization could never be entertained. In this situation, any feelings of environmental mismatch would be attributed to the occupation or any cause other than the organization, and responses would be in line with these attributions. Assumption eight is then:

A8: Individuals may misperceive the source of their feelings of mismatch and respond accordingly.

Assumption 9. The last assumption sets forth the idea that individuals in a perceived person-occupation mismatch sometimes perceive also a mismatch with their organizations or vice versa. For example, they may intend to leave or actually leave the organization, as well as the occupation, when mismatched only to the occupation. With respect to being in a mismatched occupational environment, voluntary turnover is assumed to occur for any of the following reasons:

1. The organization does not offer other occupational opportunities.
2. The individual misinterprets the feelings of mismatch and associates these feelings with the organization rather than with the occupation (Assumption 8).
3. Such a degree of mismatch is felt that the individual feels the need to leave both the occupation and the organization to alleviate these feelings.
4. The individual does not perceive or realize that other occupational options are open within the organization.

A similar argument can be made for why occupational change intentions may increase when one perceives only a mismatch with the organization (e.g., astronaut leaves NASA).

Besides these reasons, individuals in an occupational

(organizational) mismatch may still increase organizational (occupational) change intentions because of a "spillover" effect which increases the perceived degree of organizational (occupational) mismatch. That is, once the individual admits that there is something wrong in the work environment and intends to leave, the more likely s/he is to begin finding other factors of the work environment at fault. Thus, the degree of organizational (occupational) mismatch may increase.

This "spillover" effect is very similar to Festinger's theory of cognitive dissonance (1957). His theory states that after one's behavior changes, attitudes change to be in agreement with the behaviors. As applied to the present model, once intentions and/or behaviors related to leaving the work situation begin to occur, the more likely one's feelings of mismatch toward the entire work environment are to increase. Therefore, the degree of occupational mismatch is related to the degree of organizational mismatch. The last assumption then becomes:

A9: Being mismatched to one environment can result in increased feelings of mismatch in the other environment.

In other words, Assumption 9 states that being mismatched to one's occupation can result in intending to leave the organization. Also, being mismatched to one's organization can result in changing occupations. These nine assumptions provide a working foundation for the hypotheses to be tested by the proposed research.

Hypotheses

From these assumptions and the elaboration of the model, it is clear that this is a psychological model of occupational and organizational change. This initial test of the proposed model (Figure 1) is limited to considering only voluntary turnover intentions and occupation change intentions as the responses to varying degrees of person-environment mismatch. Actual turnover behavior, with respect to either the occupation or the organization, would be the ideal response to investigate for a model of turnover and occupational change. However, the present economic slump and poor labor market conditions which currently exist make it even more difficult to investigate actual turnover than to investigate change intentions. In addition, since it is assumed that intention to leave occurs at higher degrees of mismatch (Assumption 5) than some other responses and that individuals are often reluctant to change (Assumption 7), finding significant support for the responses chosen may be difficult. Add to this the fact that the moderating effects of other external or situational factors, such as economic, labor market, and social conditions (Assumption 6) are not addressed in this initial test, but certainly do affect intentions. It should be remembered, also, that there are many other responses available to mismatched situations, such as job dissatisfaction. These responses are not investigated, even though they are assumed to occur at lower degrees of mismatch and, thus, would be easier to identify.

Both of the person-environment mismatch variables are interval in nature, and, thus, the higher the degree of mismatch, the more one intends to leave the situation. Therefore, while it is possible to test

the relationships outlined in Figure 1 by considering these two independent variables as dichotomous, a stronger test of the hypothesized model is provided by using hierarchical regressions and using the independent variables in their raw form (i.e., as continuous variables).

Hypothesis 1. It is first hypothesized that the higher the degree of mismatch for the individual with the occupational environment, the higher is the degree of occupational change intentions. When individuals compare themselves to the occupational environment they perceive to exist, it is predicted that they will want to leave their occupations when conditions of mismatch or incongruency between "what they are" and "what they view the occupation to be" exceed some individually established threshold (or tolerable) level (Assumptions 3, 4, and 5). Thus, the higher the perceived degree of occupational mismatch, the more likely are intentions to leave the occupation to occur. This means that changing occupations (not organizations) is the solution to their problem, and it would serve no purpose to change organizations while the occupational environment remains fixed. Thus, occupational change intentions should be mainly a function of occupational mismatch.

However, occupational change intentions are also hypothesized to be a function of organizational mismatch and the interaction between organizational mismatch and occupational mismatch (Assumptions 8 and 9). However, the effect of the organizational mismatch on occupational change intentions should be lower than the effect of occupational

mismatch.

Assumption 8 of the proposed model states that individuals misperceive or not acknowledge the true source of their feelings mismatch. Super's notion that one's occupational choice is stron associated with one's self-concept lends definite support to the i that individuals may not want to acknowledge their occupations as be a source of mismatched feelings. This means that, for some people, perceived degree of organizational mismatch may actually include s degree of occupational mismatch. This is because the degree occupational mismatch is perceived as being associated with organization. Similarly, the perceived degree of occupational misma may include some organizational mismatch because of an individua strong organizational loyalty or commitment (i.e., the individuals d not want to admit that there is something wrong with the organizatior

In addition, Assumption 9 states that feelings of mismatch in environment "spill over" so that feeling of mismatch in the ot environment increase. As a result, some of the organizational cha intentions may be caused by occupational mismatch and, not necessari by any degree of organizational mismatch. Similarly, some of occupational change intentions may be due to an organizational mismat Therefore, analyzing the data to find the separate effects occupational mismatch and organizational mismatch becomes r difficult.

Thus, assumptions 8 and 9 strongly suggest that the degree organizational mismatch and the degree of occupational mismatch interact with each other when individuals are analyzing their mismat

feelings and responding to these. As Assumption 8 implies, this interaction may be a defense mechanism to protect the individual's self-concept or to protect the individual's "home" at work. Cognitive dissonance further suggests that once one environment is recognized as being incongruent and once the individual intends or decides to change, the feelings of mismatch with the other environment begin to increase (Assumption 9). Add to this the fact that the model is psychological in nature. As a result, several factors, besides occupational mismatch and organizational mismatch, probably interact within the individual. In summary, the two types of mismatch appear to be interrelated psychologically and to interact with each other. The first hypothesis then becomes:

> H1: Occupational change intentions are a positive function of the degree of occupational mismatch, the degree of organizational mismatch, and their interaction in that order.

Hypothesis 2. Similarly, it is also hypothesized that those individuals who perceive themselves to be in an organizational mismatch increase voluntary turnover intentions as the degree of perceived mismatch increases. Thus, organizational change intentions should be mainly a function of organizational mismatch because the source of the mismatched feelings is the organization, and, therefore, changing the organizational environment is the solution to the problem. As explained earlier, however, organizational change intentions can occur when experiencing feelings of mismatch to the occupation (Assumptions 8 and 9). The effect, though, on the level of organizational change intentions should be less for a given degree of occupational mismatch

than it is for the corresponding degree of organizational mismatch. As with occupational change intentions, the interaction between occupational mismatch and organizational mismatch also affects organizational change intentions. As a result, organizational change intentions should be primarily a function of organizational mismatch, occupational mismatch, and then the interaction between the two.

> H2: Organizational change intentions are a positive function of the degree of organizational mismatch, the degree of occupational mismatch, and their interaction in that order.

Test of Complete Model. The previous two hypotheses suggest that are certain conditions under which organizational change intentions and occupational change intentions are high or low based on the natures and degrees of mismatch. More specifically, if the assumptions associated with misperceptions and non-acknowledgement of the source of mismatch (Assumption 8) and the "spillover" effect (Assumption 9) are not true, the model can further be used to predict when change intentions will occur as well as the exact nature of the intentions and the relative degree of these intentions. These predictions would be based on the degrees of both occupational mismatch and organizational mismatch and on the perceived sources of the mismatched feelings.

The first test of the complete model consists first of dichotomizing all the variables and then classifying individuals into Cells A-D and into Cells 1-4 of Figure 3 based on the dichotomization. For example, individuals who are matched to both the occupational and organizational environment are classified as belonging to Cell A (Figure 3). Individuals who do not intend to change occupations or organizations are

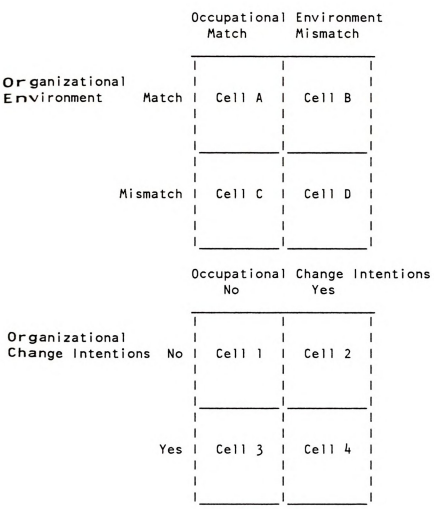

Figure 3. Classification of Dichotomized Variables

classified as belonging to Cell 1 (Figure 3). Next, the expected classifications are compared with the actual cell classifications (1-4, Figure 3). The expected cell classification is based on individual's cell classification with respect to the indepe variables (Cells A-D, Figure 3). The model predicts that if indivi are classified as belonging to Cell A (Figure 3) they should als classified as belonging to Cell 1 (Figure 3). That is, since the matched to their environments, they should have no intentions to c either their organizations or their occupations. Thus, they shou classified also as belonging to Cell 1 (Figure 3). Similarly, Ce individuals should be classified as belonging to Cell 2; Cell C to 3; and Cell D to Cell 4 (Figure 3). The third hypothesis becomes t

H3: Individuals classified as belonging to Cell A of Figure 3 are classified as belonging to Cell 1 of Figure 3.
Individuals classified as belonging to Cell B of Figure 3 are classified as belonging to Cell 2 of Figure 3.
Individuals classified as belonging to Cell C of Figure 3 are classified as belonging to Cell 3 of Figure 3.
Individuals classified as belonging to Cell D of Figure 3 are classified as belonging to Cell 4 of Figure 3.

One last test of the complete model builds on Hypothesis 3 concerns the relative degrees of change intentions among Cells 1 Figure 3. The model as developed here predicts that the lowest de of both occupational change intentions and organizational c intentions occur when individuals are matched to both the occupat and organizational environment (Cell A, Figure 3). The highest de of occupational change intentions and organizational change inter occur when individuals are mismatched to both environments (Ce Figure 3). The next highest degree of occupational change inter

should occur when individuals are mismatched to the occupational environment only (Cell B, Figure 3); followed by individuals who are organizationally mismatched only (Cell C, Figure 3). For organizational change intentions, the next highest degree should occur when individuals are mismatched to the organizational environment only (Cell C, Figure 3); followed by those individuals who are occupationally mismatched only (Cell B, Figure 3). Thus Hypotheses 4 and 5 are:

H4: The degree of occupational change intentions is greatest when individuals are mismatched to the occupational and organizational environments (Cell D, Figure 3), followed by the condition where individuals are mismatched only to the occupational environment (Cell B), then when individuals are mismatched only to the organizational environment (Cell C), and, finally, when individuals are not mismatched to their environments (Cell A). (That is, Cell D > Cell B > Cell C > Cell A, Figure 3).

H5: The degree of organizational change intentions is greatest when individuals are mismatched to the occupational and organizational environments (Cell D, Figure 3), followed by the condition where individuals are mismatched only to the organizational environment (Cell C), then when individuals are mismatched only to the occupational environment (Cell B), and, finally, when individuals are not mismatched to their environments (Cell A). (That is, Cell D > Cell C > Cell B > Cell A, Figure 3).

These hypotheses represent an initial test of the proposed model. If support is found, more in depth testing of the assumptions and of actual behaviors and research using different samples can be the next steps in validating the model.

LITERATURE REVIEW

In this section, the literature on voluntary turnover and vocational psychology is reviewed. The voluntary turnover literature represents

the literature pertaining to the person-organization mismatch situati and possibly the person-occupation mismatch situation; while vocatio psychology literature primarily represents the person-occupat mismatch condition. Turnover literature pertaining to the propo organizational environment factors and the occupational environment presented as well as supporting evidence for use of these factors in proposed research. In addition, some of the major turnover models presented with a brief summary of supporting evidence. Each model evaluated on the extent to which the model incorporates the variabl assumptions, and hypotheses proposed in this dissertation and on ma differences. A brief overview of vocational psychology and literat pertaining to Holland's model of vocational choice is presented compared to the proposed model, along with a justification for us Holland's theory to represent the person-occupation mismatch conditio

Distinction Between Organizational Behavior and Vocational Psychology

The distinction between turnover literature in the fields organizational behavior and vocational psychology is made here based a review of the latest turnover summaries. Mobley, Griffeth, Hand, Meglino (1979) reviewed turnover literature that is referred to here being relevant to the field of organizational behavior. Their rev roughly spanned the years 1972 through 1978. The journals reviewed m by Mobley et al. (1979) were Journal of Applied Psychology articles), Personnel Psychology (9 articles), Organizational Behav and Human Performance (8 articles), Administrative Science Quarterly articles) and Industrial Relations Journal (3 articles). Other journ reviewed were Psychological Bulletin (2 articles), Human Relations

articles), American Sociological Review (1 article), Academy Management Review (1 article), Industrial and Labor Relations Review article), and Monthly Labor Review (1 article). Only two articles fr Journal of Vocational Behavior and one from Personnel were include There were at least three other articles on turnover during that peri in personnel-vocational psychology journals (Gilbride, 197 Gottfredson, 1977; and Parsons and Wigtil, 1974).

There has also been a recent turnover literature review done Muchinsky and Tuttle (1979) which appeared in Journal of Vocation Behavior, which spanned a period of 50 years. Even though the revi appears in Journal of Vocational Behavior, the review deals solely wi organizational turnover and not occupational change. Again Journal Applied Psychology contributed the most articles (51); howeve personnel-vocational journals, as a group, contributed over 60 articl (Personnel Psychology - 44 articles; Journal of Personnel Research - articles; Personnel Journal - 1 article; Personnel - 6 article Personnel Administration - 1 article; Occupational Psychology - articles; Journal of Vocational Behavior - 3 articles; and Personn Practices Bulletin - 1 article). Additional journals covered includ Human Relations (4 articles), Educational and Psychological Measureme (1 article), Psychological Bulletin (2 articles), American Journal Mental Deficiency (1 article), Industrial Relations (1 article American Sociological Review (1 article), Administrative Scien Quarterly (4 articles), Acta Sociologica (1 article), Industrial a Labor Relations Review (1 article), Industrial Psychology (1 article Organizational Behavior and Human Performance (1 article), Annual Revi

of Psychology (1 ar article), and Journal of Applied and S Psychology (1 article). This review (covering 50 years) is obvi much more interdisciplinary and far more encompassing than the Jo of Applied Psychology review, which covered seven years; yet, the emphasis is still vocational and personnel psychology. On the bas these two summaries, it appears that there are, at least, two sep disciplines doing turnover research. These have been here label the fields of organizational behavior and vocational psychology.

Organizational Behavior Turnover Literature

It is not uncommon to read that over 1000 articles have been wr on turnover in the last 10 years (see Bluedorn, 1980a; Da Krackhardt, and Porter, 1981; Muchinsky and Morrow, 1980; Steers Mowday, 1979), or that the costs of turnover are phenomena organizations. For example, Mirvis and Lawler (1977) cite a cos over $2500 to replace one nonmanagerial employee. Over these pa years most organizational behavior researchers have treated turnove the departure from an organization for organizational reasons and not usually considered the possibility that turnover could result changing one's profession, career, or occupation.

In the most recent review of turnover literature by Moble al. (1979), age, tenure, intention to remain, overall job satisfac job content, and organizational commitment were all found to significant negative correlations with turnover. However, variables alone or in combinations have generally accounted for than 20% of the turnover variance. Much of this research, though performed as single predictor analysis. Results of the few multiva

studies to date have concentrated on and found significant results intention to quit, intention to search for alternative jobs, thinking quitting, organizational commitment, job characteristics, satisfaction, and employment opportunities (Marsh and Mannari, 19 Mayes and Ganster, 1980; Miller, Katerberg, and Hulin, 1979; Mobl Horner, and Hollingsworth, 1978; Newman, 1974; Porter, Steers, Mowd and Boulian, 1974; Wanous, Stumpf, and Bedrosian, 1979; Waters, Roa and Waters, 1976). However, these models have not helped to expl much more of the turnover variance. For example, the average varia explained by a sample of seven recent multivariate studies approximately 21%, ranging from 16% to 25% (see Mobley et al., 197 Although one recent study by Miller et al. (1979) which evaluated Mobley-Horner-Hollingsworth (1978) turnover model, was able to acco for approximately 54% of the turnover variance, these impressive resu may have been due to the following two factors:

1. the sample was National Guard which means that turnover from part-time job was being investigated,
2. the resignation (turnover) decision from the National Gu occurs at one specific time, namely six years after enlistin

Considering these results, it is apparent that more work needs to done to develop a turnover model which is inclusive enough to expl more of the turnover variance and, yet, not be too complex for practitioner to apply. Economic conditions or external factors h been found to account for 30% to 66% of the turnover variance (Dre and Dougherty, 1981; see Mobley et al., 1979; Price, 1977).

addition, situational and/or non-work factors, such as spouse career decision, also affect turnover. Therefore, depending on the current economic/external labor factors, multivariate turnover models which exclude these variables should probably be able to account for between 30% and 40% of the turnover variance.

Organizational Environment Factors and Turnover. Task design research and turnover research have both identified a wide range of organizational factors which have been found to affect employee performance and employee voluntary turnover (a state of employee non-performance). For the purposes of this dissertation, components were selected which deal solely with factors or variables which are part of the organizational context. Some of the organizational environment variables which have been related to turnover are: authoritarianism, autonomy/responsibility, instrumental communication, recognition or feedback, routinization or task repetitiveness, supervisory style, variety, formal communication, integration, pay/level of rewards, and promotional opportunity. Appendix A presents a partial list of these and other organizational environment factors identified in the literature, their definitions, and a brief statement about the research findings with respect to turnover for each factor.

Task design researchers are beginning to realize that there is a need to be more integrative and that research findings have not been conclusive enough -- meaning that more than simply the organizational practices and characteristics need to be investigated to improve employee behaviors and attitudes through task design. Brousseau and Prince (1981) and Roberts and Glick (1981) suggest job design and

personnel selection and placement portray jobs as job-perso relationships meaning that there are some aspects of the employee' personality which are influenced, and thus changed, by certain jo features. Thus, in order to anticipate employee responses to particula job characteristics, one must first look at the individual's personalit and the particular job characteristics and how they interrelate.

Individual Characteristics and Turnover. It has been noted earlie that most turnover researchers have ignored the mismatch between th individual and his/her chosen occupation as a cause of voluntar turnover. In order to substantiate this statement, a review of th turnover literature concerned with personal variables is presented.

Personality is the predominant personal variable which appears i the turnover literature as a predictor of turnover. Specifically, th needs for achievement, affiliation, and autonomy are the factors mos often investigated. Mowday, Stone, and Porter (1979) looked at th ability of personality and job scope to predict turnover. They foun that there was no direct relationship between need for achievement o need for affiliation and turnover, but rather that personality and jo scope interacted to predict turnover. Specifically, for high scope job turnover was negatively related to need for achievement and need fo affiliation; while for people in low task scope jobs, turnover wa negatively related to need for affiliation. They conclude by statin that there is a need to consider both individual characteristics and th features of the work environment in order to understand turnover an that it appears that the extent to which employees with give

personality characteristics are likely to quit depends on the characteristics and the immediate work environment. This conclusion reflects the direction of the proposed model in that proposed model predicts turnover to be the result of one's persona and the mismatch with the occupation and the work environment. T perhaps it is not that personality interacts with job scope determining turnover but rather that personality interacts particular aspects of the occupational environment as well as organizational environment.

The Mowday et al. (1979) study does present interesting results respect to personality, job design, and turnover in that turnover unrelated to need for achievement for low task scope jobs and turnover was unrelated to need for autonomy for high task scope jobs similar study by Mowday and Spencer (1981) found that need achievement and need for autonomy had a direct positive relationshi turnover but suggest that job scope may be curvilinearly related turnover. Basically, these two articles present contradictory resu In the first article, task scope and personality (i.e., need achievement and affiliation) interacted to affect turnover; while the second article, the two personality characteristics (need achievement and autonomy) were positively related to turnover. Per the reason for the discrepancy between these two articles is the that different organizations and occupations (and, thus, diffe Organizational and occupational environments) were used. Mowday Spencer (1981) used 569 state and county government employees in s agencies; while Mowday et al. (1979) used 109 machine operat

scientists, and technical personnel in a large manufacturing organization. Therefore, it may be true that for state and county government employees, need for affiliation, need for achievement, and high task scope do not lead to turnover; while need for affiliation and low task scope to lead to turnover. On the other hand, for the machine operators, scientists, and technicians, unsatisfied needs for achievement and autonomy may be predictive of turnover. The proposed model attempts to clarify these issues by suggesting that members of the same occupational groups desire the same job characteristics and that occupational groups differ with respect to which characteristics are desired (Assumption 2).

In a study of entrepreneurs, engineers, accountants, and middle managers, Hines (1973) found that engineers, accountants, and middle managers who did quit their organizations had significantly higher need for achievement than those who did not quit. In addition, he found entrepreneurs to be high in need for achievement and managers to be high in need for power and lower in need for achievement than entrepreneurs. Another way to view these results would be to consider it as support for the assumptions made here that members of different occupations have different needs and, therefore, react differently to the same types of organizational environments. Thus, if one is in the wrong occupation, the environment may be providing for needs which are not important to the individual. This conforms precisely with the proposed hypothesis that individuals in the wrong occupation intend to leave their situation.

In a related study on the determinants of organizational commitmen and organizational commitment's relationship to intention to quit an turnover, Steers (1977) found that personal characteristics, jo characteristics, and work experience influenced organizationa commitment, which, in turn, had a significant relationship to intentio to quit and turnover. The six most significant factors for both sample studied were need for achievement, group attitudes toward th organization, education, organization's dependability, feelings o personal importance to the organization, and task identity. However there were some differences between the two samples used (hospita employees from one hospital and research scientists and engineers fro another organization). For the hospital sample, organizationa commitment (and turnover) was predicted by the six factors just liste plus optional interaction, age, and met expectations. For the researc sample, organizational commitment (and turnover) was explained by th six factors above and feedback. Thus, it does appear, in this study a least, that there are different factors related to organizationa commitment and to turnover for members of different occupational an organizational environments. This research provides support fo Assumption 2 presented earlier.

Porter and Steers literature review (1973) report on three studie which investigated the relationship between similarity of job to one' vocational interests and turnover. Two studies found that thos employees who remained longer on their jobs scored higher on thos interest inventory factors associated with their occupations than di

those who left. The third study found that turnover had a significant negative relationship to preference for outdoor activities for foresters (see review by Porter and Steers, 1973). These three studies provide support for Holland's congruency hypothesis and the first two assumptions that individuals do want to fit into their work world and that this fit is based on one's personality.

In summary, the results with respect to the relationship between turnover and personality appear contradictory. Some have found a direct relationship while others have found that personality interacts with one's job characteristics. However, the results provide strong support for Assumptions 1 and 2 presented earlier. A closer look needs to be taken at the specific occupation and organizational settings involved in research studies of this nature to test these assumptions.

Intention to Leave as a Substitute for Turnover. Table 1 presents a summary of 13 articles which reported the correlation between intention to leave and actual turnover. As mentioned in Chapter One, intention to

Table 1

Correlation Between Turnover and Intention to Leave/Stay[a]

Study	Subjects	N	Corr.	Time Lag[b]
Mangione (1973)	Insurance co. clericals	105	-.42*	2 years
Newman (1974)	Nursing home employees	108	.39*	2 months
Kraut (1975)	Salesmen	911	-.17*	18 months
		791	-.17*	5.5 yrs.
Waters, Roach, and Waters (1976)	Insurance co. clericals	105	-.42*	2 years
Marsh and Mannari (1977)	Jap. electric factory workers	943	-.13**	2 months
Mobley, Horner, and Hollingsworth (1978)	Hospital employees	203	.49*	47 weeks
Hom, Katerberg, and Hulin (1979)	National Guard	252	.65*	6 months
Waters and Roach (1979)	Insurance co. clericals	132	.52*	1 years
			.26*	2 years
Bluedorn (1980b)	Insurance co. clericals	171	.28*	9 months
Coverdale and Terborg (1980)	University clericals	65	.39*	3 months
Mayes and Ganster (1980)	Correctional employees.	69	-.46*	11 weeks
Mowday, Koberg, and McArthur (1980)	Hospital workers	253	-.42*	1 year
	Govt.clerks	285	-.29*	1 year
Mitchel (1981)	Insurance field agency managers	263	-.29*	3 years
		274	-.21*	3 years

[a]Negative for intention to stay; positive for intention to leave.
[b]Time period between the measurement of intentions and behavior.
*$p < .01$.
**Significant tau-b at $p < .01$.

quit has become a predictor for the ultimate dependent variable actual turnover behavior (Bluedorn, 1980a; Martin, 1979; Spencer et al., 1981). Bluedorn's (1980a) summary of 25 studies all of which reported significant positive correlations between intention to quit and actual turnover yields an average correlation of .408 for those studies looking at periods less than or equal to one year. In addition, he notes that intention to quit was found to be the most accurate predictor of turnover for periods up to and exceeding one year later. The average correlation (r's converted to Z's, weighted average calculated) for the 13 studies outlined in Table 1 is .276. Neither one of these correlations is as high as the .70 reported by Newman (1974) on the relationship between intentions and behavior. The time lag between intentions and behavior provides one possible explanation for this discrepancy. Time lags ranged from two months to five years for the turnover research, while the average correlation of .70 was based on time lags ranging from two months to six months (Fishbein, 1974).

Turnover Models

There are presently a number of multivariate models of turnover. Most of the psychological models include the processes of intention to search and intention to remain/quit as immediately preceding actual turnover behavior. Whereas, previously job dissatisfaction was found to explain more turnover variance than any other variable; since the addition of intention to quit/stay to turnover models, intention to quit/stay now accounts for more of the turnover variance than any other variable (see Mobley et al., 1979). Three of these models are examined individually with research findings and comparisons with the proposed model.

Price Model. Price's (1977) original model (see Figure 4) specified that one's job satisfaction is determined by the following five independent variables: pay (positively related), integration (positively related), instrumental communication (positively related), formal communication (positively related) and centralization (negatively related). The degree of job satisfaction then determines whether one will stay or leave an organization. However, this relationship is moderated by opportunities (knowledge of opportunity and freedom to move). Further, Price hypothesized that individual demographic variables do not have a direct causal relationship with turnover. Tests of Price's early model (Bluedorn, 1979; Martin, 1979; Price and Bluedorn, 1979; Price and Mueller, 1981) have all concluded that opportunity and job satisfaction do not interact in the way that Price proposed but rather that opportunity directly affects job satisfaction.

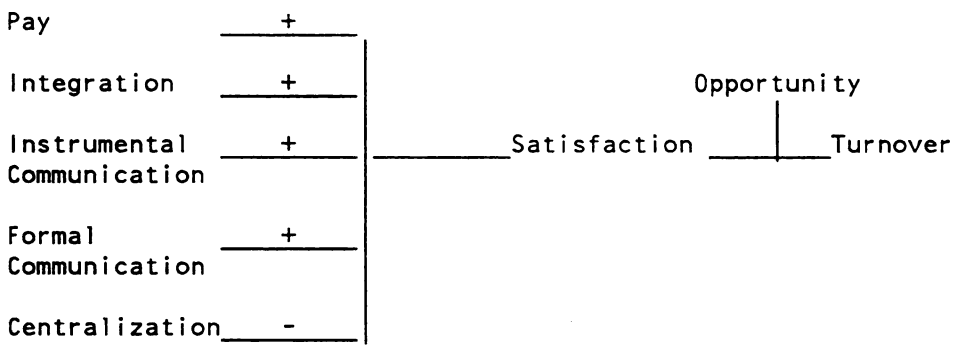

Figure 4. Price's Original Model of Turnover[a]

[a] Price, 1977.

Tests of expanded or revised Price models have been more successful than tests of the original model. Bluedorn's (1979) test of a model which borrowed heavily from Price's model (i.e., the model consisted of organizational control, organization pay, environment, and job satisfaction) explained 65% of the variance in turnover intentions for military personnel. Another expanded Price model (Price and Bluedorn, 1979) explained 44% of the variance in turnover among nurses. This model included pay, integration, instrumental communication, centralization, routinization, distributive justice, and professionalism as the antecedents of job satisfaction and opportunity as intervening between job satisfaction and turnover. Another expanded model (Martin, 1979) explained 40% (adjusted) of the variation in turnover intentions using four organizational environment variables (upward mobility, distributive justice, communication, and routinization), four

demographic variables (occupation, age, education, and sex), one external environment variable (opportunity), and one mediating variable (job satisfaction). In the latest revision to his model (see Figure 5), Price (Price and Mueller, 1981) has added intent to stay as an intervening variable between job satisfaction and turnover; has added the independent variables: routinization, participation, distributive justice, and promotional opportunity as the antecedents of job satisfaction; and has included professionalism, generalized training, and kinship responsibility as antecedents of intent to stay. Again, opportunity is positioned as having a direct effect on actual turnover. However, this model when tested (Price and Mueller, 1981) only explained 18% of the turnover variance and 24% of the variance in intent to stay. The authors suggest a number of ways to increase the amount of explained variance:

1. use organizational commitment rather than intent to stay (since intention to stay is a component of organizational commitment);
2. include organizational size, location, and sex as independent variables;
3. shorten the time lapse between data collections and actual turnover data collection;
4. improve the measurement of turnover, intent to stay, pay, distributive justice, professionalism, and integration.

Bluedorn (1980a and 1980b) has recently proposed a "unified" model of voluntary turnover which combines Price's (1977) model, Mobley's (1977) model (to be explained later), and expectancy theory (Vroom, 1964) and includes organizational commitment as an additional

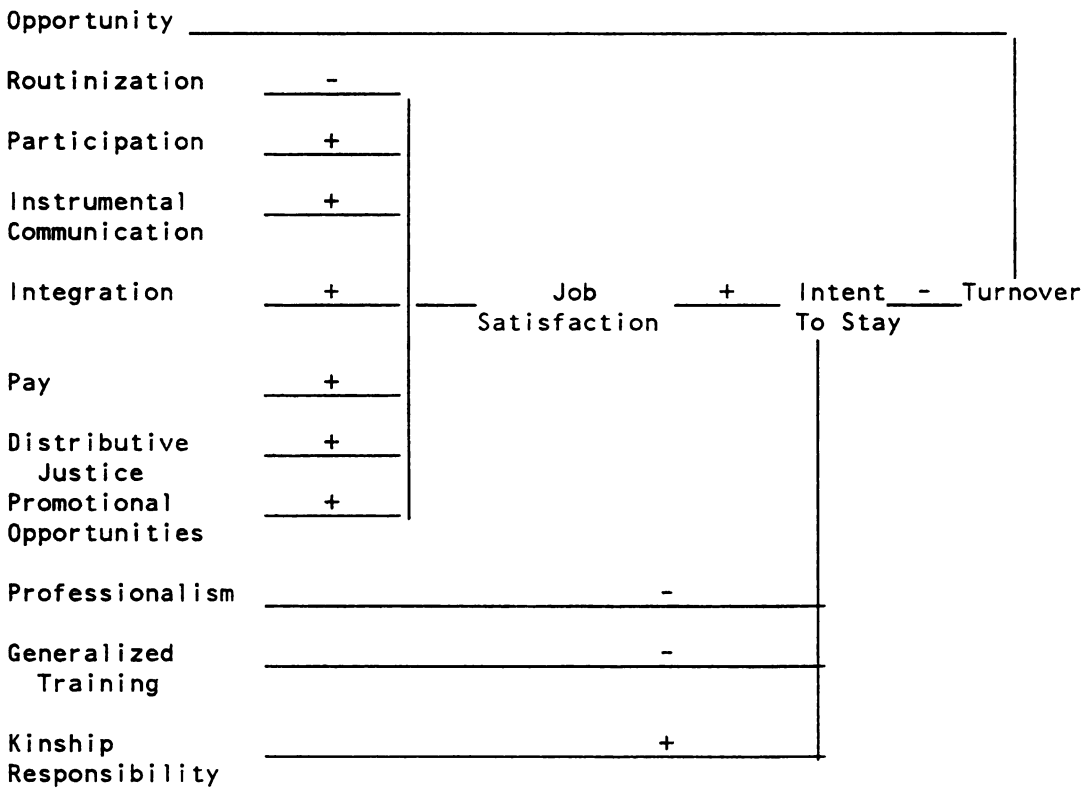

Figure 5. Causal Model of Turnover[a]

[a] Price and Mueller, 1981.

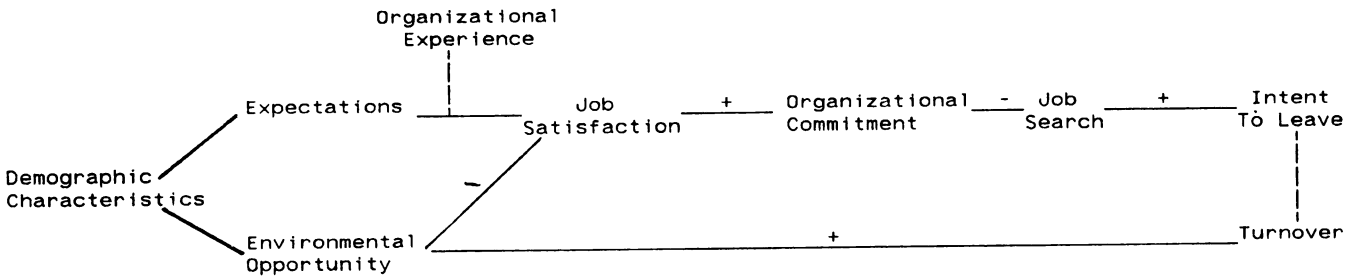

Figure 6. Unified Model of Turnover.[a]

[a] Bluedorn, 1980b.

intervening variable to the turnover process (see Figure 6). Basically, Bluedorn starts with a number of organizational, individual, and economic factors as independent variables and states that any or all of these can directly lead to job satisfaction, organizational commitment, job search, or intent to leave and indirectly to turnover. However, when Bluedorn (1980a) tested his proposed model, only 11% (adjusted R-squared) of the turnover variance was explained. The most important determinants of turnover found through path analysis were environmental opportunity, intentions to stay or leave, routinization, and age. These four variables were all found to have direct paths to turnover. However, centralization, pay, integration, tenure, and marital status were not significantly related to turnover, intention to leave, job search, organizational commitment, or job satisfaction (the five criterion variables in the Bluedorn model).

When compared to the proposed model (Figure 1), Price and his associates have, at one time or another, included as independent variables several of the elements associated with the organizational environment. In fact, each revision of Price's model has added more organizational environment elements. The principal organizational environment factors included in Price's original and revised models are: opportunity, routinization, participation, instrumental communication, integration, pay, distributive justice, promotional opportunity/upward mobility, formal communication, equity, and centralization. While the original model did not include personal characteristics as having direct effects on job satisfaction or turnover, it appears that continued research on the model has begun to include or at least suggest the use

of some personal factors. For example, Martin (1979) included occupation, age, education, and sex, and Price and Mueller (1981) suggest the addition of sex to the model. In this respect, the model proposed here might be considered a hybrid Price model which recognizes the extreme importance of organizational environment factors but additionally recognizes the importance of the individual (i.e., personality) being matched to the occupational environment.

Mobley Models. Mobley's 1977 model of turnover specifically considers the processes that occur between job satisfaction and employee turnover. As illustrated in Figure 7, these processes, beginning sequentially after job satisfaction, are: thinking of quitting, evaluating the expected utility of a job search, intending to search, searching, evaluating and comparing alternatives, and intending to quit/stay. Research on this basic intermediate linkages model has confirmed the model, especially the placement of intention to leave as the immediate precursor to actual turnover behavior. (Table 1 presented earlier summarizes a number of turnover articles which investigated the strength of association between turnover and turnover intentions.) In a test of this model, Mobley et al. (1978) explained 26% of the variance in turnover behavior. In an attempt to cross-validate these results, Mowday et al. (1980) explained 19% of the variation in turnover for a hospital sample but only 11% for a clerical sample in four government agencies. Even though they failed to cross-validate the model, the pattern of the results was consistent with the model.

The Mobley model has been modified at least twice by Mobley and others. The Mobley-Horner-Hollingsworth model (1978) elaborates on the

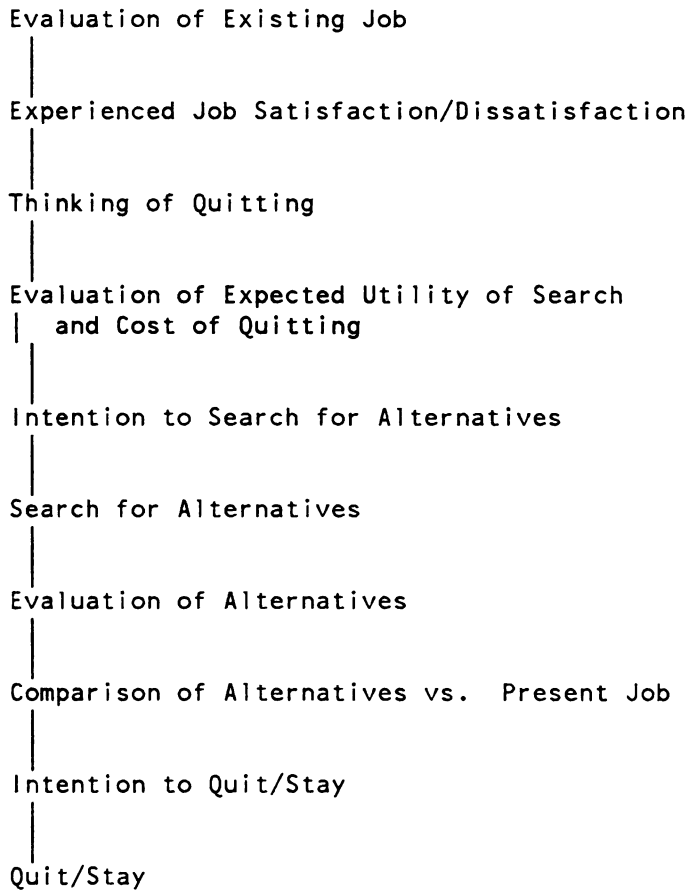

Figure 7. Intermediate Linkages Model[a]

[a] Mobley, 1977.

basic Mobley model (1977) by adding age and tenure as the antecedents of job satisfaction and of the probability of finding an acceptable alternative (Figure 8). This model has been supported by a number of studies. Miller et al. (1979) found an R-squared of 54% and 55% for two independent National Guard samples. (These very high variances were explained earlier as being due, in part, to the nature of the sample used.) Spencer, Steers, and Mowday (1981) replicated the pattern of relationships hypothesized by the model. Mitchel (1981) in testing an expanded Mobley-Horner-Hollingsworth model which added size of organizational unit, origin of unit, and ownership of organizational unit was able to explain only 16% and 9% of the variation in turnover behavior. The major finding of this research, however, was support for the relationship between intention to quit and subsequent turnover. In the latest revision (Mobley et al.,1979 and Mobley, 1981) the entire process of turnover starting with the individual, organizational, and economic labor market factors (see Figure 9 and 10) is considered. Research on this version has not been as encouraging as the previous two versions. For example, Mayes and Ganster (1980) found little support for some of the model's causal assumptions using path analysis, and while producing an R-squared of .29 with respect to actual turnover, only 4 of the 16 hypothesized causal paths reached significance.

Comparing Mobley's models to the proposed model is difficult because Mobley's models are basically concerned with the process that occurs between the time one experiences job dissatisfaction and the actual turnover behavior. Job satisfaction is not a component of the model to be tested, although the process described earlier did indicate that job

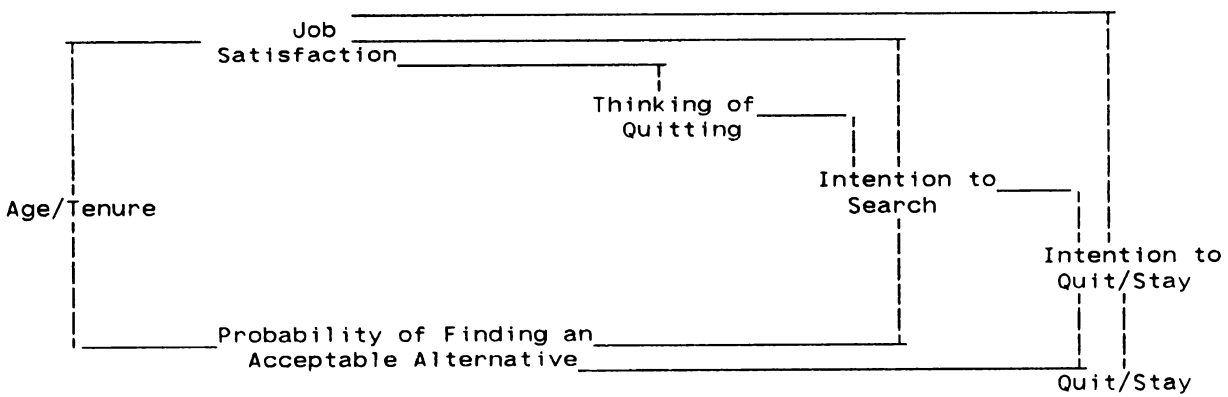

Figure 8. Simplified Intermediate Linkages Model.[a]

[a] Mobley, Horner, Hollingsworth, 1978.

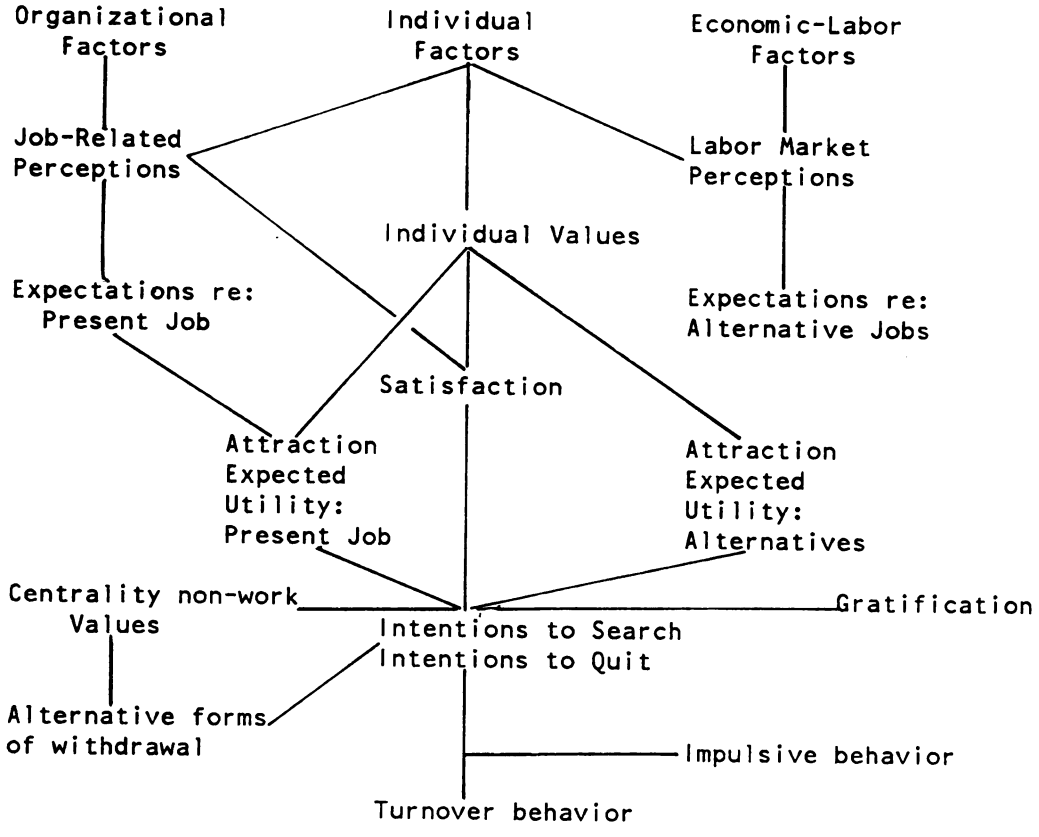

Figure 9. Employee Turnover Process[a]

[a] Mobley, Griffeth, Hand, and Meglino, 1979.

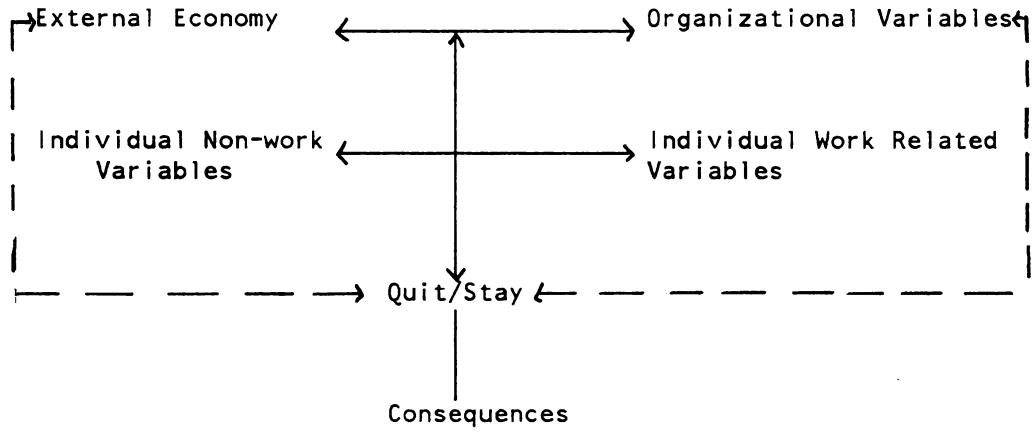

Figure 10. Simplified Model of the Causes and Correlates of Turnover[a]

[a] Mobley, 1981.

dissatisfaction could be a potential response to experienced feelings of mismatch at work. In another sense, though, the proposed model could be said to be a revision of Mobley's model if one were to accept the assumption that a mismatch between the occupational environment and the individual or a mismatch between the organizational environment and the individual results in job dissatisfaction. However, while this may be true, the proposed research does not address the response of job dissatisfaction but rather the responses of change intentions.

The proposed model, however, is similar to Mobley's models in that intention to quit is used to imply that actual turnover behavior is forthcoming. Therefore, the research done on Mobley's models, which has repeatedly confirmed the very significant positive correlation between

intention to quit and actual turnover, provides substantial support for the use of the dependent variable intention to quit rather than actual turnover behavior. Also, it is interesting to note that later revisions of the original intermediate linkages model have begun to add some personal characteristics as independent variables antecedent to job satisfaction, just as the proposed model suggests. However, these variables only begin to come close to approximating the hypothesized relationship between one's personality and personal characteristics and the occupational environment. When Mowday et al. (1980) failed to cross-validate Mobley's (1977) model, they suggested that failure to do so might have been due to the fact that the cognitive processes associated with the turnover decision as well as the individual and situational factors influencing the cognitive process may differ between settings. The situational factors definitely represent the organizational environment factors of the proposed model. It could be argued that the individual factors could be grouped by occupation and, thus, that members of different occupations have different responses to the same situation.

Steers and Mowday Model. Steers and Mowday (1979) present a complex model of voluntary employee turnover (see Figure 11). This model begins with individual characteristics which, when combined with information on jobs and the organization, determine one's job and organizational expectations. These expectations are compared with the actual organizational experiences and characteristics to determine the individual's affective responses to the job, such as job satisfaction. The affective responses then, in turn, determine whether one will intend

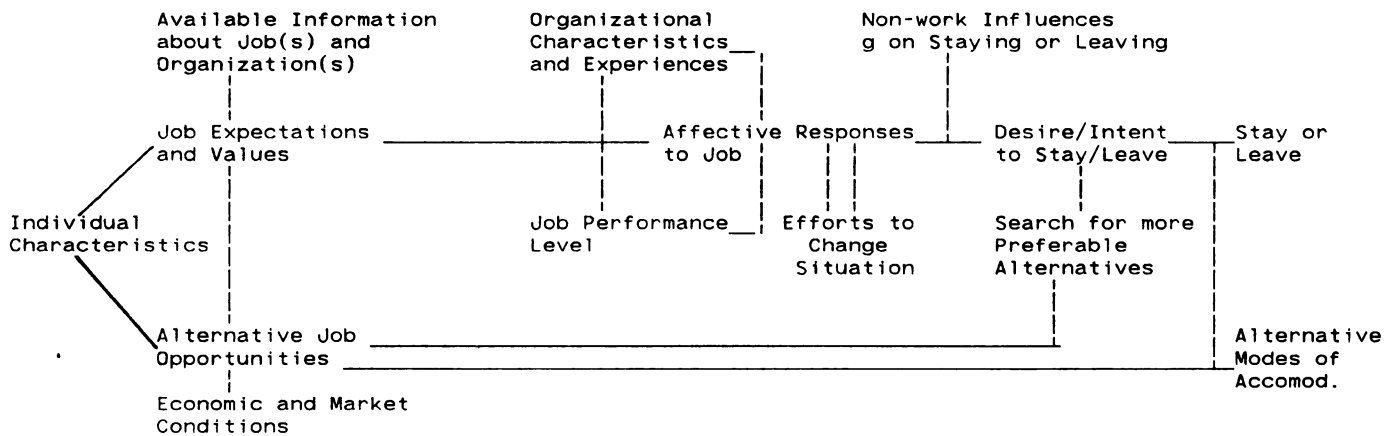

Figure 11. Model of Voluntary Employee Turnover.[a]

[a] Steers and Mowday, 1979.

to leave or remain; however, this relationship is moderated by attempts to change the situation and by economic and non-work factors. The authors state that advantages of their model over other turnover models include:

1. acknowledging the role of available job information,
2. the extent to which expectations are met,
3. the role of job attitudes other than job satisfaction (particularly organizational commitment),
4. feedback loops,
5. worker efforts to change the situation.

While the model appears to be very complete, no research has been conducted to date.

The Steers-Mowday (1979) model is very similar to the proposed model in that its starting point is the individual's characteristics and in that the individual's responses to his/her situation are a result of a comparison between one's job expectations and one's actual organizational experiences and characteristics. The proposed model, as outlined above, assumes that the individual may experience feelings of discord or incongruency at work and often look at the organizational characteristics and experiences to determine the source of these feelings. Thus, both models recognize the importance of the individual's need to feel a match between expectations and reality. Another similarity between the two models is the fact that both propose a wide range of individual responses to the matching outcome. Steers and Mowday (1979) suggest that turnover and intention to quit are just

two of the possible responses and that there are other factors which moderate these two responses. It might be that the proposed model provides a better explanation of why two of Steers-Mowday's responses occur. It could be that a person-occupation match leads to job satisfaction, while a person-organization match leads to organizational commitment and that either one of the mismatch conditions has a spillover effect to both responses (i.e., job satisfaction and organizational commitment). The major difference between the proposed model and the Steers-Mowday model is that their model does not explicitly acknowledge the role of one's chosen occupation as being a cause for the affective responses to one's job.

Summary of Major Turnover Models

Complex models of voluntary turnover have become abundant in the literature. The fact that all of these models have received some support makes it hard for the practitioner to decide which models to use in order to understand turnover. Do these models contradict each other or are they all just partial descriptions of reality? Or, perhaps the process is not as complex as the theorists believe. In fact, Bluedorn (1980a) in his attempt to combine and simplify the models of Price and Mobley around organizational commitment and expectancy theory (Vroom, 1964) states that the models probably complement, rather than contradict each other. Each model does contain job satisfaction and most do include organizational commitment as the important intervening variables between the independent variables of organizational characteristics and the individual and the dependent variable, turnover.

On the other hand, perhaps these different models have not obtained total support because each continues to ignore the same independent variable. Specifically, none of these models takes into account the fact that an individual may leave an organization because s/he is in the wrong occupation -- a fact which has <u>not</u> been ignored by vocational psychology or the proposed model. One notable exception to this is Wanous (1980) who proposed a model (Figure 12) of turnover based on Lofquist and Dawis' (1969) Theory of Work Adjustment. The Wanous model proposes that individuals consider the degree of match between the organizational climates and their needs and motives. Based on the degree of match and a comparison to other jobs, job satisfaction and organizational commitment may be negatively affected, which then may lead to job search activity if labor-market conditions are favorable and

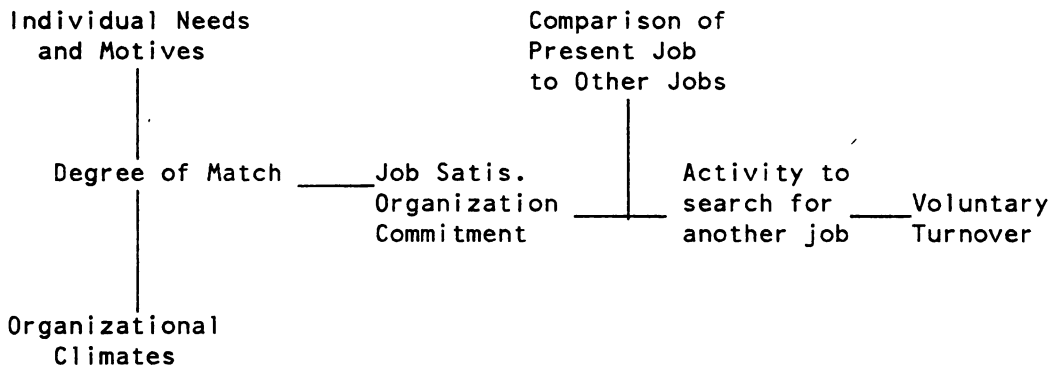

Figure 12. Model of Voluntary Turnover.[a]

[a] Wanous, 1980.

finally voluntary turnover. This model, as well as the proposed model, is concerned more with the psychological process used in the turnover decision rather than what specific factors cause job satisfaction, organizational commitment, or turnover behavior.

Vocational Psychology Literature

Vocational psychologists are typically concerned with topics such as vocational guidance, occupational success, job satisfaction, work adjustment, and vocational development. In this section, a brief review of the research done in this field relating to occupational change is presented. An explanation of Holland's model of vocational choice and why this model was used to develop much of the proposed model is next presented. Finally, research findings with respect to turnover are reviewed and compared to the proposed model.

Vocational Stability and Change. An area of vocational psychology which is related to turnover is vocational stability and change, which concerns the internal and external forces that serve to change one's vocational preferences. In a summary of current findings in this field, Holland (1976) states that:

1. changes in vocational preferences may occur because of positive reinforcement from others,
2. indecision about vocational changes may not mean maladjustment but rather a healthy or competent attitude,
3. vocational changes often appear systematic as if one were searching for a better fit.

Several vocational psychologists have proposed models of vocational choice and preference. For example, Super (1957) predicts that vocational change occurs when one's self-concept has changed simply because one's vocational preference is an attempt to implement the self-concept. Of all the theories of vocational change and vocational choice, Holland's theory is, by far, the most widely accepted and used.

In fact, the Strong Vocational Inventory Blank has been modified to report also to the user how Holland would classify the individual with respect to vocational interests. The Holland codings of different occupations have also been extended to the Dictionary of Occupational Titles (1970), so that all occupations can be represented by Holland's occupational environment codes (see Viernstein, 1972).

Holland's model has been chosen for this research because it provides an objective tool for determining the degree of match or congruency between the individual and one's occupation. A test of the proposed model, on the relationship between voluntary turnover and occupational change intentions and the degree of person-occupation mismatch, must look at the the degree to which one's occupation matches one's personality, characteristics, needs, etc. Holland provides an objective evaluation of what personality types tend to pursue each occupation and also provides a tool for individuals to use to determine their own personality type. In addition, there has been considerable support for Holland's congruency hypothesis as well as for other propositions in Holland's theory. Thus, because Holland's model lends itself so well to the intended research and because it also provides one of the fundamental building blocks for the proposed model, Holland's model is used.

Holland's Theory of Vocational Choice. According to Holland (1966,1973) most personalities and work environments in our culture can be classified according to six types: Realistic, Enterprising, Investigative, Social, Artistic, and Conventional. Each personality type is a complex array of personal attributes based on one's biological

and social heredity and personal history; similarly, each environment is differentiated in its demands and opportunities to stimulate activity, foster competencies, encourage perceptions, and reward values (Holland, 1973). Each environmental type reinforces the traits of the corresponding personality type. Holland (1966, 1973) characterized environments by describing the distribution of personality types in a given environment and assuming that the nature of an occupational environment emanates from the personality types which dominate the environment. Thus, occupations are categorized by the three environmental types most representative of that occupation which reinforce the traits of the corresponding personality type. The environmental types are Realistic, Conventional, Artistic, Enterprising, Investigative, and Social. Determination of which occupations to pursue is made by exactly matching the individual's personality type with the characteristics of the work environment. Figure 2 presented earlier provides a summary of the personality characteristics, values, and activities of the six personality types. The Realistic personality traits, for example, include unsociable, uninsightful, frank, and materialistic; while the Artistic type is independent, introspective, non-conforming, and idealistic.

Numerous studies have investigated the construct and predictive validity of Holland's congruency hypothesis (i.e., that individuals choose or are employed in occupations which match their personalities) and most do support Holland (e.g., Gottfredson, Holland, and Gottfredson, 1975; Matthews and Walsh, 1978; Mount and Muchinsky, 1978; Rounds, Davison, and Dawis, 1979; Wakefield and Doughtie, 1973; see also

Latack, 1981; Walsh, 1979; Zytowski, 1978). Since some personality types are more closely related to each other than other personality types, Holland (1973) developed a hexagonal model (Figure 13) to represent the relationship between the personality types. The six points of the hexagon in clockwise arrangement are Realistic, Investigative, Artistic, Social, Enterprising, and Conventional. The psychological similarities between the types is hypothesized to be inversely proportional to the distances between the types on the hexagon (Holland, 1973). Therefore, adjacent types on the hexagon are most similar, while opposite types are most dissimilar. Many research studies on the relatedness of the personality types have supported the hypothesized hexagon (Bobele, Alson, Wakefield, and Schnitzen, 1975; Cole, Whitney, and Holland, 1971; Crabtree and Hales, 1974 - partial support; Cunningham et al., 1977; Tuck and Keeling, 1980; Wakefield and Doughtie,

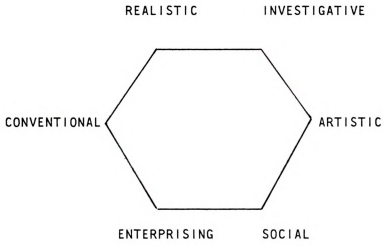

Figure 13. Holland's Hexagon of Personality Types

1973).

Implicit in Holland's theory is the premise that people leave their jobs if they are in occupations which do not match their personality. This is also a major premise of the proposed model (see Assumption 1). Most turnover researchers have ignored this fact and continue to concentrate on organizational and job characteristics as being the cause of turnover rather than a mismatch between the individual and his/her occupation. Perhaps this is one of the reasons why turnover research usually fails to explain more than 20% of the turnover variance (Mobley et al., 1979). The proposed model builds on Holland's congruency hypothesis and on the prevalent notion in organizational behavior research that organizational factors contributed to decisions to leave an organization. Thus, the proposed model can now be called a hybrid Holland-Price model of voluntary turnover and occupational change intentions.

Careers and Turnover. As mentioned earlier, research on career or occupational change has not taken into consideration whether the individual left the organization or not. However, research does indicate that the new career/occupation is more congruent (or matches better) the individual's work orientation, needs, and values than the old career (Andrews, 1973; Gilbride, 1973; Gottfredson, 1977; Snyder et al., 1978; Wiener and Vaitenas, 1977). These findings support Holland's theory. However, there have been some contradictory results. For example, Robbins et al. (1978) found that mid-career changers did not always change to a more congruent occupation, as defined by Holland; however, the authors admit that the manner in which the occupations were

converted to Holland's environmental codes using DOT was highly questionable. Also, Thomas (1980) suggests that in order to understand mid-career changers, one must consider the status of and satisfaction with the previous job are extremely important as well as the reasons cited for changing occupations. Thomas' study seems not to support Holland's congruency hypothesis in that it suggests that one's previous, not the new, occupation plays an important role in occupational change and, thus, is more in line with organizational behavior turnover research. However, in another sense, Thomas does support Holland. It appears that in order to understand some of the reasons for turnover, one needs to consider the characteristics and needs of those who inhabit a particular occupation, whether the organization provides for these needs, how the individual fits into that environment, and what specifically the organization can do to satisfy more of these needs for the individual.

CHAPTER SUMMARY

In this chapter the major findings concerning the antecedents of occupational and organizational change were reveiwed. Personality factors seem to be the primary antecedents of occupational change; while, for organizational change, organizational characteristics (and their contribution to job dissatisfaction) appear to be the primary antecedents of organizational change. Each of these has usually be considered separately, thus ignoring any interaction or additional effects which might be due to the ignored factor. In the proposed research this oversight is avoided by considering both personality and organizational characteristics as possible antecedents and by analyzing

both expressed intentions to leave one's organization and one's occupation.

CHAPTER THREE

METHODOLOGY AND RESULTS

The purposes of this chapter are to present the research design developed to test the hypotheses presented in Chapter Two, to discuss the implementation of the research design, and to analyze the data which test the hypotheses and the model presented in this dissertation. These purposes are accomplished through the presentation of five chapter sections: research design, method of analysis, description of the instruments, procedure, and results. Each section begins with a short summary of what that section intends to accomplish. The chapter is then concluded with a brief summary.

RESEARCH DESIGN

In this section, the basic research design for testing the hypotheses is first presented. This includes a brief discussion of the potential problems associated with the design chosen and a comparison with designs previously used to study intention to quit and turnover. The model (Figure 1) is next presented in a form which lends itself to hypothesis testing and statistical analysis, followed by a brief re-examination of the hypotheses.

The research design involves a pre-established (non-random) group of individuals whose data are collected at only one point in time. This design fits Campbell and Stanley's (1963) definition of a "pre-experimental" design and can best be described as a case study

design (X O) with the treatment X being one's organizational/occupational experiences to date.

In studies of this nature, significant threats to internal and external validity (or generalizability) exist, such as instrumentation, individual differences, and selection. Of particular concern in studies of turnover and of occupational change is the fact that the experimental design should at least be a pre-post test design (O X O) in which two observations are taken over some period of time -- once before individuals have the opportunity to leave and then after some period of time to verify that individuals did or did not leave. Thus, the "one shot" design used here is a shortcoming of the present design; however, it is not new in the field of turnover research. As explained earlier, use of intention to leave and the single observation design have received support both theoretically and empirically (Bluedorn, 1980a; Coverdale and Terborg, 1980; Fishbein, 1967; Locke, 1968; Martin, 1979; Spencer, Steers, and Mowday, 1981). As a result, more turnover researchers are beginning to use this type of design. At the conclusion of this dissertation, more is said about these research design problems.

The hypotheses to be tested in this dissertation are:

H1: Occupational change intentions are a positive function of the degree of occupational mismatch, the degree of organizational mismatch, and their interaction in that order.

H2: Organizational change intentions are a positive function of the degree of organizational mismatch, the degree of occupational mismatch, and their interaction in that order.

H3: Individuals classified as belonging to Cell A of Figure 14 are classified as belonging to Cell 1 of Figure 14.

Individuals classified as belonging to Cell B of Figure 14 are classified as belonging to Cell 2 of Figure 14.
Individuals classified as belonging to Cell C of Figure 14 are classified as belonging to Cell 3 of Figure 14.
Individuals classified as belonging to Cell D of Figure 14 are classified as belonging to Cell 4 of Figure 14.

H4: The degree of occupational change intentions is greatest when individuals are mismatched to the occupational and organizational environments (Cell D, Figure 14), followed by the condition where individuals are mismatched only to the occupational environment (Cell B), then when individuals are mismatched only to the organizational environment (Cell C), and, finally, when individuals are not mismatched to their environments (Cell A). (That is, Cell D > Cell B > Cell C > Cell A, Figure 14).

H5: The degree of organizational change intentions is greatest when individuals are mismatched to the occupational and organizational environments (Cell D, Figure 14), followed by the condition where individuals are mismatched only to the organizational environment (Cell C), then when individuals are mismatched only to the occupational environment (Cell B), and, finally, when individuals are not mismatched to their environments (Cell A). (That is, Cell D > Cell C > Cell B > Cell A, Figure 14).

Hypotheses 1 and 2 both are tested by the following two regression equations:

H1: $y1 = ax1 + bx2 + cx1x2$, where the amount of variance explained by x1 is greater than by x2 which is greater than by x1x2 and $a,b,c > 0$.

H2: $y2 = dx2 + ex1 + fx1x2$, where the amount of variance explained by x2 is greater than by x1 which is greater than by x1x2 and $d,e,f > 0$.

Where y1 = occupational change intentions,
y2 = organizational change intentions,
x1 = occupation mismatch,
x2 = organization mismatch.

The methods chosen to describe further the interaction effect and to test the entire model, which considers the dependent variables simultaneously, involve transforming the continuous independent and

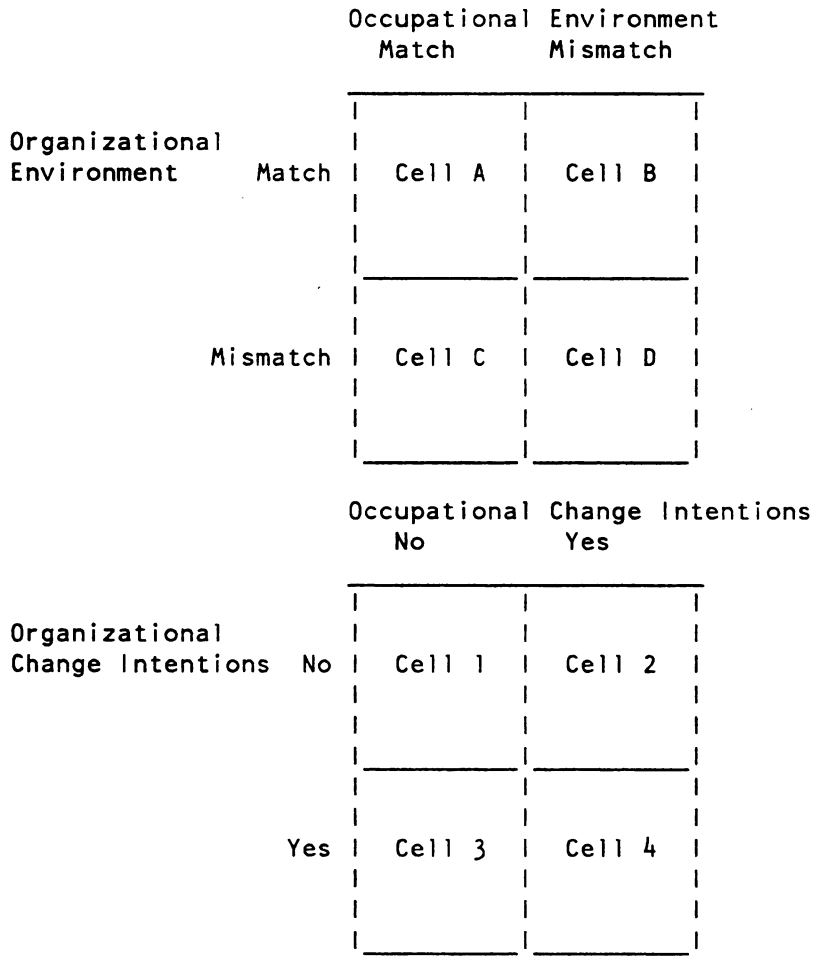

Figure 14. Classification of Dichotomized Variables

dependent variables into discrete classifications. This, of course, means that a considerable amount of information is lost. First, the variables occupational mismatch and organizational mismatch for each subject are dichotomized at the midpoint of the response options. Those subjects below this midpoint are labeled as "matched" to a particular independent variable, while those above this point are labeled as "mismatched." Subjects are classified into one of the four cells (A-D) presented in Figure 14 based on the reclassification of the mismatch variables. For example, if the subject is now coded as "matched" to the occupation and "mismatched" to the organization, the subject belongs in Cell C.

The dependent variables (organizational change intentions and occupational change intentions) are similarly dichotomized at the midpoint into two groups, labeled "no" (to intention to change) and "yes." Subjects are classified into one cell (of Cells 1-4) of the two by two matrix presented in Figure 14 based on these recoded variables for occupational change intentions and organizational change intentions.

The nature of the interaction can now be further described by plotting the means of each dependent variable for the four different combinations of the dichotomized independent variables. The means are plotted on two graphs. First, the means for occupational change intentions are plotted on a graph where the y-axis represents the dependent variable occupational change intentions and the x-axis represents occupational mismatch. The four points plotted correspond to the four dichotomous situations: occupational match - organizational match (Cell A of Figure 14), organizational match - occupational

mismatch (Cell B), organizational mismatch - occupational match (Cell C), and occupational mismatch - organizational mismatch (Cell D). The points corresponding to Cells A and C (occupational match) are connected as well as the points corresponding to Cells B and D (occupational mismatch). The resulting two lines indicate the interaction effect associated with occupational change intentions. The same four situations are used to plot the means for organizational change intentions on a y-axis representing organizational change intentions and on an x-axis representing organizational mismatch. The points connected correspond to organizational match (Cells A and B) and organizational mismatch (Cells C and D). The two resulting lines indicate the interaction effect associated with organizational change intentions. It is expected that all four lines are positive in slope and that each pair do intersect.

The predictions outlined in Hypothesis 3 can also be tested using the dichotomized variables and non-parametric binomial tests. To reiterate, the individuals whose independent variables place them into Cell A of Figure 14 are expected to have dependent variable responses which place them into Cell 1 of Figure 14. Similarly, the individuals in Cell B are expected to fall into Cell 2; Cell C into Cell 3; and Cell D into Cell 4. All subject whose expected cell classification matches their actual cell classification are considered as "Hits"; while any mismatch is considered a "Miss". Since the exact nature of the "Miss" is not needed (i.e., whether a Cell A person was classified as Cell 2, 3, or 4, for example), a simpler version of the Chi-square test, the binomial test, is used. The binomial test is basically a Chi-square

test which measures how the observed and expected results differ. The test statistically compares the actual "Hit" rate with the expected "Hit" rate.

In order to test Hypotheses 4 and 5, the means for occupational change intentions and for organizational change intentions are calculated for each possible combination of the two main independent variables. In other words, the mean for occupational change intentions is calculated for subjects classified as belonging to Cell A, then for subjects in Cell B, Cell C, and, finally, Cell D of Figure 14. The relative magnitudes of the means for Cells A-D are compared with each other to determine if the ordering of the means matches the predictions made in Hypotheses 4 and 5. For occupational change intentions, as an example, the highest mean should occur for subjects in Cell D, then Cell B, Cell C, and lowest for Cell A. If the relative magnitudes match the predictions, then the hypotheses are further tested by performing t-tests for significant mean differences among the cells. For Hypothesis 4 (occupational change intentions), the following means are compared: Cell D and Cell B, Cell B and Cell C, Cell C and Cell A. For Hypothesis 5 (organizational change intentions), the specific comparisons made on the mean organizational change intentions are Cell D and Cell C, Cell C and Cell B, and Cell B and Cell A.

ANALYSIS

This section briefly describes in more detail the statistical tests planned to test the five hypotheses. Additionally, the specific tests of significance are provided. Before testing any of the hypotheses, the Pearson product moment intercorrelations among all the independent and

dependent variables are calculated and analyzed with respect to strength and direction of the relationships.

In order to test Hypotheses 1 and 2, hierarchical regressions are performed by sequentially adding each of the two matching variables and the interaction of the two to the equations predicting intentions to change organizations or occupations, and noting the amount of additional explained variance added after each independent variable is added. (For this analysis, the interaction term is computed by multiplying the two mismatch variables together.) Hierarchical multiple regression is a statistical method useful in decomposing the explained variance into its separate parts. Since a definite causal ordering is hypothesized to exist for the independent variables, hierarchical regression should be used (Nie, Hull, Jenkins, Steinbrenner, and Bent, 1964).

The regression method to be used consists of running a series of multiple regressions in which the dependent variable (organizational change intentions or occupational change intentions) is regressed first on the independent variable hypothesized to be most predictive of the dependent variable and then adding in the remaining independent variables in order of hypothesized strength of relationship. When a new variable is added to the regression, the Beta weights change for those variables entered previously and the amount of change is an indication of that variable's indirect effect on the dependent variable which acts through the newly entered variable. In other words, this method of analysis identifies the incremental contribution of the independent variable to the dependent variable or the colinearity among the predictors. In addition, the sum of squares attributable to each

variable includes both the variable's direct influence on the dependent variables and the variable's indirect influence on the dependent variable which acts through the remaining unentered independent variables. The independent contribution is inferred by the change in R-squared rather than from the size of the regression coefficient. By analyzing the change in R-squared after each step, the statistical significance associated with each independent variable can be determined.

Tests for statistical significance include the standard probability test used to test the level of significance for correlation coefficients based on different sample sizes and levels of significance. This test is applied to all intercorrelations and apply primarily to tests of Hypotheses 1 and 2. There are two particular tests of significance to be used with the hierarchical regressions. The first test is the overall F test for goodness of fit of the final regression equation obtained. This F test is:

$$F(k,N-k-1) = (R^2/ k) / (1 - R^2) (N - k - 1),$$

where k is the number of independent variables and N is the sample size.

The second F statistic tests the significance of each independent variable in predicting the dependent variable. In other words, the amount of variance attributable to a given independent variable is tested for statistical significance. This F test is:

$$F(k,N-k-1) = (\text{change in } R^2 \text{ due to the addition of a given independent variable} / 1) / ((1 - R^2 \text{ TOT}) /(N - k - 1)),$$

where k is the number of independent variables

and N is the sample size.

In order to test Hypothesis 3, concerning the entire model, non-parametric binomial test statistics are used. This test is employed when one wants to determine whether or not significant differences exist between the expected and observed frequencies for a given situation. The hypothesis to be tested, then, is that those subjects in a given mismatch cell fall into the corresponding cell of the intentions matrix (see Figure 14). A small probability level indicates that the hypothesis is not accepted, or, more specifically, that the degrees of the independent variables do not significantly predict the degrees of organizational mismatch and occupational mismatch. That is, knowing the individual's mismatch classification does not help predict the intentions classification.

As mentioned earlier, Hypotheses 4 and 5 are tested first by comparing the relative magnitudes of each of the means for the cells A-D (Figure 14) on each of the two dependent variables, occupational change intentions and organizational change intentions. If the relative magnitudes are not in the order hypothesized by the hypothesis, the hypothesis is rejected. However, if the relative magnitudes do satisfy the hypothesized ordering, the hypothesis is further tested using the t-tests for mean differences to determine if there are significant mean differences between the means. Specifically, the mean occupational change intentions for individuals in Cell D (Figure 14) should be statistically different (as well as greater) from the mean occupational change intentions for individuals in Cell B. Similarly, the mean for

Cell B should be statistically different (and greater) from the mean for Cell C, which should be statistically different (and greater) from the mean for Cell A. For organizational change intentions, the mean of Cell D should be statistically different (and greater) from Cell C, which should be statistically different from Cell B, which should be statistically different from Cell A. The test statistic is:

$$t = (y1 - y2 - 0) / s * (1/n1 + 1/n2)^{1/2},$$

where y1, y2 are cell means,
s is pooled estimate of population standard deviation,
n1, n2 are respective sample sizes for the cells.

$$s^2 = ((n1 - 1) * s1^2 + (n2 - 1) * s2^2) / (n1 + n2 - 2),$$

where n1, n2 are respective sample sizes for the cells,
s1, s2 are respective sample standard deviations,
n1 + n2 - 2 are the degrees of freedom.

The hypothesis is then not accepted if any one of the three cell mean comparisons results fails to reject the null hypothesis (i.e., HO: y1 = y2, where y1, y2 are cell means).

INSTRUMENTS

The measures for both of the independent variables and for both of the dependent variables are described in detail in this section. Supporting literature for those measures which have been used previously in research studies are presented. Where possible, reliability and validity coefficients are also included.

Person-Occupation Mismatch

The variable person-occupation mismatch is based on Holland's hypothesis that occupational environments consist of the common

personality types found in a particular occupation. In order to determine occupational-environment mismatch, two sets of information are needed: the individual's personality pattern and the occupational environment code for the individual's occupation. Subjects are first asked to specify their job titles. Job titles are then converted into their corresponding 6-digit DOT (Dictionary of Occupational Titles) code. The DOT classification is based on the work performed, worker trait requirements, and level of involvement with data, people, and things. Environments for different occupations are coded with a three-letter code indicating the three environmental types most representative of the occupation using a method developed by Viernstein.

Viernstein (1972) outlines two methods for converting the DOT codes into Holland's three-letter environment code. The first method involves statistically manipulating the six-digit DOT code to produce a six-letter Holland occupational-environment classification, the first three letters of which are the environment code. The second method, and the method used here, involves taking the first three digits of the DOT code and looking up the corresponding three-letter occupational-environment code in tables provided by Viernstein (1972). This method resulted in 85% and 89% agreement between the conversion results and the known occupational environments for two samples when Viernstein (1972) compared the first letter only. Comparing all three letters resulted in 64.7% and 56% agreement with the two samples (Viernstein, 1972). Comparisons between these two methods strongly suggest that they yield similar results (see Viernstein, 1972).

There are two major instruments which can determine an individual's six-letter personality pattern. The Self-Directed Search or SDS (Holland, 1973) consists of four sections: activities (mark those liked and disliked), competencies (mark those one can perform well), occupations (mark those which interest and disinterest), and self-ratings on a number of skills and abilities. Because of its length, the SDS is not used in the present research. The Vocational Preference Inventory or VPI (Holland, 1973) (Question 13 of questionnaire, Appendix B) is a checklist of 160 occupational titles. Subjects are instructed to mark those occupations that appeal or interest them, those occupations that they dislike or find uninteresting, and those occupations upon which they are undecided. There are 11 scales assessed by the VPI: the six personality types, self-control, masculinity, status, infrequency, and acquiescence. Since the proposed study is interested in only the determination of the individual's six-letter personality pattern, only the six personality scales are included in the questionnaire. As a result, the measure is a checklist of 90 occupational titles.

The VPI has gone through seven revisions and presently seems to be the quickest tool possessing sufficient validity and reliability available for determining one's personality pattern. Reliabilities for the seventh edition of the VPI range from .42 to .91 for males and from .53 to .91 for females on the 11 scales (see Spokane and Derby, 1979). In addition, the occupational titles appear to be more gender-neutral than previous versions. Concurrent validity for Holland's congruency

hypothesis (i.e., that people want to be matched to their occupational environments) has been found for a wide range of samples when using the VPI: employed non-college subjects, non-professional workers, employed college-degreed black females, adults in general, college females, women, college students, and men (Andrews, 1973; Bingham and Walsh, 1978; Edwards, Nafziger, and Holland, 1974; Gaffey and Walsh, 1974; Matthews and Walsh, 1978; Salomone and Slaney, 1978; Spokane and Derby, 1979; Walsh, 1974; Walsh and Barrow, 1971; Walsh, Bingham, Horton, and Spokane, 1979; Walsh and Lewis, 1972).

The result of the VPI is a six-letter code indicating the subject's overall personality pattern. The first letter is the individual's personality type or that personality most indicative of the individual; the second letter indicates the personality type next most representative of the individual; and so on down to the sixth letter which indicates the personality type least indicative of the individual. Holland (1966,1973) states that a congruent match between the person and the occupational environment exists when the first three letters of one's personality pattern exactly match the three letter environment code. In essence, he is saying that people will choose occupations with environments that are congruent with (or match) their own personalities. Thus, a mismatch exists when these do not match. For the purposes of this study, however, the degree of mismatch is needed. Since no studies are found which use all three letters of both the personality pattern and occupational environment to determine the degree of match, as Holland's definition requires, an algorithm is developed by the researcher to determine the degree of match between these two variables

based on a three-letter comparison.

For the algorithm developed, the degree of mismatch ranges from 0 to 18, where 0 signifies an exact match and 18 signifies the most extreme mismatch. The decision rules are based on comparing the three-letter occupational-environment code with the first three letters of one's personality pattern. The rules are applied by comparing the letters in their corresponding positions within each code unless otherwise specified. Holland's hexagon (Figure 13) is used for the comparison of letters which are not identical between the two codings. The hexagon, as explained earlier, suggests that personality types adjacent to each other in the RIASEC hexagon (i.e., R-I, I-A, A-S, S-E, E-C, C-R) are more similar than types which are not adjacent and not opposite (i.e., R-A, I-S, A-E, S-C, E-R, C-I). Personality types which are opposite on the hexagon (i.e., R-S, I-E, A-C) are the least similar.

Table 2

Rules for Determining
The Degree of Occupational Mismatch

A. Investigate the similarity between the occupational code and the personality pattern by applying rules 1-8 on each of the first three letters in the occupation code one at a time and comparing each with the first three letters of the personality pattern.

B. The person-occupation mismatch index will be the sum of three numbers, one for each letter in the occupational code, subtracted from 18. The index is initialized at 0.

C. Once a letter has actually been used by a rule, it is no longer eligible to be used in other comparisons.

D. Positional comparisons are to be used for all situations where matching letters are not found. If one of the letters has already been used, the adjacent letter is used.

1.	If the first letters (of personality pattern and occupational-environment code) match Ex. RIA vs. RSC: first letters match	add 7
2.	If second letters match Ex. RIA vs. SIC: second letters match	add 6
3.	If the third letters match Ex. RIA vs. SCA: third letters match	add 5
4.	If the same letter appears in both codes but in adjacent positions Ex. RIA vs. RAI: I and A are both in adjacent positions	add 4
5.	If the same letter appears in both codes but in non-adjacent positions Ex. RAI vs. AIR: A and I are in adjacent positions and R is in a non-adjacent position	add 3
6.	If a letter in one code does not match a letter in the other code but is adjacent in Holland's hexagon Ex. RIA vs RIS: A and S are adjacent in RIASEC	add 2
7.	If a letter appears which does not match a letter in the other code, and it is neither adjacent nor opposite in Holland's hexagon Ex. RIA vs RIE: A and E and not adjacent and are not opposite in RIASEC	add 1

Table 2 (cont'd)

8. If a letter appears in one code which does not match a letter in the other code and is opposite in Holland's hexagon Ex. RIA vs. RIC: A and C are opposite in RIASEC	add 0

Some examples are presented below to illustrate how these rules are applied.

	INDEX
Three letter occupation code exactly matches three letter personality pattern: RIA vs. RIA: Use Rules 1, 2, and 3.	0
All three letters of both codes match but they are in reverse order: RIA vs. AIR: Use Rules 2, 5, and 5.	6
First two letter of each code exactly match: and the last letters are adjacent in the hexagon: RIA vs RIS: Use Rules 1, 2, and 6.	3
and the last letters are not adjacent or opposite: RIA vs. RIC: Use Rules 1, 2, 7.	4
and the last letters are opposite: RIA vs. RIC: Use Rules 1, 2, 8.	5
First letter of the codes match and the other two letters are in the wrong order: RIA vs. RAI: Use Rules 1, 4, 4.	3

Since this index is developed by the researcher and since no previous research using Holland's theory is found which attempted a three-letter match, it is decided to also calculate the degree of occupational mismatch using a one-letter comparison. The one-letter method has been used most extensively in vocational research (DeWinne et al., 1978; Matthews and Walsh, 1978; Mount and Muchinsky, 1978; Peiser and Meir, 1978; Robbins et al., 1978; Turner and Horn, 1977; Walsh et al., 1979). Walsh et al. (1973) compared a one-letter definition and a two-letter definition of congruence in studying the relationship between satisfaction and making congruent occupational choices. The two-letter definition resulted in significant findings, while the one-letter definition did not. Based on this finding and the fact that the variable created here uses substantially more of the individual's information, predictions are expected to be more accurate.

The usual way in which Holland's occupational mismatch is determined for research purposes is to compare the first letter only of the personality pattern and the occupational environment code. Then based on the proximity of the two comparison letters on Holland's hexagon, the following codes are assigned: 0 for identical letters, 1 for adjacent letters on the hexagon, 2 for letters which are not identical, adjacent, or opposite on the hexagon, and 3 for letters which are opposite on the hexagon. Thus, a code 3 represents a total mismatch and a code 0 represents an exact match. By using two forms of the occupational mismatch variable, one based on the developed algorithm and one based on the one-letter match, the data can be analyzed and compared using the

two alternative measures of the same independent variable. In order to distinguish between these two alternative forms for the same independent variable throughout the remainder of this dissertation, the term "tradition occupational mismatch" designates the one-letter comparison; the term "developed occupational mismatch" or "occupational mismatch" represents the independent variable based on the three-letter comparison. Figure 15 clarifies these definitions.

To test Hypothesis 3 and the entire model, the two independent variables must be dichotomized into the categories Matched and Mismatched. While several methods can be used to divide the sample, the method used here is based on the meaning of the actual responses given. The division of the sample then occurs at the midpoint of responses, so that responses below midpoint imply that the individual is in a matched situation and that responses above this midpoint suggest the individual is in a mismatched situation. The midpoint for occupational mismatch

Occupational mismatch (Developed representation)	degree of occupational mismatch based on a three-letter comparison between the occupational environment and the first three letters of the personality pattern. (Range = 0 to 18.)
Traditional occupational mismatch	degree of occupational mismatch based on a one-letter comparison using only the first letter of the occupational environment and the first letter of the personality pattern. (Range = 0 to 3.)

Figure 15. Definition of Occupational Mismatch

occurs at code 9.

Person-Organization Mismatch

A review of organizational practices and characteristics as presented in Chapter Two and Appendix A reveals that there are over 20 components of the organizational environment which have been found to have significant positive or negative relationships with voluntary turnover. No instrument presently exists which measures even a majority of these factors. However, there are a few measures available which assess a number of these factors.

Bluedorn (1980b) used an instrument which gauged the employee's description of each of the following components of the organizational environment: centralization, instrumental information, foregone environmental opportunity, promotional opportunity, member integration, equity, routinization, and potential role conflict. Price and Mueller (1981) used a measure which assessed the employee's description of each of the following organizational environment variables: routinization, participation (centralization), instrumental communication, integration, pay, distributive justice, and promotional opportunity. Martin (1979) used an instrument which assessed the employee's description of distributive justice, routinization, upward mobility, pay, integration, instrumental communication, formal communication, and centralization. These instruments are all based on expanded versions of Price's (1977) model of voluntary turnover (Figure 4) which originally proposed that pay, integration, instrumental communication, formal communication, and centralization were significantly related to voluntary turnover.

The Job Diagnostic Survey or JDS (Hackman and Oldham, 1975) currently assesses 6 of the organizational environment factors listed in Appendix A: task identity, task significance, feedback, autonomy, variety, and dealing with others. The JDS determines the extent of the 6 perceived job characteristics in an individual job setting with 21 items. This tool has been used extensively in task design and performance research, as well in some job satisfaction research (Abdel-Halim, 1981; Brousseau and Prince, 1981; Farrell and Robb, 1981; Griffin, 1981; Mayes and Ganster, 1980; Mowday and Spencer, 1981; and Mowday, Stone, and Porter, 1979). In a recent review by Griffin, Welsh, and Moorhead (1981), the JDS was found to be the instrument used most often in research dealing with task characteristics and performance.

All of these instruments assess the employee's perceptions of each of the factors. However, for the proposed research, an instrument is needed which assesses the degree to which the organizational environment components present in one's organizational environment match the individual's desired amount of each of these factors specified in the tool. To accomplish this task, items from the instrument used by Price and Mueller (1981) and from the Job Diagnostic Survey developed by Hackman and Oldham (1975) are modified by additionally asking how much of each factor the individual would like to have in his/her present situation. The reliabilities (Cronbach's alpha coefficient) for the factors borrowed from Price and Mueller (1981) range from .75 to .90. Internal consistency reliabilities for each of the scales of the JDS range from .88 to .56; while the coefficient alpha for the combined

items of the JDS is .72 (Hackman and Lawler, 1975). The factors used in the new measure are autonomy, task identity, feedback, task significance, dealing with others, variety, routinization, participation/centralization, instrumental communication, integration, pay, distributive justice, and promotional opportunity (Question 15 of the questionnaire, see Appendix B).

Initially, there was some concern that perhaps the JDS assesses items which too closely correspond to the occupation rather than the organization. However, upon closer scrutiny, it becomes more apparent that items such as feedback, autonomy, task identity, task significance, and variety are affected primarily by organizational and supervisory practices, policies, and attitudes. For example, the occupation of college professor appears to be an occupation which would not vary much across universities. However, being allowed to determine which texts are to be used as well as what the course content is (autonomy) depends on the organizational environment, <u>not</u> the occupation. Similarly, the organization's or the department's emphasis on teaching, publications, or community service affects the task significance of teaching as well as the variety component associated with being a professor. The procedure used by the organization or the department to evaluate professors (including if the evaluations are shared) determines the extent of the feedback component. Finally, the task identity and again task significance of the job are affected greatly by the manner in which classes are structured: Are the professors expected to construct their own examinations? Does the course fit into a curriculum whose goal is well specified and valued by students and faculty alike? Does the

institution emphasize quality of education and the importance of each course more than publication?

To evaluate the degree of organizational mismatch, each subject is asked to think about his/her present situation and about the ideal situation for each item and respond based on how much more or less of that item is desired. In other words, the individual specifically determines the amount of mismatch between "what is" and "what is desired." Each item is rated on a 7-point Likert scale ranging from "significantly less desired" (code 1) to "significantly more desired" (code 7), with code 4 corresponding to the response "about the same". Respondents next indicate which six items are most important to them and which six items are least important to them. The format for this question (Question 15 of questionnaire, Appendix B) is:

Below is a list of characteristics which could be present in your current organization and which may or may not be important to you when you think about your IDEAL ORGANIZATION. For each item, think about how much you are getting in your CURRENT ORGANIZATION and how much you would like to have if you were in your IDEAL ORGANIZATION. Then indicate how much more or less you would like to have of this characteristic by circling the number which best corresponds to your rating.

1. Chance to completely finish the pieces of work that I begin. 7 6 5 4 3 2 1

.
.
.

18. Co-workers who are friendly and helpful. 7 6 5 4 3 2 1

Responses:
7 = Significantly more is desired
6 = Somewhat more is desired
5 = Slightly more is desired
4 = About the same amount is desired
3 = Slightly less is desired
2 = Somewhat less is desired
1 = Significantly less is desired

Consider the above items and indicate which six (6) items are most

important to you by placing the corresponding item number next to the line labeled MOST IMPORTANT. Indicate which six (6) items are least important to your by placing the corresponding item number on the line labeld LEAST IMPORTANT.

MOST IMPORTANT: __ __ __ __ __ __
LEAST IMPORTANT: __ __ __ __ __ __

Since Holland's theory (1966, 1973) predicts that different personality types desire different job characteristics, only those responses which are listed as most important to the individual are used in the calculations. In other words, the degree of organizational mismatch is based on only those organizational factors valued most by the particular individual. These responses are averaged after subtracting 4 from each response and using only absolute values to calculate the average of organizational mismatch. This average, then, becomes an index for the amount of perceived mismatch between the individual and the organizational environment. This index can range from 0 to 3, with 3 being an indicator of extreme person-organization mismatch and 0 being an indicator of extreme person-organization congruence or match. Since this representation provides such a small range for variation, some thought was given to using the total of the summed absolute values. However, this method was discarded when it was discovered that there was missing data for some of the subjects. In order that these subjects' data might not be lost, it was decided to continue using the averaged absolute value for the data analyses.

Some thought had initially been given to the use of deficiency scores for determining the degree of organizational mismatch. In this method subjects would indicate how much of each item exists in their

present situation and then they would indicate how much of each item they would like to have present in their situation. The index would then be calculated by subtracting these two numbers and then averaging the absolute differences. However, deficiency scores (i.e. one item is subtracted from another) provide two sources of error variance rather than the one source of error variance associated with the method used here.

Wall and Payne (1973) detail some of the constraints involved in using deficiency scores. For example, if high degrees of a given factor already exist in one's present situation (using a 7-point Likert scale with 7 corresponding to "a significant amount is provided"), the resulting deficiency scores are smaller than if the existing degrees are lower. (Ex. Present job = 5 and Ideal job=7, Deficiency=2 while Present job = 2 and Ideal job = 7, Deficiency = 5.) Another constraint cited by Wall and Payne (1973) is that individuals rarely indicate that they want less of a given factor so that the range of possible deficiencies does, in fact, become smaller for those already existing high degrees of each factor (i.e., existing levels of 5 have deficiencies ranging from 0 to 2 whereas existing levels of 2 have deficiencies ranging from 0 to 5). Wall and Payne (1973) suggest that the subjects do their own arithmetic and simply report the difference; this is the method here chosen to assess directly the degree of mismatch.

A dichotomized version of this variable is needed to test Hypothesis 3 and the entire model. The midpoint of responses is used to determine into which classification (matched or mismatched) each subject falls.

For organizational mismatch, the midpoint is 1.55. Therefore, responses less than 1.55 are treated as being matched to the organization and responses greater thatn 1.55 are treated as being mismatched.

Organizational Change Intentions

Intention to leave one's organization rather than actual voluntary turnover behavior is used as one of the dependent variables. It is measured using a modified Bluedorn Staying or Leaving Index (1980a). The original Bluedorn measure contains eight questions which have subjects rate their chances of working for the same organization and for quitting the organization 3 months, 6 months, 12 months, and 2 years from now. Items 1-4 are reversed scored, then all eight items are summed. The range for the SLI is then 8 to 56. Bluedorn (1980a) tested his measure with five samples and found that the reliabilities (Cronbach's alpha coefficient) ranged from .87 to .95. He further stated that shortened forms of the SLI measure appear very workable with only small decreases in reliabilities. In order to reduce the length of the questionnaire, only a four-item question is used and the Likert-type responses reduced to a 5-point rather than a 7-point scale. The range of summed responses then for this modified version of Bluedorn's SLI is 4 to 20, where the higher one's score the greater the individual's intention to leave. This variable is created only for those subjects who responded to all four parts of the question. The question (Question 18 of the questionnaire, Appendix B) is:

> What are your intentions with respect to quitting your present ORGANIZATION? (Mark one response for each line)
>
> a. Three months from now 5 4 3 2 1

b. Six months from now 5 4 3 2 1
c. One year from now 5 4 3 2 1
d. Two years from now 5 4 3 2 1

Responses: 5 = definitely will leave
4 = probably will leave
3 = unsure
2 = probably will not
1 = definitely will not leave

If you did quit your present ORGANIZATION within the next two years, what would be the major reason(s)?

_____

The dichotomized version (for testing the entire model) of this summed intentions variable is based on a sample split at the midpoint associated with "unsure." That is, when the summed response is less than 12, the individual is classified as not intending to change; while greater than 12 results in a classification corresponding to intending to change.

Occupational Change Intentions --- The items to determine the subject's intention to change occupations are also derived from Bluedorn's (1980a)

SLI. The question (Question 19 of the questionnaire, Appendix B) is: What are your intentions with respect to leaving your present OCCUPATION? (Mark one response for each line)

a. Three months from now 5 4 3 2 1
b. Six months from now 5 4 3 2 1
c. One year from now 5 4 3 2 1
d. Two years from now 5 4 3 2 1

Responses: 5 = definitely will leave
4 = probably will leave
3 = unsure
2 = probably will not
1 = definitely will not leave

If you did quit your present OCCUPATION within the next two years, what would be the major reason(s)?

_____

The dependent variable for occupational change intentions is the sum of these four items and ranges from 4 to 20. Just as is done with organizational change intentions, the variable is created only for those subjects who responded to all four parts of the question. As with the organizational change intentions, the higher one's score the greater is one's intention to change occupations. The dichotomization of this variable follows the same procedure as used for organizational change intentions; that is, below a sum of 12 means matched while above means mismatched.

PROCEDURE

In this section the purpose of the pilot test and its results are presented. Next the sample chosen is described. Finally, the data collection phase of this dissertation is outlined.

Pilot Study

A pilot study was conducted the first two weeks of March, 1982, using present Master of Business Administration students enrolled in Management 818 and one section of Management 806 at Michigan State University. Only those students who were presently employed were asked to participate. As an additional incentive, all participants were provided with their six-letter personality pattern (as defined by Holland), a short summary of the six personality types, and a listing of possible occupations for various three-letter personality codes after their responses had been processed. For many of these individuals, the MBA represents an opportunity to do better career-wise; some may be considering changing occupations as well as organizations. As a result,

considerable variance on the dependent and independent variables was expected. The purpose of the pilot study was to test the instructions, content, length of the structured questionnaire, and the feasibility of the developed organizational environment instrument, as well as the algorithm for determining the degree of occupational mismatch.

Thirty-nine usable questionnaires were obtained. Analysis of these questionnaires and their comments indicated that the questionnaire was very long in length and that some questions were hard to interpret. In response to these criticisms, a few questions were dropped and several questions were modified to be more concise, easier to understand, and easier to answer. The results of the pilot test also did indicate that the subjects had different responses with respect to leaving their occupations as compared to leaving their organizations. However, when citing the specific reasons why they might leave their organizations and their occupations, some subjects cited the identical reasons for leaving both. This problem had been anticipated to some degree, in that it was hypothesized that some individuals would leave their organization when, in fact, their occupations were the problem and that some individuals would leave their occupations (and organizations) when the organizations were the problem (Hypotheses 4 and 5, Assumption 9).

The developed measure for determining one's match with his/her present organization represented the one questionnaire item which was developed entirely by the researcher. The question was very complex in that subjects were asked to think about each statement (representing one organizational characteristic) and mentally determine how much more or less of that item they desired. In this way, the degree of match

between the subject and the organizational environment was determined. A second part to the same question asked subjects to indicate which of the statements were the most important, of medium importance, and least important to them. By pooling and averaging the individual's responses on only those statement which s/he indicated were most important to her/him, the measure for the degree of match between the subject and the organizational environment was obtained. While all subjects completed both parts of this question, a few indicated that they were tempted not to answer the second part because it would be too time-consuming or because they did not understand what was to be done. This question was modified by deleting the section which asked subjects to list those items which were of medium importance to them. Instructions to the second portion were also rewritten so that the respondent would concentrate on only the items as listed in the first part and not their particular responses.

The pilot test was beneficial in that it highlighted potential problems with the questionnaire design. In particular, there was a concern that the number of respondents would be fewer than anticipated because of the questionnaire length. Additionally, the researcher felt that some subjects might not take the time to answer the complicated question on organizational mismatch. Therefore, changes were made to the questionnaire to improve response rates and to clarify unclear items. After some revisions, the final version of the questionnaire was prepared.

Sample Tested

Participants in this research were College of Business graduates whose addresses were presently on the Michigan State University Alumni Donor Files and who received their bachelor's degrees in the years 1977, 1972, 1967. Prior to the mailing of the questionnaires, the information detailed in Table 3 was obtained from the Michigan State University Annual Reports for the Registrar's Office for the specified years. It was estimated that approximately 1500 of these graduates would be located in the alumni address file. Further, it was estimated that there would be a 50% return rate, yielding a total of 750 subjects. A 50% return rate was used because past survey mailings from Michigan State University's Placement Services had usually resulted in a response rate of between 40 and 50% based on two mailings of surveys. The 50% return rate was also anticipated because Placement Services was participating in this research.

Table 3

College of Business Bachelor's Degrees

Year of Graduation	N	Percent of total sample	Males	Females
1977	1119	41.4%	802	317
1972	814	30.1%	714	100
1967	769	28.5%	696	73
Total	2702		2212	490

Data Collection

Michigan State University's Alumni Records provided 2,224 mailing address labels for College of Business graduates for the years 1977, 1972, 1967. One half of the sample was sent questionnaires on April 23, 1982; the remainder was mailed on May 24, 1982. Subjects were asked to respond within three weeks. In order to encourage participation, a cover letter (see Appendix B) expressed the concern of Placement Services and the College of Business for providing better career counseling, a better curriculum, and a better understanding of the Business graduate and asked for their input into these concerns. This letter also indicated that summary results would be sent to all respondents desiring them and was signed by the Director of Placement Services, John D. Shingleton, and Dean Richard Lewis of the College of Business.

Of the 2,224 questionnaires mailed, 18 were returned because of bad addresses, 7 were returned with address update information only, and 709 codable questionnaires were returned. The 709 usable responses represent a response rate of 31.88%. This response rate was less than had been anticipated, but, can easily be explained by the fact that only one mailing of the questionnaire was sent to graduates because of the costs involved. However, the number of respondents was close the the 750 predicted prior to the survey. Of these 709 subjects, 680 were either employed full-time or part-time and, thus, could be used for the testing of the hypotheses.

The questionnaire was designed so that keypunching of the data could be done directly from the questionnaire, after some of the information

was hand-coded. The following information was hand-coded onto each questionnaire:

1. Subject identification number,
2. Industry type for first and current occupations,
3. Six-digit DOT representation for the first, current, and desired occupations,
4. Response totals for each of the six personality types on the VPI,
5. Three reasons for leaving the organization,
6. Three reasons for leaving the occupation.

Keypunch instructions were prepared and arrangements were made for the data encoding by Michigan State University's Keypunch Service. However, a problem occurred with this phase of the project. The keypunch supervisor indicated that 100 cards per hour could be punched which translated into 25 surveys an hour. However, the keypunching was scheduled so that at most 40 to 50 questionnaires were completed each day. The researcher decided on June 15, 1982, one week after the last day for responses, that keypunching could be done more expeditiously by the researcher and proceeded to keypunch the unfinished 200 observations. This decision was beneficial in that the researcher was able to obtain a better understanding of the data and its problems. These problems are cited later.

Following the keypunching of the data to cards, two computer programs which listed illegal data were run. The data were corrected by referring to the original questionnaire for the survey number in error and the data card repunched. After all the data were editted and

corrected, two transformation programs were run to perform the following manipulations and to create the final data master file. Many of these manipulations have already been explained above when the independent and dependent measures were described.

1. Convert six-digit DOT occupational title (first, current, and desired occupation) to a three-letter Holland occupational-environment code.

2. Sort the raw scores from the VPI in descending order to obtain the six-letter personality pattern.

3. Sum the responses on the organizational and occupational change intention questions.

4. Calculate the averages for multiple item questions (organizational and occupational change intentions, organizational mismatch).

5. Calculate the degree of congruency with respect to the current occupations (using the first three letters of the personality pattern and the three-letter occupational environment code).

6. Calculate the degree of congruency with respect to the current occupations (using only the first letter of the personality pattern and the occupational environment code).

The participants reflect a wide range of ages, majors, organization and occupation tenure. The demographic characteristics for the subjects are presented in Table 4. For the three years involved in the study, a fairly even distribution for the years of graduation is obtained: 303 subjects (42.7%) graduated in 1977; 210 (29.6%) graduated in 1972; and 196 (27.6%) graduated in 1967. Males represent 79% percent of the sample (n=559). These results are surprisingly similar to the percentages obtained from the Annual Reports for the Registrar's Office reported earlier in Table 3.

Table 4

Description of Sample[a]

MEANS

Organizational Tenure	1 to 3 years
Occupational Tenure	3 to 5 years
Number of Occupations	1.9
Number of Dependents	1.49
Hours Worked per Week	41 to 50 hours

FREQUENCIES/PERCENTAGES

	N	Percent		N	Percent
Sex					
Males	559	79.0			
Females	148	21.0			
Major					
Accounting	159	22.5	Office Adm.	12	1.7
Risk/Insurance	2	.3	Food Systems	4	.6
Financial Adm.	35	5.0	Personnel	42	5.9
Hotel/Rest Mgmt	82	11.6	Material Ops.	30	4.2
Travel/Tourism	10	1.4	Marketing	87	12.3
General Business	156	22.1	Transportation	10	1.4
Economics	50	7.1	Other	15	2.1
Bus/Distrib Educ	13	1.8			
Employment Status					
Employed	680	96.2	Student	4	.6
Unemployed (Seeking)	8	1.1	Unemployed (Not seeking)	15	2.1
Organization Type (Present Job)					
Accounting	86	12.6	University	27	4.0
Financial Inst.	85	12.5	Self-employed	17	2.5
Government	43	6.3	Utilities	27	4.0
Retail	50	7.3	Other	346	50.8
Marital Status					
Single	190	27.1			
Married	511	72.9			
Advanced Degrees					
Second Bachelor's	20	2.8	Specialist's/CPA	19	2.7
Masters-Business	136	19.2	Doctorate	41	5.8
Other Masters	50	7.1			

[a]Figures may not add up to 709 because of missing data on a given item.

RESULTS

In this section the hypotheses are tested. However, the first two parts of this section describe the dependent and independent variables in detail. This is followed by a presentation of the intercorrelations among all these variables. The hierarchical regressions which test Hypotheses 1 and 2 are next presented. Finally, the results for Hypotheses 3, 4, and 5 are presented.

Dependent Variables

The dependent variables for this research are occupational change intentions and organizational change intentions. As described earlier, each of these variables is the sum of four items (5-point Likert scale) and, thus, the index ranges from 4 to 20, where 20 indicates that an individual is very likely to leave the organization or the occupation. However, it was discovered during the keypunch phase of the project by the researcher that some of the subjects did not fill out all four items for these questions. Thus, it would be inappropriate to use the summation of the four items for these individuals. A portion of these were instances where a code 5 ("definitely will leave") was indicated for a time period under two years. For these cases, the researcher coded a 5 for the remaining questionnaire items during the hand-coding process of data entry. This was felt to be justified in that if an individual definitely intends to leave within the next six months, for example, s/he also intends then to leave definitely within the next year and within the next two years since both of these time periods include the six-month period. Since some of the data are still missing after this step, the dependent variable represented by the sum of these four

items is still inappropriate for these cases, and, thus, data could be lost.

Two other representations of the dependent variable are considered as possible alternatives for the analyses in order that more of the data may be used. The first representation is the average intention to leave based only on the data provided. For example, if the subject indicated response 2 for three months from now, 4 for six months from now, and left the remaining items blank, the individual's dependent variable would be 3 ((2+4)/2). This alternative dependent variable is also of an interval nature and can be easily substituted for the summed intention to change index into the regressions. The second representation of the dependent variable provides a much less robust test of the hypotheses and merely uses the response to item d (Two years from now) as the dependent variable. Using the two-year response ensures that all subjects intending to leave their present organizations and/or occupations any time within the next two years are included (provided the two-year response was not blank) in the intending to leave group. In other words, if the six-month responses were used, those subjects who do not intend to leave until one or two years from now would not be included in the group of subjects intending to leave. Using this representation, though, means that the variance of the dependent variable is increased and also that some of the precision is lost by ignoring other available information. This variable also can be substituted into the regressions. Thus, for analysis purposes, there are three possible sets of dependent variables available for use:

Organizational change intentions: Summed Averaged Two years

Occupational change intentions: Summed Averaged Two years

In order to determine which representation(s) should be used, a one-way frequency distribution of these variables is presented in Table 5. For the summed versions of the dependent variables, subjects who are in the "probably" to "definitely will leave" range (13-20) represent 14.3% of the sample for organizational change intentions and 7.4% for occupational change intentions. Using only the two-year response, these frequencies indicate that 27.6% of the subjects intend to leave their organizations within the next two years, while only 16.7% of the subjects intend to leave their occupations within the next two years. These discrepancies between the summed and the two-year versions are due to the fact that not all subjects responded to all four items and that the response to the two-year item would be the most indicative of any intention to leave. On the averaged dependent variable, 15.2% of the subjects intend to leave their organizations, while only 9.7% intend to leave their occupations. Since these results are similar to the results obtained on the summed intention dependent variables, perhaps the averaged versions do not enhance the predictive capabilities of the data. A correlational analysis can further clarify the relationship between these representations of the same dependent variable.

The intercorrelations for the dependent variables are presented in Table 6. Since the intercorrelations between the summed and the averaged versions of the dependent variable for both occupational change intentions and organizational change intentions are 1.00 and since the frequency distributions are very similar, the two averaged versions of

Table 5

Frequency Distributions for Dependent Variables

Summed Dependent Variables	Org. Intent To Leave (Summed) N	Org. Intent To Leave (Summed) Percent	Occ. Intent To Leave (Summed) N	Occ. Intent To Leave (Summed) Percent
4 -- Definitely Will Not Leave	115	18.0	206	32.2
5	62	9.7	68	10.6
6	70	11.0	65	10.2
7	64	10.0	50	7.8
8 -- Probably Will Not Leave	75	11.8	86	13.4
9	49	7.7	37	5.7
10	51	8.0	34	5.3
11	32	5.0	19	3.0
12 -- Unsure	29	4.5	28	4.4
13	17	2.7	5	0.8
14	18	2.8	11	1.7
15	13	2.0	9	1.4
16 -- Probably Will Leave	16	2.5	9	1.4
17	10	1.6	5	0.8
18	3	0.5	1	0.2
19	4	0.6	2	0.3
20 -- Definitely Will Leave	10	1.6	5	0.8
TOTAL	638	100	640	100

Remaining Dependent Variables	Org. Intent To Leave (Averaged)[a] N	Org. Intent To Leave (Averaged)[a] Percent	Org. Intent To Leave (Two Years) N	Org. Intent To Leave (Two Years) Percent	Occ. Intent To Leave (Averaged)[a] N	Occ. Intent To Leave (Averaged)[a] Percent	Occ. Intent To Leave (Two Years) N	Occ. Intent To Leave (Two Years) Percent
1 -- Definitely Will Not Leave	177	26.3	121	18.8	275	40.9	209	32.0
2 -- Probably Will Not Leave	262	38.9	155	24.0	241	35.9	187	28.6
3 -- Unsure	132	19.6	191	29.6	91	13.5	148	22.7
4 -- Probably Will Leave	75	11.1	102	15.8	51	7.6	68	10.4
5 -- Definitely Will Leave	28	4.1	76	11.8	14	2.1	41	6.3
TOTAL	674	100	645	100	672	100	653	100

[a]The averages were rounded for ease of presentation.

Table 6

Intercorrelations among the Dependent Variables[a]

Variable	1	2	3	4	5	6
1 Org Intent To Leave (Summed)						
2 Org Intent To Leave (Averaged)	1.0000 (n=638)					
3 Org Intent To Leave (Two years)	.8555 (n=638)	.8538 (n=645)				
4 Occ Intent To Leave (Summed)	.5563 (n=627)	.5385 (n=633)	.4355 (n=628)			
5 Occ Intent To Leave (Averaged)	.5436 (n=633)	.5938 (n=664)	.4267 (n=640)	1.0000 (n=640)		
6 Occ Intent To Leave (Two years)	.4125 (n=631)	.4066 (n=646)	.4346 (n=638)	.8647 (n=640)	.8653 (n=653)	

[a]All intercorrelations are significant at the $p < .001$ level.

the dependent variables are dropped from further analyses. There are also very strong and significant intercorrelations between the two-year versions and the summed versions for organizational change intentions (r = .8555, p < .001) and for occupational change intentions (r = .8647, p < .001). Since these correlations are very high, the two-year versions are also dropped as a possible set of dependent variables. At this point of the analysis there is only one set of dependent variables for consideration in further analysis:

Organizational change intentions: Summed

Occupational change intentions: Summed

The high degree of intercorrelation between organizational change intentions and occupational change intentions (.5563, p < .001) is not surprising. It has already been hypothesized that when individuals are mismatched to their organizations, some do intend to leave their occupations (Hypothesis 1) and that when individuals are mismatched to their occupations, some do intend to leave their organizations (Hypothesis 2). Therefore, a strong interrelationship between the two variables can be anticipated. However, there is concern that the two dependent variables can be differentiated at all in the manner hypothesized. That is, will occupational mismatch be more strongly related to occupational change intentions than organizational mismatch and will organizational mismatch be more strongly related to organizational change intentions than occupational mismatch?

Part of this close relationship between the two dependent variables is due to the fact that many subjects appear to have responded to leaving the organization and the occupation in the same fashion. During

the keypunch process, the researcher discovered a number of questionnaires in which the reasons for leaving the organization and the occupation were identical. In fact, one respondent said that the two questions were the same. In an attempt to better understand why this relationship exists, an analysis of those cases which responded identically to these two questions (n=116) is performed.

Table 7 presents a list of the reasons cited for leaving both the organization and occupation when the same responses are given to both questions. It is very apparent that some of these reasons tend to be organizational in nature (promotional opportunity, politics, job demands, company problems) and not really of an occupational nature. However, boredom, variety, and career opportunities could be either

Table 7

REASONS FOR LEAVING[a]

	N		N
Money, better job offer	30	Death, wealth, retire	6
Promotional opportunity	27	Relocate	6
Career opportunity	20	Start own business	6
Family concerns	15	More responsibility, managerial role, prestige	4
Boredom, variety	13	Politics, not get wanted promotion	3
Job demands (travel, long hours)	8	Super/"ideal" job offer	3
Company problems (bankrupt,interference,etc.)	7		

[a]For those subjects who responded identically to reasons for leaving the organization or occupation (n = 116).

occupational and/or organizational in nature. This table does reveal that some individuals do confuse the relationship between the organization and the occupation. Thus, Assumption 8 seems to be supported (i.e., the cause of the mismatch is misperceived). Therefore, the concern over the ability to distinguish properly between these two dependent variables and their interrelationships is justified.

Independent Variables

Careful consideration is also given to the independent variables.

Occupational Mismatch. Since the occupational mismatch variable is calculated based on a method developed for this research, it seems reasonable to compare the results obtained with this variable with the results obtained using the traditional occupational mismatch index (one-letter comparison) (see Figure 15 for definitions). The correlation between these two variables of .5992 is significant at the $p < .001$ level (see Table 8). The size of the intercorrelation is encouraging because it indicates that the two variables are related (as they should be). However, the correlation is low enough to indicate that these variables are different.

The frequency distributions for these two variables are presented in Table 9. These results also indicate that the two variables are different. Using the traditional occupational mismatch variable, 32.6% of the sample have an identical match with their occupations and 10.2% have an exact opposite match; while only 1.6% of the sample are totally matched to their occupational environments when using the developed occupational mismatch variable and 0.6% are totally mismatched. Even if one interpolates the data for the developed variable, only 11.9% are

Table 8

Intercorrelations Among Dependent and Independent Variables

Variable	1	2	3	4	5	6	7	8	9
1 Occ Mismatch (3-letters)									
2 Occ Mismatch (1-letter)	.5992*** (n=681)								
3 Org Mismatch	-.0108 (n=607)	.0518 (n=607)							
4 Job Dissatis.	.0746* (n=679)	.0990** (n=679)	.5145*** (n=609)						
5 Interaction (Vars. 1x3)	.2601*** (n=681)	.1929*** (n=681)	.5087*** (n=610)	.0026 (n=683)					
6 Org Intent To Leave (Summed)	.0306 (n=634)	.0542* (n=634)	.4413*** (n=574)	.5287*** (n=638)	.0395 (n=638)				
7 Org Intent To Leave (Two years)	.0334 (n=641)	.0555* (n=641)	.4376*** (n=579)	.5006*** (n=645)	.0498 (n=645)	.8555*** (n=638)			
8 Occ Intent To Leave (Summed)	.0292 (n=634)	.0643* (n=634)	.3386*** (n=574)	.4498*** (n=636)	.0502 (n=640)	.5563*** (n=627)	.4355*** (n=628)		
9 Occ Intent To Leave (Two years)	.0374 (n=646)	.0652* (n=646)	.3260*** (n=584)	.4117*** (n=649)	.0203 (n=653)	.4125 (n=631)	.4346*** (n=638)	.8647*** (n=640)	

*p < .10.
**p < .01.
***p < .001.

Table 9

Frequency Distributions for Mismatch Variables[a]
And Job Dissatisfaction

Developed Occupational Mismatch[b]

	N	Percent			N	Percent
0 - Match	11	1.6	10		99	14.5
1	0	0	11		81	11.9
2	0	0	12 -	Some	41	6.0
3	25	3.7	13	Mismatch	32	4.7
4	21	3.1	14		29	4.3
5	48	7.0	15		11	1.6
6 - Some match	55	8.1	16		3	.4
7	99	14.5	17		0	0
8	63	9.3	18 -	Complete	4	.6
9	66	9.7		Mismatch		

Traditional Occupational Mismatch[b]	N	Percent
0 - Identical	222	32.6
1 - Adjacent	246	36.1
2 - Not identical-adj-opp	143	21.0
3 - Opposite	70	10.2
TOTAL	681	100

Organizational Mismatch[c]		
0 - No change desired	42	6.9
1 - Slightly more/less desired	335	54.9
2 - Somewhat more/less desired	174	28.5
3 - Signif more/less desired	59	9.7
TOTAL	610	100

Job Dissatisfaction		
1 - Extremely satisfied	123	18.0
2 - Very satisfied	281	41.1
3 - Satisfied	181	26.5
4 - Only slightly satisfied	83	12.2
5 - Not satisfied	15	2.2
TOTAL	683	100

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[a]Totals may not yield 709 because of missing data.
[b]Matching is done using the six-letter personality pattern and the three-letter occupational environment code.
[c]The averages were rounded for ease of presentation.

matched, 45.1% are somewhat matched, 38.25% are somewhat mismatched, and 4.75% are mismatched. Despite these differences, both representations are used in the analyses in order to provide a comparison of the two operationalizations.

Organizational Mismatch. The other independent variable is organizational mismatch, a variable developed specifically for this research which has not appeared in previous research. In order to investigate the nature and feasibility of the new organizational mismatch variable, the questionnaire was designed to include a question related to job dissatisfaction. Job dissatisfaction is a variable often used in research when investigating employee attitudes towards work. Job dissatisfaction is chosen because, as earlier proposed, it is assumed to be one of the possible responses to a mismatched environment. In addition, it was assumed to occur at lower degrees of mismatch than change intentions for many people on a general continuum of responses (Assumptions 4 and 5). Therefore, job dissatisfaction should be positively and significantly related to organizational mismatch if the organizational mismatch measure is an accurate representation. The question as it appeared in the questionnaire is:

All in all, how satisfied are you with your job?

___ (1) Extremely satisfied
___ (2) Very satisfied
___ (3) Satisfied
___ (4) Only slightly satisfied
___ (5) Not satisfied

The intercorrelations and frequency distributions for the variables, organizational mismatch and job satisfaction, are presented in Tables 8 and 9 respectively. The intercorrelation between job dissatisfaction

and organizational mismatch is .5145 ($p < .001$). Using the job dissatisfaction variable, 59.1% of the sample are extremely or very satisfied with their jobs, and 2.2% are not satisfied. When the organizational mismatch variable is used, 61.8% desire about the same or slightly more or less of their six most important organizational characteristics or practices and 9.7% desire significantly more or less of these organizational characteristics. These results do demonstrate that there is a relationship between organizational mismatch and job dissatisfaction and that the use of the developed organizational mismatch variable seems to be supported.

Correlational Analyses

Hypothesis 1. Table 8 presented the intercorrelations among all the possible independent and dependent variables. These correlations are used to determine if initial support for the direction and significance of the relationships hypothesized in Hypotheses 1 and 2 exists. The developed occupational mismatch variable's intercorrelation with occupational change intentions is .0292 ($p = .232$) and with the occupational change intentions (two years) is .0374 ($p = .171$). While the direction of the relationship is positive as expected by Hypothesis 1, the intercorrelations are not significant ($p = .232$ and .171) and, in fact, are very low in magnitude ($r = .0292$ and .0374). Using the traditional occupational mismatch variable (based on only a one letter comparison), however, the intercorrelations are significant and in the direction predicted. The intercorrelation with occupational change intentions is .0643 ($p = .053$) and occupational change intentions (two

years) is .0652 (p = .049). The magnitude of these correlations, however, are again very small. Of particular interest is the fact that the intercorrelation between occupational change intentions and organizational mismatch is .3386 (p < .001). Thus, it appears that occupational change intentions is more closely associated with organizational mismatch (r = .3386) than with occupational mismatch (r = .0292) or the interaction (r = .0502, p = .102). In other words, occupational change intentions does not appear to be mainly a function of occupational mismatch and then organizational mismatch as predicted by Hypothesis 1, but rather a function of organizational mismatch only.

Another interesting result is found when comparing job dissatisfaction, occupational change intentions, and occupational mismatch (see Table 8). The intercorrelation of occupational mismatch with job dissatisfaction is .0746 (p < .10), while with occupational change intentions it is .0292 (p = .232). The intercorrelation between job dissatisfaction and occupational change intentions is .4498 (p < .001). Further, when job dissatisfacction is partialled out, the intercorrelation between occupational mismatch and occupational change intentions becomes only .0049. This result indicates that again Hypothesis 1 is rejected and that occupational change intentions are not a function of occupational mismatch, but a function of job dissatisfaction, as well as organizational mismatch. It appears that job dissatisfaction is more closely related to occupational mismatch than is occupational change intentions and, perhaps, is an outcome of being occupationally mismatched, which then leads to occupational change intentions. Further exploration of this possibility will be presented

later in this section.

Hypothesis 2. The intercorrelation for organizational mismatch with organizational change intentions is .4413 ($p < .001$) and with organizational change intentions (two years) is .4376 ($p < .001$). These intercorrelations are positive in direction, as predicted by Hypothesis 2, and are significant, as well as strong. In addition, of the three independent variables, organizational change intentions appears to be primarily a function of organizational mismatch because the intercorrelation between organizational change intentions and occupational mismatch ($r = .0306$) and between organizational change intentions and the interaction term ($r = .0395$) are very small and insignificant.

The relationship between organizational change intentions and organizational mismatch can be further explored by comparing the correlations among organizational change intentions, organizational mismatch, and job dissatisfaction. The intercorrelation between job dissatisfaction and organizational change intentions is .5287 ($p < .001$) and between organizational mismatch and organizational change intentions is .4413 ($p < .001$). These results indicate significant positive linear relationships among the variables. However, when the relationships between organizational mismatch and job dissatisfaction ($r = .5145$) and between job dissatisfaction and organizational change intentions ($r = .5287$) are partialled out, the intercorrelation between organizational mismatch and organizational change intentions becomes only .2326 ($p < .001$). Although this result still suggests that organizational change intentions is a function of organizational mismatch, it also seems to

indicate that job dissatisfaction may be an intervening variable between organizational mismatch and organizational change intentions and not necessarily an alternative representation for organizational mismatch. In other words, it could mean that organizational change intentions are a result of job dissatisfaction which is an outcome of organizational mismatch. This possibility will be examined later in this section.

Hierarchical Regressions

Hypotheses 1 and 2 are further tested by using hierarchical regressions.

H1: Occupational change intentions are a positive function of the degree of occupational mismatch, the degree of organizational mismatch, and their interaction in that order.

H2: Organizational change intentions are a positive function of the degree of organizational mismatch, the degree of occupational mismatch, and their interaction in that order.

As mentioned previously, hierarchical regression is a statistical method which analyzes the relationship between a dependent variable and a set of independent variables. By adding the independent variables to the regression equation in a prespecified order, one can determine both the direct and indirect influence of any independent variable on the dependent variable. The independent variables are entered in order of their hypothesized importance.

Hypothesis 1. Hypothesis 1 states that occupational change intention is a function of occupational mismatch, organizational mismatch, and the interaction between organizational mismatch and occupational mismatch. The first regression analysis uses the variables

which are specifically created for this dissertation. This is followed by a regression which substitutes the traditional occupational mismatch variable (based on a one-letter comparison) for the developed occupational mismatch. Table 10 presents these results. Both regressions predict a significant amount of the variance; in other words, the goodness of fit tests are both significant at the $p < .01$ level.

The regression using the developed variable results in occupational mismatch accounting for only .159% of the variance in occupational change intentions, organizational mismatch for 11.258%, and the interaction term for .066%. The only significant R-squared is associated with organizational mismatch. When the traditional occupational mismatch variable is used in place of the developed

Table 10

Hierarchical Regressions for
Occupational Intention to Leave

	Occupational Mismatch			Traditional Occ. Mismatch		
	Beta	R^2	F	Beta	R^2	F
Occ. Mismatch	0.002	.00159	1.020**	-.014	.00690	4.450**
Org. Mismatch	1.140	.11258	72.245**	1.200	.11019	71.063**
Interaction	.035	.00066	.424	.214	.00215	1.387
TOTAL[a]		.11483	24.562**		.11925	25.634**

[a] $n = 572$.
* $p < .05$. ** $p < .01$.

measure, again, organizational mismatch accounts for most the variance in occupational change intentions (11.019%). Thus, looking at the contributions made by the three independent variables in predicting occupational change intentions, organizational mismatch is the only variable which consistently accounts for a significant amount of the variance (11.258% and 11.019%). In other words, Hypothesis 1 is rejected because occupational change intentions is not a function of occupational mismatch or the interaction. The only conclusion that can be drawn from Table 10 is that occupational change intentions is a positive function (as indicated by the sign of the Beta weight) of organizational mismatch.

Although the data are not cross-validated with a second sample, it is possible to estimate the multiple correlation coefficient and the explained variance (i.e., the R-squared) expected for the entire population. The multiple correlation coefficients obtained in Table 10 are compared with estimates of the population multiple correlation coefficient. The method used to make the comparisons is based on formulae presented by Darlington (1968). Table 11 presents the results of these comparisons. Both of the estimated population multiple correlation coefficients fall into the confidence interval calculated for the sample R. In other words, these data results appear to be good estimates of the results expected if the entire population were used.

Hypothesis 2. Hypothesis 2 states that organizational change intention is a function of organizational mismatch, occupational mismatch, and the interaction between the two. Hierarchical regressions similar to those run to test Hypothesis 1 are also run to test

Table 11

Comparison of Expected with Observed Correlations
(Occupational Change Intentions)

Variable Information	Sample R	Confidence Interval for R[a]	Population Estimates
Developed Occupational Mismatch	.33885	(.238, .430)	.32232
Traditional Occupational Mismatch	.34533	(.247, .437)	.33154

[a] 99% confidence interval.

Hypothesis 2. These results are presented in Table 12.

The results for these two regressions indicate that the overall goodness of fit is significant ($p < .01$) and also show that organizational mismatch does account for more of the variance in organizational change intentions than does occupational mismatch (19.234% vs. .156%; 19.234% vs. .186%) as predicted by Hypothesis 2. However, as was found with Hypothesis 1, organizational mismatch is the only independent variable which consistently accounts for a significant amount of the variance in organizational change intentions (19.234%). In other words, Hypothesis 2 is rejected because organizational change intentions is found not to be a function of occupational mismatch and its interaction with organizational mismatch, but solely a positive function of organizational mismatch.

Table 12

Hierarchical Regressions for
Organizational Intention to Leave

	Occupational Mismatch			Traditional Occ. Mismatch		
	Beta	R^2	F	Beta	R^2	F
Org. Mismatch	2.97	.19234	136.228**	2.050	.19234	135.594**
Occ. Mismatch	.167	.00156	1.105	.119	.00186	1.311
Interaction	-.097	.00413	2.925*	.043	.00007	.049
TOTAL[a]		.19803	46.753**		.19428	45.652**

[a] $n = 572$. *$p < .05$. **$p < .01$.

The same procedure is used to compare these results with the population estimates of R as was done with the results for Hypothesis 4. Table 13 presents the sample and population estimates of R as well as the confidence interval for the sample R. Again, it appears that the results obtained with the present sample are good estimates of the expected population results.

Nature of the Interaction. The means of the dependent variables are plotted on axes representing one independent variable (x-axis) and its corresponding dependent variable (y-axis) in order to describe the nature of the interaction. The results of these plots are presented in Figure 16. These plots do indicate that the lines do intersect. In

Table 13

Comparison of Expected with Observed Correlations
(Organizational Change Intentions)

Variable Information	Sample R	Confidence Interval for R[a]	Population Estimates
Developed Occupational Mismatch	.44501	(.355, .527)	.43535
Traditional Occupational Mismatch	.44077	(.350, .524)	.43097

[a] 99% confidence interval.

other words, it appears that the two independent variables do interact. The statistical tests concerning these means, though, will be presented with the results for Hypotheses 4 and 5.

The first graph in Figure 16 suggests that when one is organizationally mismatched, the degree of occupational change intentions increases as the degree of occupational mismatch increases. This is exactly what is expected based on Hypothesis 1. However, occupational change intentions <u>decrease</u> when individuals are organizationally matched yet occupationally mismatched. In other words, individuals remain in their occupations when they are matched to their organizations. Thus, the interaction effect is not in the direction and further support is obtained for rejecting Hypothesis 1. For predicting organizational change intentions, the amount of organizational change intentions increases at a faster rate when individuals are

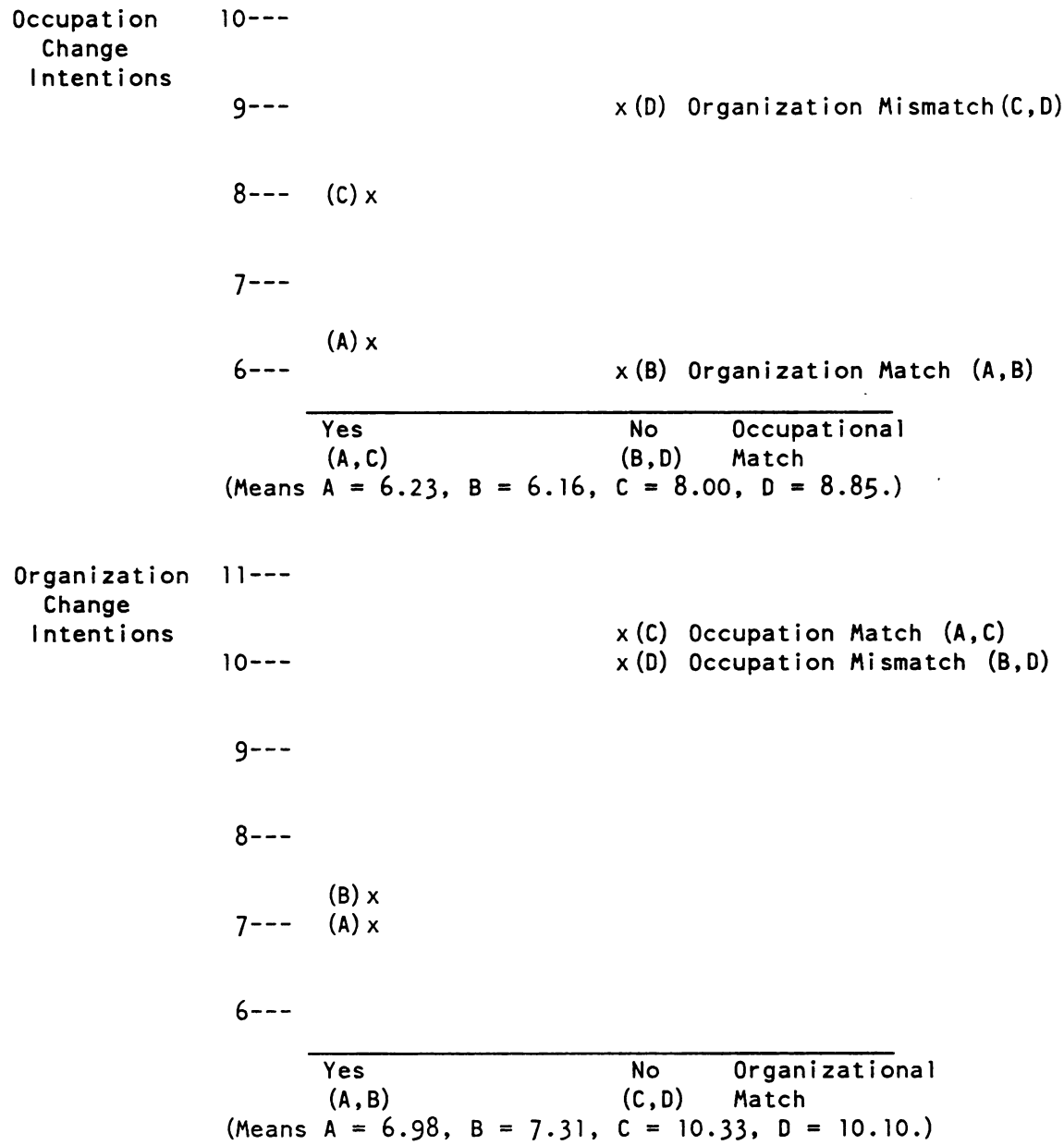

Figure 16. Plot of Mean Intentions[a]

[a] Letters A-D represent the cells labels from Figure 14.

occupationally matched to their situations than when occupationally mismatched. Therefore, an interaction effect appears to exist and is in the direction predicted (positive).

Hypothesis 3

As explained in Chapter Two, the complete model indicates that by knowing the degrees of mismatch, one can predict what intentions will occur. In other words, if Hypothesis 1 is true, one can predict that occupational change intentions increase as the degree of occupational mismatch increases. However, occupational change intentions also increase as the degree of organizational mismatch increases, although to a lesser extent. Similarly, if Hypothesis 2 is true, the degree of organizational change intentions can be predicted by the degree of organizational mismatch (as well as by the degree of occupational mismatch -- again to a lesser extent). In testing the complete model, both dependent variables, occupational change intentions and organizational change intentions, are analyzed together, rather than separately as done in Hypotheses 1 and 2. Figure 14 graphically depicted the hypothesized relationships using two by two matrices and the dichotomized variables. For example, if individuals fall into Cell C (organizational mismatch, occupational match) of Figure 14 based on their degrees of occupational mismatch and organizational mismatch, then the model predicts that they fall into Cell 3 (organizational change intentions, no occupational change intentions) of Figure 14.

The first results for testing the entire model are presented in Table 14 and are not encouraging. First, it is hypothesized that all subjects who are "matched" to their occupations and organizations have

Table 14

Predictability of Mismatch

Independent Variable Classification			Expected Dependent Variable Classification				RESULTS				Signif.
Occupation	Organization	Cell	Occupation Change Int.	Organization Change Int.	Cell	N	1	2	3	4	Level
Match	Match	A[a]	No	No	1[b]	167	150[c] 90%	6 4%	8 5%	3 2%	.036
Mismatch	Match	B	Yes	No	3	159	147 93%	0[c] 0%	9 6%	3 2%	.000
Match	Mismatch	C	No	Yes	2	76	53 70%	1 1%	16[c] 21%	6 8%	.000
Mismatch	Mismatch	D	Yes	Yes	4	68	45 66%	2 3%	8 12%	13[c] 19%	.000

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[a] Alphabetic cell numbers refer to the cells in Figure 14.
[b] Numerical cells refer to the cells in Figure 14.
[c] The expected cell based on the prediction from the first two cells.

low degrees for intentions to change organizations and occupations. As expected, most of the 167 subjects (n=150 in Cell A do not intend to change their occupations or organizations. However, the significance level (p = .036) indicates that the hypothesis is rejected with respect to Cell A (i.e., that Cell A individuals are also Cell 1 individuals). Table 14 also shows that for the remaining mismatched situations (Cells B-D of Figure 14), the majority of the subjects indicate that they have no intentions to change either their organizations or occupations (Cell B - 93%, Cell C - 70%; Cell D - 66%). The significance levels again show that Hypothesis 3 is rejected. For Cell C (organizational mismatch only), though, most of the subjects who intend to change something intend to change their organizations (the correct response) (21% - intend to change organizations, 1% - intend to change occupations, 8% - intend to change both). For the individuals who are classified into Cell D (organizational and occupational mismatch), most of the subjects who intend to change something, intend to change both their organizations and occupations as is expected (19% - intend to change both, 12% - intend to change organizations, 3% - intend to change occupations). However, none of the individuals who are categorized as being occupationally mismatched (Cell B) intend to change their occupations. In fact, most of those who intend to change something, intend to change organizations (6%). Nevertheless, Hypothesis 3 and the proposed model are not supported because, regardless of the degree and nature of the mismatch, individuals, in general, do not intend to change their occupations or organizations.

Hypotheses 4 and 5

The final test of the complete model involves the relative magnitudes of the means for the dependent variables among the cells A-D (Figure 14). As described in the Analysis Section of this chapter, the first step in testing Hypotheses 4 and 5 is to calculate the mean dependent variable for the four cells (A-D) and then to rank order them. Table 15 presents these results.

Hypothesis 4. For occupational change intentions, it is predicted that the means would be rank ordered Cell D, Cell B, Cell C, and Cell A in descending order. This ordering is not supported. Of particular interest is the fact that when individuals are only occupationally mismatched, the mean occupational change intentions is the lowest. However, before rejecting Hypothesis 4, the means need to be compared statistically to determine if mean differences do exist.

Table 16 presents the t-tests for the pairs of means to be compared in Hypotheses 4 and 5. The first observation to be made is that for all

Table 15

Rank Ordering of Dependent Variable Means

Occupational Change Intentions	8.85 (Cell D)[a]	8.00 (Cell C)	6.23 (Cell A)	6.16 (Cell B)
Organizational Change Intentions	10.33 (Cell C)	10.10 (Cell D)	7.31 (Cell B)	6.98 (Cell A)

[a] Cell letters refer to the cells presented in Figure 14.

Table 16

T-Tests for Mean Differences

Occupational Change Intentions	Mean	N	Standard Deviation	t-value	Significance Level
Cell D[a]	8.85	68	4.389		
and				-5.84	.000
Cell B	6.16	159	2.495		
Cell B	6.16	159	2.495		
and				4.57	.000
Cell C	8.00	76	3.567		
Cell C	8.00	76	3.567		
and				-4.16	.000
Cell A	6.23	167	2.834		
Organizational Change Intentions					
Cell D	10.10	68	4.489		
and				.31	.757
Cell C	10.33	76	4.253		
Cell C	10.33	76	4.253		
and				6.42	.000
Cell B	7.31	159	2.855		
Cell B	7.31	159	2.855		
and				-.99	.324
Cell A	6.98	167	3.304		

[a] Cells refer to cells in Figure 14.

the mean comparisons for occupational change intentions, there are significant mean differences among the cells (D - B - C - A). However, the actual rank orderings do not match the ordering specified by Hypothesis 4. It is possible to calculate the t-statistic for the unexpected pairings presented in Table 15. First, the t-value associated with Cell D and Cell C is -1.29 (p = .201), which indicates that there is not enough information to reject the null hypothesis that the mean for Cell D is statistically different from the mean for Cell C (8.85 vs. 8.00). Similarly, there is not enough information to reject the null hypothesis that the mean for Cell A is significantly different from the mean for Cell B (6.23 vs. 6.16; t = .22, p = .829). However, there is a significant mean difference between Cell C and Cell A (t = -4.16, p < .001). In conclusion, then, Hypothesis 4 is rejected because the actual ordering of the mean magnitudes for occupational change intentions deviates from the hypothesized ordering.

Hypothesis 5. For organizational change intentions, the means are to be rank ordered as Cell D, Cell C, Cell B, and Cell A. Again, the hypothesized ordering of Hypothesis 5 is not supported (see Table 15). The only deviation from the hypothesized ordering is the fact that the highest mean organizational change intentions occurs when individuals are only organizationally mismatched and not when mismatched to both environments. However, based on the information provided in Table 16, the t-value for testing mean differences between Cells C and D is .31 (p .757) and indicates that there is not enough information to reject the null hypothesis that the mean organizational change intentions for Cell C is significantly different from the mean organizational change

intentions for Cell D. In other words, it may be true that over repeated samplings Cell D would be the highest mean and not Cell C. Nevertheless, the information in Table 16 also indicates that mean differences do not exist between Cells A and B, as well as Cells C and D. Therefore, Hypothesis 5 is rejected because there are not significant mean differences between some of the hypothesized pairings.

Rejection of Model -- Possible Explanations. In order to explain the unusual results found in Table 14 and the rejection of all the hypotheses and the model, additional analyses on those individuals who do not intend to change thi their organizations and occupations (Cell 1 only of Figure 14) and who fall into Cells A-D of Figure 14 are performed. Some of the possible explanations include:

1. All variables except one were measure by the questionnaire (i.e., common method variance). The dependent variable occupational mismatch, however, was measured using the Vocational Preference Inventory (VPI).

2. Occupational mismatch is calculated using an inaccurate algorithm, or, alternatively, Holland's definition of occupational mismatch is incorrect.

3. The organizational mismatch measure may not be an accurate representation for the construct.

4. Present economic and labor market conditions affect change intentions, as well as change behavior (Assumption 6).

5. The hypothesized relationship between mismatch and intentions is incorrect.

Each of these possibilities is explored separately in the remainder of this section.

VPI Measure of Occupational Mismatch. Since the results for occupational mismatch (and occupational change intentions) have received

the least amount of support, part of the problem with the results may be due to the fact that the degree of occupational mismatch is based solely on the VPI measure, while all other variables are measured by the questionnaire. As a result, the remaining variables share a common method variance, which may account for the relatively stronger results obtained among these variables than the results obtained when the VPI measure is used. In order to investigate this possibility, a measure very similar to occupational mismatch, which appears on the questionnaire is compared with the VPI measure.

One question on the questionnaire (Question 11, Appendix B) specifically asks subjects if they would prepare for the same occupation if they were to enter college again as freshmen. This question is followed by a question on the reasons for desiring to prepare for a new occupation. Although this information does not directly assess the individual's degree of occupational mismatch, it could be treated as an indicator of occupational mismatch, or, at least, a measure of the individual's occupational satisfaction (which may be an element of occupational mismatch). By comparing the individual's classification of being occupationally matched or mismatched based on the VPI with his/her answers to these two questions, the relationship between the questionnaire items and the VPI measure may be approximated.

If the questionnaire measures are <u>not</u> similar to the VPI measure, then the results presented in Table 17 should indicate that individuals who desire to prepare for new occupations are not classified as occupationally mismatched and that those who do not desire to prepare for new occupations are classified as being occupationally mismatched.

Table 17

Desire to Change Occupations and Why[a]

Mismatch Conditions	N	Reasons for Change: Change Occup.	Poor Counsel	Econ. Oppor.	Job Satis.	Fewer Jobs	New Interests	Job Security	Other
Both Match (Cell A)[b]	167	36 21.6%	7 4.2%	21 12.6%	14 8.4%	7 4.2%	23 13.8%	4 2.4%	10 6.0%
Occ. Mismatch (Cell B)	159	58 36.5%	14 8.8%	25 15.7%	23 14.5%	5 3.1%	33 20.8%	8 5.0%	16 10.1%
Org. Mismatch (Cell C)	76	26 34%	13 17%	17 22.4%	13 17%	7 9.2%	15 19.7%	7 9.2%	9 11.8%
Both Mismatch (Cell D)	68	36 53%	9 13.2%	18 26.5%	19 27.9%	9 13.2%	21 30.9%	4 5.9%	5 7.4%
Change Intentions	**N**	**Change Occup.**	**Poor Counsel**	**Econ. Oppor.**	**Job Satis.**	**Fewer Jobs**	**New Interests**	**Job Security**	**Other**
No Intentions (Cell 1)[c]	395	121 30.6%	31 7.8%	62 15.7%	52 13.2%	22 5.6%	72 18.2%	19 4.8%	30 7.6%
Occ. Intentions (Cell 2)	9	3 33.3%	0 0%	1 11.1%	3 33.3%	0 0	2 22.2%	1 11.1%	0 0%
Org. Intentions (Cell 3)	41	19 46.3%	9 22%	8 19.5%	9 22%	3 7.3%	9 22%	1 2.4%	6 14.6%
Both Intentions (Cell 4)	25	143 52%	3 12%	10 40%	5 20%	3 12%	9 36%	2 8%	4 16%

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[a] Subjects were asked to indicate all the reasons why they would want to prepare for a different occupation if they were to re-enter college as freshmen.
[b] See Figure 14.
[c] See Figure 14.

However, Table 17 reveals that more of the individuals in an occupational mismatch situation (Cells B and D) based on the objective measure do desire to prepare for different occupations than those in the occupational match situations (36.5% - Cell B; 53% - Cell D vs. 21.6% - Cell A; 34% - Cell C). In fact, as predicted by Hypotheses 3 and 4 and by Assumption 9 (spillover effect), the situation in which individuals are mismatched to both the occupation and the organization is the situation in which the highest percentage of subjects desire to prepare for different occupations. This result seems to suggest that the questionnaire measure of occupational mismatch is related to the VPI measure of occupational mismatch. Further, as would be expected if common method variance does exist, Table 17 indicates that when using the questionnaire measure of occupational mismatch, more individuals intend to change occupations than when the VPI measure is used (Table 14). Thus, common method variance among all the variables except the VPI measure of occupational mismatch seems to account for some of the unusual findings in Table 14.

To determine more precisely the strength of the relationship between the questionnaire measure and the VPI measure of occupational mismatch, Table 18 presents the intercorrelation between the two. The correlation between desire to prepare for a new occupation and occupational mismatch is .1090 ($p = .002$) and between desire to prepare and occupational change intentions is .1897 ($p < .001$). Thus, the questionnaire measure is significantly related to the occupational dependent and independent variables, but the relationship is weak. The fact, though, that desire to prepare for a new occupation correlates at a much higher level with

Table 18

Intercorrelations Among Other Predictors and the Original Variables

Variable	1	2	3	4	5	6	7	8
1 Org Intent								
2 Occ Intent	.5563*** (n=627)							
3 Org Tenure	-.0937** (n=634)	.0585** (n=633)						
4 Occ Tenure	-.1141** (n=625)	-.1420*** (n=625)	.3824*** (n=668)					
5 Desire New Occupation	.1438*** (n=635)	.1897*** (n=637)	.0005 (n=676)	-.0532* (n=669)				
6 Org Commitment	-.1754*** (n=636)	-.1729*** (n=633)	-.0183 (n=674)	.0420 (n=665)	-.1610*** (n=676)			
7 Dependents	-.0542 (n=404)	-.0480 (n=404)	.2033*** (n=425)	.1418** (n=418)	-.0489 (n=441)	.0649* (n=424)		
8 Occ Mismatch	.0306 (n=634)	.0292 (n=634)	-.0533* (n=675)	-.0491 (n=667)	.1090** (n=678)	-.1068** (n=674)	-.0192 (n=425)	
9 Org Mismatch	.4413*** (n=574)	.3386*** (n=574)	.0598* (n=607)	-.0297 (n=598)	.1918*** (n=607)	-.2453*** (n=609)	-.0734* (n=382)	-.0108 (n=607)

*p < .10.
**p < .01.
***p < .001.

occupational change intentions than does occupational mismatch (.1897 vs. .0292) does imply that using the VPI measure may have affected results and that common method variance (i.e., use of all questionnaire variables) may account for some of the results obtained.

Table 17 also presents the frequency distributions for the questions on the desire to prepare for a new occupation based on first the subjects' mismatched classification (Cells A-D, Figure 14) and then based on the subjects' change intentions (Cells 1-4, Figure 14). Analyzing the reasons for preparing for a different occupation does not provide much in the way of information valuable to understanding the results of Table 14. The reasons for the desired change follow similar patterns for most of the eight classifications. Generally, new interests is the most often cited reason for desiring the occupational change, followed by economic opportunities and job satisfaction. Yet, this information does not help to explain why subjects do not intend to change their organizations and occupations, even when mismatched.

Inaccurate Occupational Mismatch Measure. Another possible explanation for the results is associated with the accuracy of the occupational mismatch measure. This involves three possibilities: that occupational mismatch is not actually measured by the VPI, that the algorithm used to estimate the degree of occupational mismatch is in error, and/or that Holland's definition of occupational match (i.e., an exact match exists when the first three letters of the occupational environment match the first three letters of the personaltity pattern) is incorrect. As detailed earlier in this chapter, research on the VPI has indicated that it is reliable and valid; thus, the first alternative

is not considered further at this time.

The algorithm developed here is based entirely on Holland's definition, and, thus, should be sound as long as the definition is sound. However, since Holland is not specific about how the matching is done, the algorithm could be inaccurate. Specifically, the algorithm used here assumes that each position of the three-letter comparison is weighted in a linear fashion when determining the degree of occupational mismatch. For example, if the first letters match, the occupational mismatch index is decreased by 7. If the second letters match, the index is decremented by 6; and a match of the third letters decrements the index by 5. It is probably more likely that a match of the first letters is considerably more important than a match in either of the two other positions. In other words, a match of the first letter should be weighted more or considered more important than other matchups.

Another possibility is that the weighting should reflect the strength of the relationships among the individual's personalities in his/her personality pattern. For example, assume that one individual's personality pattern is RIASEC and his/her scores from the VPI are Realistic - 16, Investigative - 15, Artistic - 14, Social - 0, Enterprising - 0, and Conventional - 0. Next, assume another individual has the same personality pattern, but his/her VPI scores are Realistic - 16, Investigative - 2, Artistic - 1, Social - 0, Enterprising - 0, and Conventional - 0. Even if different positional weightings are used and if the two are in the same occupational environment, the two individuals would end up with the same degree of occupational mismatch. This ignores the fact that one individual is basically a combination of three

personality types (Realistic, Investigative, and Artistic) and that the other is primarily a Realistic personality type. It could be that the first individual experiences less occupational mismatch when in an environment which is primarily Investigative or Artistic than does the second individual. At this point in time, however, there is no theoretical foundation for determining what weighting should be used.

One alternative representation is compared with the algorithm to determine if there were significant differences between the two possible representations. The alternative method applies the same rules as outlined in Table 2; however, the amount to be added to the occupational mismatch index is weighted. The weights are based on the actual VPI scores correpsonding to the three most prevalent personality types of the personality pattern. If the second most prevalent personality's actual VPI score is less than half of the first personality's VPI score, the amount to be added to the index is weighted by the VPI score - second most prevalent personality type divided by the VPI score - most prevalent personality type. If the score is greater than half, the weight is 1.0. The same procedure is applied to a comparison of the second and third most prevalent personality types.

Example: Two individuals have the same personality pattern ECR and work in the same occupational environment ECS. However, the first person's VPI scores are E = 10, C = 8, R = 6, and the second person's scores are E = 9, C = 4, R = 2. The first person's congruency index (refer to Table 2) is 18 - (7 + 6 + 0) or 5. The second person's congruency index, though, is 18 - (7 + 6 * 4/9 + 0) or 8.3.

If this revised representation of occupational mismatch is more accurate and if there is a linear relationship with being occupationally mismatched and intending to leave, with desiring to prepare for a new occupaion, or with job dissatisfaction, then these intercorrelations should be stronger using the revised representation. These results are presented in Table 19 and do not show an improvement in the correlations. In fact, some of the correlations are weaker using the revised representation. Therefore, the algorithm used may or may not be in error. Further in-depth research is needed on the feasibility of the algorithm.

Alternatively, Holland's theory of occupational personalities and environments may be incorrect. If one of the working assumptions (Assumption 1) of the present model is false, then the results obtained are suspect. However, support for Holland's theory has been overwhelming (see Literature Review, Chapter Two).

In conclusion, some of the results of Table 14 may be due to using an inaccurate algorithm. Since this study represents the first time that the algorithm is used, it is not possible to statistically validate the procedure yet. Despite its intuitive appeal, other possible algorithms are suggested above which also appear to be reasonable representations. In addition, the fact that the traditional occupational mismatch measure is consistently correlated with the other variables at higher levels than the developed occupational mismatch measure also suggests that the algorithm may be inaccurate (see Table 8).

Table 19

Intercorrelations Using Occupational Mismatch

Variable	Occup. Mismatch (Developed)	Occup. Mismatch (Revised)
1 Occup. Intent To Leave (Summed)	.0292 (n=634) (p=.232)	.0153 (n=634) p=.350)
2 Occup. Intent To Leave (Two years)	.0374 (n=646) (p=.171)	.0208 (n=646) (p=.299)
3 Desire New Occupation	.1090** (n=678) (p=.002)	.0976** (n=678) (p=.005)
4 Organ. Intent To Leave (Summed)	.0305 (n=634) (p=.221)	.0307 (n=634) (p=.220)
5 Organ. Intent To Leave (Two years)	.0334 (n=641) (p=.199)	.0361 (n=641) (p=.181)
6 Job Dissatisfaction	.0746* (n=679) (p=.026)	.0866* (n=679) (p=.012)

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*
** $p < .1$.
$p < .01$. $< .001$ level.

Inaccurate Organizational Mismatch Measure. Similarly, the organizational mismatch measure may not actually assess the degree of mismatch. This possibility can be explored by making two assumptions and then testing the relationship between the two assumptions. Specifically, if the organizational mismatch measure is a reasonable representation of organizational mismatch and if job dissatisfaction is an indicator of organizational mismatch, then the mean job dissatisfaction should be higher in the organizational mismatch cells (C and D) of Figure 14. Further, if organizational mismatch is more related to organizational change intentions than is occupational mismatch, the mean job dissatisfaction will be higher in the organizational change intentions cells (3 and 4) of Figure 14 than in the other cells.

Table 20 presents a comparison between the mismatch classification and job dissatisfaction and between the intentions classification and job dissatisfaction. The highest job dissatisfaction means for all eight situations (mismatch - Figure 14; intentions - Figure 14) occur when organizational mismatch is present or when organizational change intentions are present. In other words, this table indicates that job dissatisfaction is highest when individuals intend to leave both their occupations and their organizations and when individuals are mismatched to both environments. This seems to imply that job dissatisfaction, at least, accompanies change intentions and being mismatched. Since the next highest mean job dissatisfaction occurs when individuals are organizationally mismatched and when they intend to change

Table 20

Mean Job Dissatisfaction

Mismatch Cells				Intention Cells			
Occup.	Organiz.	Mean	t[a]	Occup. Change	Organiz. Change	Mean	t
Match (Cell A)[b]	Match	1.982	-2.01*	No (Cell 1)	No	2.162	-1.37
Mismatch (Cell B)	Match	2.164	5.08*	Yes (Cell 2)	No	2.556	1.65
Match (Cell C)	Mismatch	2.803	-1.39	No (Cell 3)	Yes	3.146	-1.52
Mismatch (Cell D)	Mismatch	3.044		Yes (Cell 4)	Yes	3.560	

[a] t-value for the t-test of mean differences.
[b] Cell labels refer to the cell labels used in Figures 3 and 14 respectively.
* $p < .05$.

organizations, job dissatisfaction seems to be more related to the organizational environment than to the occupational environment; yet it is also related to the occupational environment (but to a lesser degree). However, the only significant mean differences occur between Cells A and B and between Cells B and C. This finding does indicate, though, that job dissatisfaction is more related to organizational mismatch than to occupational mismatch, and, thus, may be an indicator of organizational mismatch. In summary, these results, then, seem to provide some support for the usage of the organizational mismatch measure for this study. Thus, this measure is probably not a reason for the results obtained in Table 14.

However, the relationship between organizational mismatch, job dissatisfaction, and organizational change intentions should be further explored. Earlier in this chapter, it was discovered that when the correlations between job dissatisfaction and organizational mismatch (r = .5145) and between job dissatisfaction and organizational change intentions (r = .5287) were partialled out, the correlation between organizational mismatch and organizational change intentions fell from .4413 to .2326. Similarly, when the correlations between job dissatisfacction and occupational mismatch (r = .0746) and between job dissatisfaction and occupational change intentions (r = .0292) were partialled out, the correlation between occupational mismatch and occupational change intentions fell from .0292 to .0049. It was also suggested that, perhaps, job dissatisfaction was an outcome of being mismatched or that job dissatisfaction itself was a predictor of change intentions alone. To test this possibility, the hierarchical regressions predicting occupational change intentions and organizational change intentions are rerun including job dissatisfaction as the fourth independent variable to be entered. These results are presented in Table 21.

The results in Table 21 indicate that organizational change intentions, as well as occupational change intentions, are primarily a function of organizational mismatch and then job dissatisfaction. For occupational change intentions, these two variables account for over 20% of the variance; and, for organizational change intentions, they account for over 31% of the variance. Therefore, organizational mismatch and

Table 21

Hierarchical Regressions for
Change Intentions Including
Job Dissatisfaction

Occupational Change Intentions	Beta	R^2	F
Occ. Mismatch	-.013	.00159	1.144**
Org. Mismatch	.567	.11258	80.993**
Interaction	.011	.00066	.475**
Job Dissatis.	1.268	.09563	68.799**
TOTAL[a]		.21046	35.786**

Organizatonal Change Intentions	Beta	R^2	F
Org. Mismatch	2.307	.19234	160.404**
Occ. Mismatch	.158	.00156	1.301*
Interaction	-.133	.00413	3.444**
Job Dissatis.	1.580	.12085	100.784**
TOTAL[a]		.31889	66.366**

[a] $n = 572$. * $p < .05$. ** $p < .01$.

job dissatisfaction appear to be different concepts, both of which affect change intentions. Considering also the effects found when job dissatisfaction is partialled out, it does appear that job dissatisfaction is an outcome of being mismatched to one's environment, which also affects change intentions.

Economic Conditions. Another possible explanation for the fact that most individuals, regardless of their mismatched situation, do not intend to change may be that economic and labor market conditions moderate these intentions (Assumption 6). In order to investigate this possibility, the responses to Question 5 (Appendix B) on the effects of the recession are analyzed by each of the cell classifications in Figure 14. This is done in an attempt to determine if economic factors have affected the individual. If individuals experience negative recession effects, and if economic conditions (or Assumption 6) are a reasonable explanation, it is expected that they will be less hesitant to change organizations and possibly their occupations (e.g., if the occupation change involves also an organization change). Therefore, individuals may be mismatched to their organizations and/or occupations, but, because of the recession they do not intend to change their situations at this time.

Table 22 presents the results of this analysis. This table presents frequency distributions for each of the mismatch conditions (Cells A - D, Figure 14) for each of the negative recession effects. Within each mismatch category, these frequency distributions are further broken down by the intentions classification (Cells 1-4, Figure 14). The top half of Table 18 presents these frequency distributions for the two

Table 22

Frequency Distribution of Recession Effects
By Intentions and Mismatch Classifications[a]

Recession Effects	No Mismatch: No Change (Cell 1)	No Mismatch: Organ. Change (Cell 3)	No Mismatch: Occup. Change (Cell 2)	No Mismatch: Both Change (Cell 4)	Both Mismatch: No Change (Cell 1)	Both Mismatch: Organ. Change (Cell 3)	Both Mismatch: Occup. Change (Cell 2)	Both Mismatch: Both Change (Cell 4)
Permanent Lay-off	3 (75%)	0	1(25%)	0	1 (50%)	0	0	1(50%)
Temporary Lay-off	0	0	0	0	0	0	0	1(100%)
Formally Notified Possible Job Loss	0	0	0	0	0	0	0	0
Job/Promotional Freeze	13(87%)	1(7%)	0	1(7%)	3 (30%)	4(40%)	0	3(30%)
Demoted	1 (50%)	0	0	1(50%)	1(50%)	0	1 (50%)	0
Involuntary Transfer	1 (100%)	0	0	0	0	1(33%)	1(33%)	1(33%)
Decreased Fringes	26(81%)	3(9%)	2(6%)	1(3%)	11(61%)	2(11%)	0	5(28%)
No Salary Increases	26(76%)	4(12%)	2(6%)	2(6%)	14(58%)	3(13%)	0	7(29%)
Decreased Income	15(94%)	1(6%)	0	0	2 (25%)	1(13%)	0	5(63%)
Positive Effects	52(96%)	0	2(4%)	0	11(69%)	3(19%)	0	2(13%)
Other Effects	17(100%)	0	0	0	6 (86%)	0	0	1(14%)
TOTALS	154	9	7	5	49	14	2	21

Recession Effects	Organizational Mismatch: No Change (Cell 1)	Organizational Mismatch: Organ. Change (Cell 3)	Organizational Mismatch: Occup. Change (Cell 2)	Organizational Mismatch: Both Change (Cell 4)	Occupational Mismatch: No Change (Cell 1)	Occupational Mismatch: Organ. Change (Cell 3)	Occupational Mismatch: Occup. Change (Cell 2)	Occupational Mismatch: Both Change (Cell 4)
Permanent Lay-off	1 (100%)	0	0	0	0	0	0	0
Temporary Lay-off	2 (67%)	1(33%)	0	0	0	0	0	0
Formally Notified Possible Job Loss	0	1(100%)	0	0	4 (100%)	0	0	0
Job/Promotional Freeze	6 (67%)	2(22%)	0	1(11%)	7 (78%)	2(22%)	0	0
Demoted	1 (100%)	0	0	0	4 (100%)	0	0	0
Involuntary Transfer	1 (100%)	0	0	0	2 (100%)	0	0	0
Decreased Fringes	16(80%)	3(15%)	0	1(5%)	25(93%)	2(7%)	0	0
No Salary Increases	16(76%)	3(14%)	0	2(10%)	18(95%)	0	0	1(5%)
Decreased Income	5 (71%)	2(29%)	0	0	14(82%)	3(18%)	0	0
Positive Effects	16(94%)	1(6%)	0	0	51(98%)	1(2%)	0	0
Other Effects	9 (82%)	0	1(9%)	1(9%)	14(82%)	2(12%)	0	1(6%)01(6%)
TOTALS	73	13	1	5	139	10	0	2

a Cell numbers refer to the intentions cells depicted in Figure 14. Mismatch refers to organizational or occupational environment mismatch.

conditions: both environments matched (Cell A) and both mismatched (Cell D). The bottom half presents the frequency distributions for the remaining conditions: occupationally mismatched (Cell B) and organizationally mismatched (Cell C). The percentages are calculated within each of the mismatched conditions by each recession effect. For example, the first table entry is "3(75%)" for those in "No Change" (Cell 1) situation and who are also matched to both environments (Cell A). The "3" means that 3 of the individuals who are classified as belonging to Cell 1 and to Cell A were permanently laid off. The "75%" means that 75% of all individuals who are classified as belonging to Cell A (matched) and who permanently laid off were are individuals who are classified as belonging to Cell 1 (no change).

These results indicate that, in general, of those individuals who have experienced negative recession effects, most do <u>not</u> intend to change their situations. In other words, if individuals experience some negative recession effects, they are more likely <u>not</u> to respond to a mismatched situation with change intentions, regardless of what the mismatch is. Therefore, most individuals who experienced recession effects are classified as belonging to Cell 1 (no change intentions), regardless of their mismatch classification (Cells A-D). The only exception occurs when individuals are mismatched to <u>both</u> their organizations and their occupations. For three of the effects (job freeze, involuntary transfer, and decreased income), the number of subjects experiencing some negative recession effects and still intending to change something is greater than when no intentions exist. For example, seven individuals who are classified as totally mismatched

(Cell D) and who experienced a job freeze do intend to change their organizations and/or occupations (Cells 3 and 4). Only three individuals classified as being totally mismatched and who experienced a job freeze do not intend to change their organizations or occupations. This could be expected from the model because individuals are mismatched to both environments. That is, the overall degree of felt mismatch is probably greater than for any other mismatch condition, and, thus, the desire to respond is probably greater also. The conclusion to be drawn from Table 22 seems to be that economic factors do moderate the response of intentions to change either the occupation or the organization (Assumption 6). In other words, when individuals experience negative effects from the recession, they are unlikely to respond to a mismatch with change intentions. This appears to be one very reasonable explanation for the results obtained in Table 14.

Hypothesized Relationship. One last possibile explanation for the fact that occupational and organizational mismatch do not predict occupational and organizational change intentions is that occupational mismatch and organizational mismatch are not the only predictors of change intentions or that there are other variables which better predict change intentions, like job dissatisfaction. In order to test this possibility, a multiple discriminant analysis is performed on all those individuals who are classified as not intending to change organizations and occupations (Cell 1 of Figure 14). The independent variables are those variables identified earlier in the turnover literature review (Chapter Two) as being related to turnover and included in the questionnaire (Appendix B). Additionally, the variables desire to

prepare for a new occupation and occupational tenure are included as possible predictors of occupational change intentions. By determining the most discriminating factors for the mismatch classifications (Cells A-D of Figure 14) for these individuals, it may be possible to determine if the results obtained in Table 14 are due to variables other than organizational mismatch and occupational mismatch.

The results of the multiple discriminant analysis are presented in Table 23. These results are based on using job dissatisfaction, organizational commitment, occupational tenure, organizational tenure, pay dissatisfaction, desire to prepare for a different occupation, work saliency, age, sex, and number of dependents as the discriminating factors possible. Since individuals are to be categorized into one of four cells, by chance, 25% of the subjects are correctly classified. Results in Table 23 indicate that 47.83% are able to be correctly grouped into their corresponding mismatch conditions by the discriminating factors. This is significantly different from 25% at the $p < .001$ level. Therefore, it appears that these variables are determinants of the mismatch classifications, as well as determinants of why these individuals do not intend to change their organizations or occupations, even when mismatched.

In order to interpret the results of the discriminant analysis, the functions are first analyzed to determine what they represent. Since the coefficients for each function indicate the relative contribution of each variable to the function, functions are analyzed by investigating the strongest coefficients. Next, the percent of variance associated with each function and the canonical correlations for each function are

Table 23

Standard Canonical Discriminant Function Coefficients

	Function 1	Function 2	Function 3
Job Dissatisfaction	.71	.07	-.19
Prepare New Occupation[a]	-.01	.55	-.10
Organization Tenure	-.01	-.18	.77
Occupation Tenure	.14	-.43	-.64
Organization Commitment	.18	-.66	-.15
Work Salience			
Sex[b]	.24	-.39	.30
Age			
No. Dependents	-.23	.21	-.49
Pay Dissatisfaction	.53	-.29	-.20
Number	250		
% Correctly Classified	47.83		
Group Centroids			
1-No Mismatch	-.29	-.32	-.03
2-Occ. Mismatch	-.33	.34	-.03
3-Org. Mismatch	.62	.02	.41
4-Both Mismatch	1.07	.01	-.35
Wilks Lambda	.70	.89	.96
Chi-Square	87.22	28.71	10.02
(degrees freedom)	(24)	(14)	(6)
Significance level	.000	.011	.124
Percent of Variance	69.04	20.28	10.67
Canonical Correlation	.46	.27	.20

[a] This variable is coded 1=No, 2=Yes.
[b] This variable is coded 1=Male, 2=Female.

analyzed. The correlations provide an indication of the relative ability of each function to discriminate the groups. A low correlation indicates that the corresponding function does not provide much help in discriminating the groups. This information is also obtained by checking the significance level of the Chi-squared associated with each function. Finally, the group centroids for each function are plotted to determine the specific pattern or meaning for each group based on all the functions. In general, centroids near zero are not as informative as extreme values. These patterns are then compared with the a priori groupings based on organizational mismatch and occupational mismatch.

Function 1 is highly and positively related to job dissatisfaction and pay dissatisfaction and being female. It is also negatively related to the number of dependents. In other words, the value of this function increases as the level of job dissatisfaction and pay dissatisfaction increases and as the number of dependents decreases. The value also increases at a faster rate for females than for males. Since the canonical correlation of .46 for Function 1 is greater than the other two functions, this function is the most discriminating function of the three. Additionally, Table 23 indicates that Function 1 is able to explain 69% of the variance.

Function 2 is related primarily to the desire to prepare for a new occupation (if one could re-enter college) (positive effect), organization commitment (negative effect), occupational tenure (negative effect), and sex (negative effect). In other words, the value of Function 2 increases as the desire to prepare for a new occupation increases and as the level of organizational commitment and occupational

tenure decreases. Additionally, the value increases at a faster rate for males. This function is not as discriminating as Function 1 because the canonical correlation is .27 and the proportion of explained variance is 20%. The results, however, for this function are still significant (p = .011).

Function 3 is related primarily to organizational tenure (positive effect), occupational tenure (negative effect), number of dependents (negative effect), and sex (positive effect). For this function, the value increases as the length of organizational tenure increases, as the length of occupational tenure decreases, and as the number of dependents decreases. Also the value of the function increases at a faster rate for females. Although the canonical correlation is .20, only 10% of the variance is explained and the significance level of the corresponding Chi-squared is .124. Therefore, Function 3 still does discriminate among the groups but to a much lesser extent than either of the other two functions.

The results must now be analyzed with respect to the plots of group centroids and with respect to determining the meaning of each group. This analysis reveals that for all groups, Function 1 is an important discriminator; that for Groups 3 and 4 (the organizational mismatch condition), Function 3 is also an important discriminator; and that for Groups 1 and 2 (the organizational match condition), Function 2 is also important. Figure 17 presents these plots on two graphs where Function 1 is the x-axis on both, Function 2 is the y-axis on the first graph, and Function 3 is the y-axis on the second graph.

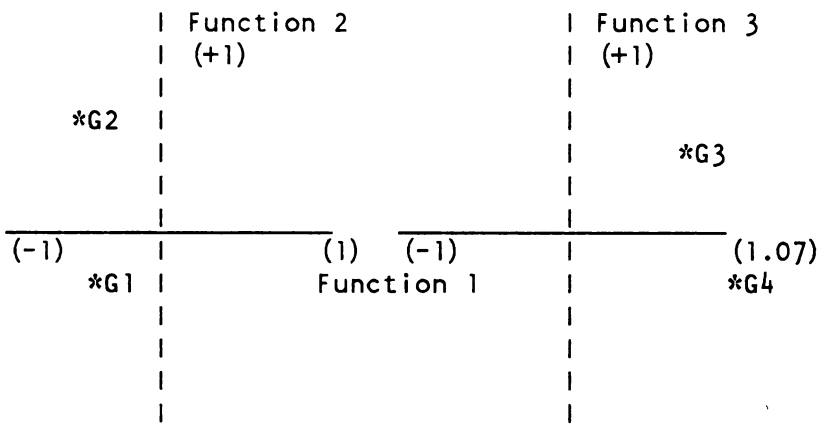

Figure 17. Graphs of the Group Centroids[a]

[a] Refer to Table 22.

Specifically, the Group 1 individuals (matched to both their organizations and occupations and who do not intend to change organizations or occupations) are described with Functions 1 and 2. Since the centroids for Function 1 and 2 are negative for group 1, the negative side of the functions are interpreted. The value of Function 1 decreases as the amount of job dissatisfaction and pay dissatisfaction decreases and for males. Also, the value of Function 2 decreases as the amount of organizational commitment and occupational tenure increases, for females, and when the individual does <u>not</u> desire to prepare for a new occupation. Therefore, Group 1 people are described using Functions 1 and 2 as being females and males with job and pay satisfacction, organizational commitment, long occupational tenure, and being matched to their occupations. This description fits the a priori definition of

Group 1, that the individuals are occupationally and organizationally matched (Cell A, Figure 14) and do not intend to change their situations.

Group 2 individuals are identified originally as being those individuals occupationally mismatched but organizationally matched (Cell B, Figure 14) and who do not intend to change their situations. The functions which describe these individuals are Functions 1 (negative effect) and Function 2 (positive effect). The value of Function 1 decreases as the amount of job dissatisfaction and pay dissatisfaction decreases and for males. The value of Function 2 increases as the level of organizational commitment decreases, the length of occupational tenure decreases, and for males who do desire to prepare for a new occupation. Therefore, Group 2 individuals are described using Functions 1 and 2 as being males who are occupationally mismatched and who are satisfied with their pay and jobs, but are not committed to the organization. Since the lack of organizational commitment does not necessarily mean that individuals are mismatched to their organizations, the Group 2 individuals might be described as males who are occupationally mismatched and possibly organizationally matched (Cell B, Figure 14). Relating this result to the findings in Table 14 seems to indicate that the males who fall into Cell B (Figure 14) are those reluctant to change occupations.

The Group 3 individuals used in the multiple discriminant analysis are those individuals originally identified as being occupational matched and organizationally mismatched (Cell C, Figure 14), yet not intending to change organizations or occupations. These individuals are

now described using the positive sides of Functions 1 and 3. Function 1 increases as the degree of job dissatisfacton and pay dissatisfaction increases, as the number of dependents decreases, and for females; while Function 3 increases as the amount of organizational tenure increases, the amount of occupational tenure decreases, the number of dependents decreases, and for females. Thus, Group 3 individuals are females with few dependents who are dissatisfied with their jobs and pay and who have been with the organization for a long time but not with their occupations for a long time. This description fits the a priori classification for Group 3 with respect to being organizationally mismatched but does not seem to fit the a priori occupationally matched classification. This description does, however, seem to provide more information as to why individuals do <u>not</u> intend to leave their organizations when mismatched. In particular, it appears that females in new occupations, even though organizationally mismatched, with few children are those who do not intend to change organizations or occupations.

Finally, Group 4 individuals, who are identified as being both organizationally and occupationally mismatched (Cell D, Figure 14) and who do not intend to change either their organizations or occupations, are described using Function 1 (positive effect) and Function 3 (negative effect). The value of Function 1 increases as the degree of job dissatisfaction and pay dissatisfaction increases, as the number of dependents decreases, and for females; while the value of Function 3 decreases as the amount of organizational tenure decreases, the amount of occupational tenure and the number of dependents increase, and for

males. Thus, Group 4 individuals are here categorized as being both males and females who have been in their occupations for a long time and in their organizations for a short time. Relating this to the results of Table 14, it appears that those individuals who are organizationally and occupationally mismatched (Cell D, Figure 14) and who do not intend to change their situations are those individuals in new organizations and old occupations. Perhaps these individuals are waiting to see if the organizational mismatch continues as they remain longer in the organization.

The results of the multiple discriminant analyses are summarized in Figure 18. These results combined with Table 22 indicate that other variables do affect change intentions, such as job dissatisfaction, sex, and length of tenure. The function coefficients for Functions 1 and 2 indicate that job dissatisfaction, pay dissatisfaction, and organizational commitment are strong predictors of change intentions. In other words, how individuals feel affect intentions. The function coefficients, however, for Function 3 indicate that individual differences (i.e., tenure) are the strongest predictors of change intentions. Since Table 22 indicates that there are other very strong predictors of change intentions, some of the unusual results found in Table 14 may be due to this. In other words, individuals, even though mismatched to their situations, do not intend to change their situations because of the effects of such variables as sex, number of dependents, tenure, satisfaction, and commitment.

Summmary. To summarize, the possible explanations for why the data did not support the hypotheses or the model have been discussed and

Original Classification			
Occup.	Organ.	N	Description
Match (Cell A)[a]	Match	150	Individuals who are satisfied with their jobs and pay, who have organizational commitment and long occupational tenure, and who are matched to their occupations.
Mismatch (Cell B)	Match	147	Males who would prepare for a new occupation, who are satisfied with their jobs and pay, but who are not committed to their organizations.
Match (Cell C)	Mismatch	53	Females in new occupations with few childern who are dissatisfied with their jobs and pay.
Mismatch (Cell D)	Mismatch	45	Individuals who are dissatisfied with their jobs and pay, who have been in the same occupations for a long time, and who have been in their organizations for a short time.

Figure 18. Description of Individuals Who do Not Intend to Change Organizations or Occupations[b]

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[a] Cells refer to Figure 14.
[b] Cell 1 of Figure 14.

analyzed. Of the six possibilities outlined, there are three very reasonable explanations based on the data.

First, Table 22 presented data regarding the recession effects. These data demonstrated that of all those individuals who experienced some negative recession effects, most do not intend to change their organizations or occupations. In other words, the recession appears to have affected intentions. Thus, the present economic and labor market conditions affect intentions to change organizations or occupations. This may be one explanation as to why change intentions were not found, even when individuals were mismatched (Table 14).

Second, the multiple discriminant analysis (Table 23) indicated that there are other predictors of change intentions besides organizational mismatch and occupational mismatch. Specifically, job dissatisfaction, pay dissatisfaction, organizational commitment, and tenure appear to be strong predictors of change intentions. Thus, lack of support for the model may have been found because the model did not include these critical predictors.

Third, lack of support for the model may be due to the fact that occupational mismatch was measured using the VPI (Vocational Preference Inventory), rather than the questionnaire, which measured the remaining variables. In other words, shared method variance may account for some of the results obtained.

CHAPTER SUMMARY

In this chapter, details of the research project were presented. Data analyses were performed to test the hypotheses. None of the hypotheses were supported. Possible explanations for some of the

unusual results found in Tables 14, 15, and 16 were presented, discussed, and analyzed. In Chapter Four, discussion of these results are presented along with the conclusions and implications of these data analyses.

CHAPTER FOUR

CONCLUSIONS AND RECOMMENDATIONS

In this chapter, the limitations of the present research study are first presented. Next, the statistical results presented in Chapter Three are discussed along with the conclusions drawn from the data analyses. The chapter concludes with a discussion of implications drawn from the model and the data analyses.

LIMITATIONS

The results of this research must be considered limited in five major aspects: the sample chosen, the low response rate, the use of intentions as the dependent variable, the use of a newly developed independent variable, and the use of perceptions to assess organizational mismatch. These limitations are now discussed further as well as suggestions to remove these limitations.

Sample

All subjects were business graduates from only one midwestern university. This, of course, limited the generalizability to other graduates, as well as to all other workers. Business graduates were chosen, however, because it was felt that, at least from an organizational viewpoint, these would be a major group that organizations were concerned about hiring and retaining in the long run. Most research studies have been limited by the sample chosen. To improve generalizability of this research, however, the research need

only be replicated using different samples. By cross-validating and comparing the results obtained, researchers should be able eventually to define more precisely a psychological model of occupational and organizational change intentions.

Another limitation associated with the sample's generalizability was the problem associated with what types of individuals had kept their addresses on file with the Michigan State University Alumni Donor Records. Were these individuals different from the graduates who were not on file? Were they perhaps the individuals most concerned with Michigan State University, which might mean that some type of "organizational" loyalty or commitment existed for these people, at least with respect to Michigan State? This problem is probably very difficult, if not impossible, to solve. The first step, however, would be to find and survey those graduates who had not kept their addresses up-to-date on the address file and then to compare the two groups of people to determine if there were major differences between the two groups.

Response Rate

The second major limitation was somewhat related to the first limitation. The response rate for this project was 31.9%. While this response rate was not low for a one-shot mail survey, it still raised the question of what were the characteristics of those who did respond compared to those who did not. In other words, did the respondents share some common characteristics not found in the non-respondents which affected the research findings? In order to improve on this limitation, a short questionnaire could be sent to all the non-respondents (or a

random sample of this group), asking for input on why they did not respond. Even if this were done, there is nothing to ensure that these people would now respond or that the data needed to identify group differences would be obtained.

Use of Intentions

Another major limitation of this research was the fact that intentions and not actual behaviors were used as the dependent variables. Using organizational change intentions can be a limitation when one tries to generalize these results to turnover research. However, as was explained in earlier chapters, intentions are now being used more often to generalize to turnover behaviors.

In an attempt to make the results of this dissertation more generalizable to turnover and occupational change research, a follow-up questionnaire could be sent out in six months along with the summary results promised to the respondents. This questionnaire would ask the subjects if they have changed their occupations and/or organizations within the last six months and what their intentions are for the next two years with respect to leaving their organizations and occupations. In this way, the results of this study could be validated or shown inconclusive.

Occupational Mismatch Measure

This dissertation included a newly developed measure to assess the degree of occupational mismatch. Even though the occupational mismatch measure did not consistently improve the results obtained over the use of the occupational mismatch variable traditionally used in research, it was a more robust conceptualization of occupational mismatch and better

matched Holland's (1966, 1973) definition of the degree of congruency between the individual and his/her occupational environment.

Although the measure appeared to be an improvement, it has not been validated with other data. As mentioned in Chapter Three, the algorithm for calculating the degree of mismatch may need to include different weightings for the positional comparisons. Test-retest reliabilities should not be a problem since the variable is calculated directly from the Vocational Preference Inventory scores (test-retest reliabilities already established). Research needs to be done to show that this representation actually gauges the degree of occupational mismatch. This could be done by designing other questions which have the subjects describe their work situations and their attitudes, intentions, and behaviors. Another way to validate this measure is to follow-up all the subjects after some period of time to determine if the hypothesized responses occurred or did not occur.

Use of Perceptions

The last major limitation was the fact that one of the dependent variables was measured using the Vocational Preference Inventory (VPI), while all the other variables were measured using the same questionnaire. In other words, common method variance may account for some of the support found among the variables measured by the questionnaire and may also account for some of the lack of support found when comparing the VPI measure of occupational mismatch with the remaining variables. In the future, common method variance could be addressed by developing

DISCUSSION AND CONCLUSIONS

The results of this dissertation indicate that none of the hypotheses were supported by the data collected. In this section, interpretation of the data analyses is presented with respect to the sample, variables, and conceptual implications of the results. Additionally, conclusions are presented with respect to these analyses.

Sample

For all three sets of variables, there were more subjects intending to leave their organizations than their occupations. As presented in Table 5, 14.3% of the sample probably or definitely will leave their organization within the next two years, while only 7.4% of the subjects intend to leave their occupations. This result was to be expected. the proposed Occupations, especially those occupations of most college graduates, represent an activity for which the subjects have been preparing for, at least, the last two years of undergraduate school. In other words, a considerable amount of time has already been devoted to occupational preparation before one even enters his/her chosen occupational field. As a result, the commitment of individuals to their occupations is probably stronger than their commitment to their organizations, although research of this nature has not been done. Additionally, the decision to leave one's occupation can be harder because the individual may now have to spend additional time learning a new occupation; whereas, leaving an organization while retaining the same occupation should be a much easier transition to make. Thus, the intentions expressed by the sample were not surprising.

Research Design

This research study was different from most other studies done in the field of turnover or intention to turnover because it did not look at the employees in a given organization; rather it looked at a cross-section of college graduates over a number of organizations. In fact, analyzing why individuals leave given organizations by investigating organizational characteristics, practices, and policies, organizational commitment, and job satisfaction,as was done in many previous turnover studies, seemed to be too narrow a perspective for generalizing to all organizations or even organizations in the same industry. The results seemed to apply only to the organizational unit under investigation. What was more likely to be true was that each organization must analyze its own organizational environment as it affects its own employees. The best that turnover research can probably do then is to present its findings with respect to what job characteristics, organizational characteristics, practices, and policies members of different occupations, not employees in general, desire.

Operationalization of Independent Variables

In this dissertation, representations were developed to express the degree of organizational mismatch and occupational mismatch. Since each of these were new representations, it seemed reasonable to compare the results obtained from these with the results obtained when using alternative representations that have been used previously in research. For occupational mismatch, this was done easily because most of the research on Holland's theory of vocational choice had used one common representation for occupational mismatch, which could be duplicated

here. For organizational mismatch, however, an alternative formalization was difficult to find. Previous research had not directly measured organizational mismatch, but rather had used measures such as the Job Diagnostic Survey to determine the degree of satisfaction with different work components. Therefore, no comparisons were made to determine the effectiveness of the organizational mismatch variable. However, the nature of this variable is discussed.

Occupational Mismatch Measure. The developed occupational mismatch measure was based on a somewhat complex procedure which utilized a three-letter comparison between the occupational environment and the personality pattern. It was designed to provide a more robust measure of the degree of occupational mismatch than the traditional measure because it used all the information available. Since the traditional degree of occupational mismatch was based on only a one-letter comparison, the variable had only four values: 0 (identical match), 1, 2, and 3 (total mismatch). Using only a one-letter comparison when a three-letter comparison should be used (Holland, 1966, 1973), can greatly decrease the accuracy of a variable labeled degree of occupational mismatch. For this reason, a significant, but not too high, intercorrelation was expected and found between the two representations ($r = .5992$, $p < .001$).

Considering the nature of Holland's theory (1966, 1973) on personality patterns and occupational environments (i.e., that the occupational environments are complex combinations of several personality types) and considering Holland's definition of an environmental match (an exact match of the first three letters of the

occupational environement and the personality pattern), the developed occupational mismatch did, in fact, provide a more reasonable operationalization of occupational mismatch. However, as mentioned in Chapter Three, it also seemed reasonable that the calculation of the degree of occupational mismatch should include different weightings for exact matches in different relative positions of the three letter codes or should take into account the different strengths among the different personalities in the individual's personality pattern. For these reasons, the developed occupational mismatch might be somewhat inaccurate. One of these alternative representations was tested (Table 19), but the results did not indicate an improvement over the developed algorithm. Further testing of the developed algorithm, as well as different representations, was suggested.

Another potential problem with the occupational mismatch measure was that, for this particular study, occupational mismatch was the only measure determined by an instrument other than the questionnaire (i.e., the VPI). None of the results concerning the VPI measure of occupational mismatch were significant, regardless of whether the traditional or developed measure was used. However, the results using a questionnaire mearure of occupational mismatch were stronger and si lt could very well be that common method variance accounted for these results.

For all of the hierarchical regressions (Tables 10 and 12), use of either the developed occupational mismatch or the traditional occupational mismatch did not greatly affect the overall variance explained. Since the developed occupational mismatch was the more

robust measure, however, it should have helped to explain more overall variance than the traditional measure. This relationship was supported when the dependent variable was organizational change intentions. However, when occupational change intentions were predicted, the traditional occupational mismatch helped to explain more variance. The differences in total explained variance, though, were so small (differences < .5%) that conclusions can not be drawn yet as to the effectiveness of the developed occupational mismatch. Further tests which compare the two measures need to be done.

Organizational Mismatch Measure. The organizational environment mismatch measure developed for this research listed 18 different organizational characteristics, practices, policies, and job characteristics and asked subjects to indicate how much more or less of each factor was desired. At this point, the instrument was no different from previous instruments. However, the second part of the question asked subjects to indicate which of these factors were most important and least important to them. This measure should prove very useful for future research on employee attitudes and behaviors. For example, different occupational groups could be described by the organizational characteristics most important and least important to them.

Hypothesis 1

The hypothesized relationship between occupational change intentions and occupational mismatch, organizational mismatch, and their interaction was not supported. The only independent variable which consistenly accounted for a significant amount of the variance in occupational change intentions was organizational mismatch (accounting

for over 11% of the variance). Occupational mismatch explained less than 1% of the variance. This lack of a significant relationship between occupational change intentions and occupational mismatch was further supported by the low intercorrelation found between the two variables (r = .0292, p = .232).

The results, then, with respect to the relationship between occupational mismatch and occupational change intentions were very discouraging. Logically the relationship should exist. One possible explanation might be that some people confuse occupational mismatch with organizational mismatch (as predicted by the model and its assumptions). Perhaps, this confusion affects most people rather than just some people. Additionally, people may protect their self-concept which is obtained through their occupational choice by attributing the cause of the mismatched feelings to other sources (Super, 1957, and Assumption 8). These appear to be two reasonable explanations for why the relationship between occupational mismatch and occupational change intentions was not be found. Alternatively, the fact that occupational mismatch was measured using the VPI, while all other variables were measured by the questionnaire, might have contributed to the significant support obtained (i.e., common method variance would exist). Other possible explanations which have been discussed in Chapter Three include an inaccurate measure of occupational mismatch, or that economic conditions inhibit change intentions, as well as behavior. Further research needs to be done, however, to explore further these possibilities and to find out why the discrepancy occurs.

In predicting occupational change intentions, a smaller total percentage of variance was explained than was the case for the dependent variable, organizational change intentions (11.843% vs. 19.803%). The present research appeared to be the first to predict occupational change intentions so the explained variance of 11.5% can not be compared with past research. However, it seemed logical to expect that the independent variables used here would predict a considerable amount of the variance in occupational change intentions.

It could be that this low amount of explained variance in occupational change intentions was due to the fact that very few of the subjects actually indicated that they would probably or definitely intend to leave their occupations (n=47) and that economic conditions affected the response of change intentions (Assumption 6, Table 18). Another explanation is found in the results of the multiple discriminant analysis. The multiple discriminant analysis results presented in Table 23 and Figure 18 also indicated that there were other variables affecting occupational change intentions when individuals are mismatched to their occupations, such as satisfaction, sex, tenure, and organizational commitment. This possibility was further explored by performing hierarchical regressions using the originally hypothesized independent variables as well as job dissatisfaction to predict occupational change intentions. The results (Table 21) indicated that when job dissatisfaction was included, the total explained variance increased by almost 10% (job dissatisfaction accounted for 9.563% of the variance, which was significant at the .01 level). This finding

indicated that occupational change intentions was a function of organizational mismatch and job dissatisfaction and not occupational mismatch or its interaction with organizational mismatch. Extensive research is needed to determine what other factors contribute to occupational change intentions.

Another possible explanation for the low percentage of total explained variance might be that people do not want to accept their occupations as being the source of their mismatched feelings (Assumption 8). Super's (1957) theory of vocational choice suggests that one's occupation is an attempt to implement one's self-concept and that problems with the occupation could imply to the individual problems with his/her self-concept. Therefore, individuals may be reluctant to admit to themselves that they are in the wrong occupation and, instead, change organizations in the hope of alleviating the feelings of mismatch. As indicated in Tables 5 and 9, only 7.4% of the subjects intended to leave their occupations within the next two years; while at least 29% had some degree of occupational mismatch.

In addition, individuals might be reluctant to change occupations (Assumption 7). They may not want to act on these feelings for such reasons as career time already invested or a high level of pay currently being received. A final explanation might be that individuals confuse organizational mismatch and occupational mismatch in their minds or can not properly diagnose the causes of feelings of mismatch. Thus, when organizational change intentions surface, they may not be due to the organizational environment.

To summarize the results, no significant relationship was found between occupational change intentions and occupational mismatch and between occupational change intentions and the interaction of occupational mismatch and organizational mismatch. The results indicated that individuals change occupations as a result of organizational mismatch and job dissatisfaction, rather than because of occupational mismatch. This finding represented a new contribution to the field of occupational change in that occupational change had been previously related to occupational mismatch and job dissatisfaction and not to organizational mismatch. What was also surprising was the lack of any significant relationship between occupational mismatch and occupational change intentions. The relationship between occupational change intentions and occupational mismatch should logically exist. Possible explanations for these results were set forth. Further research is needed to determine the exact causes of occupational change intentions and to discover why being occupational mismatch does not affect occupational change intentions. Also, these results should be followed up to determine if occupational change intentions do eventually result in actual occupational change. Hopefully, results would be similar to the relationship found between turnover intentions and actual turnover behavior ($\underline{r}$ = .408). Such results would also provide further support for Fishbein's theory (1967) that one's intention is the best predictor of future behavior.

Hypothesis 2

It was predicted that organizational change intentions would be a function of organizational mismatch, occupational mismatch, and their interaction. This hypothesis was not supported because occupational mismatch and the interaction did not account for a significant percentage of the variance in organizational change intentions. In both regressions, organizational mismatch accounted for most of the variance in organizational change intentions (19.234%). This relationship was further supported by the fact that there was strong correlation between organizational mismatch and organizational change intentions (r = .4413, p = .001).

The total amount of variance in organizational change intentions explained by the three independent variables was under 20% (Table 12). However, when job dissatisfaction was added as a possible predictor of organizational change intentions, 31.9% of the variance was explained. Thus, organizational change intentions appeared to be a function of organizational mismatch and job dissatisfaction, and not occupational mismatch or its interaction with organizational mismatch. A next step in determining the causes of organizational change intentions could be to determine the relationship between organizational mismatch and job dissatisfaction. Is job dissatisfaction an outcome of being organizationally mismatched? Is job dissatisfaction a component of organizational mismatch? Is job dissatisfaction an independent predictor of organizational change intentions?

These results were somewhat encouraging, though, because multivariate turnover models have predicted on the average 25% of the

turnover variance (see Mobley et al., 1979). The model presented here only used two variables (plus their interaction) and explained almost 20% of the variance in organizational change intentions. In fact, when a third independent variable was added (i.e., job dissatisfaction), the total explained variance increased to almost 32%. Further research should also be done to determine if organizational mismatch is related to actual organizational change.

To conclude the discussion on Hypothesis 2, there was a significant and positive relationship between organizational environment mismatch and organizational change intentions, but not between organizational change intentions and occupational mismatch or between organizational change intentions and the interaction between occupational mismatch and organizational mismatch. In addition, it was found that organizational mismatch accounted for 19% of the variance and job dissatisfaction for 12% of the variance in organizational change intentions. Previous turnover research has established a significant positive relationship between job dissatisfaction and organizational change intentions and actual turnover behavior (usually less than 14% of the variance, Mobley et al., 1979). However, the relationship found between organizational mismatch and organizational change intentions had not been explored previously. Therefore, that relationship did represent a new contribution to the research done on the causes of turnover intentions, and it appeared that organizational mismatch and job dissatisfaction were two different concepts which need to be clarified further.

Hypotheses 3, 4, and 5

Hypothesis 3 dealt with the ability to predict presence of change intentions based on the presence of mismatched conditions. For example, if individuals were classified as being occupationally mismatched and organizationally matched, they should also be classified as intending to leave their occupations and not their organizations. Table 14 indicated, however, that no matter what the mismatch situation was, most subjects did not intend to leave either their occupations or their organizations. Therefore, Hypothesis 3 was not supported.

The last two hypotheses were also tests of the complete model. They dealt with predicting the relative degrees of change intentions based on the degrees of mismatch. The data did not support the predictions because the specified ordering did not occur and only some of the predicted mean differences were significant. Of course, this was to be expected after the results for Hypothesis 3 were analyzed (i.e., the fact that even when mismatched people did not intend to change). Thus, Hypotheses 4 and 5 were not supported.

The results of these tests of hypotheses were so unexpected that some possible explanations were set forth and tested in Chapter Three. The most likely explanations for the results obtained were:

1. Economic conditions (i.e., negative recession effects) appeared to affect change intentions (Assumption 6).

2. The calculation of occupational mismatch might need to include different weighting for different positions in the three-letter comparison.

3. Common method variance might exist among the questionnaire variables, while occupational mismatch was determined by the Vocational Preference Inventory.

4. There were variables which affect change intentions other than occupational mismatch and organizational mismatch.

In particular, the results of the multiple discriminant analysis (Table 23) indicated that individuals did not intend to change their organizations or occupations when in a mismatched situation because of such variables as job dissatisfaction, organizational commitment, sex, and length of occupational and organizational tenure. In other words, there appear to be particular circumstances under which individuals will remain in a mismatched situation (see Figure 18). The impact of job dissatisfaction was further explored by including it as a possible predictor of occupational mismatch and organizational mismatch. These results (Table 21) indicated that job dissatisfaction accounted for 9.6% of the variance in occupational change intentions and 12% of the variance in organizational change intentions. Thus, it did appear that the lack of predictive ability was caused by not considering some of the more important variables related to change intentions.

Further research is needed to clarify these relationships. Of particular interest would be to include some of the possible predictors (job dissatisfaction, organizational commitment, tenure, etc.) and determine if the prediction of change intentions can be improved. It could be that economic conditions are presently the overrriding determinant of whether individuals intend to leave their organizations or occupations. It could also be that the model is not as simple as originally hypothesized. Perhaps other predictors, such as job dissatisfaction, need to be included in the model. The exact placement of these predictors into the model must also be determined through

further research (i.e., are they independent predictors, are they intervening or moderating variables, are they outcomes of being mismatched, etc.).

To summarize the findings related to Hypotheses 3, 4, and 5, the model's predictive abilities when predicting organizational change intentions and occupational change intentions simultaneously were not supported. Several explanations were proposed in trying to understand better the unusual results found in Table 14, such as an inaccurate occupational mismatch measure or economic factors inhibiting change intentions. In particular, the results of Table 23 and Figure 18 indicated that there were additional independent variables (e.g., job dissatisfaction, organizational commitment, sex, occupational tenure, organizational tenure) which affected the responses of intentions to change, even when already mismatched to the organization and/or occupation. These results were offered as explanations for why individuals did not intend to change their situations even though mismatched.

Contributions to Previous Research

The results of the present research provided at least partial support for many of the turnover models discussed earlier. The turnover models of Price (Figure 5), Mobley (Figure 7), and Mobley, Horner, and Hollingsworth (Figure 8) specifically proposed a job dissatisfaction-intention to leave linkage. Even though this linkage was not an explicit part of the proposed model, it was tested. Tables 8 and 20 presented results which indicated that job dissatisfaction and organizational change intentions were related. The intercorrelation

between organizational change intentions and job dissatisfaction was .5287 ($p < .001$), and job dissatisfaction accounted for 12% of the variance in organizational change intentions. Therefore, further support was found for the job dissatisfaction - intention to leave linkages proposed by the turnover models of Price; Mobley; and Mobley, Horner, and Hollingsworth.

Bluedorn's unified model (Figure 6) linked up demographic characteristics with expectations, job satisfaction, intention to leave, and, finally, actual turnover behavior. The demographic characteristics - expectations linkage was somewhat similar to the person-environment linkage if one accepts the notion that being matched to one's situation implies that their expectations are met. In this study, the relationship between met expectations and job dissatisfaction found some support (i.e., the correlation between organizational mismatch and job dissatisfaction was .4413). Similarly, Mobley, Griffeth, Hand, and Meglino's model (Figure 9) received some support. This model also included a linkage between perceptions and expectations.

Steers and Mowday's model (Figure 11) received the most support from the research done here because the model so closely mirrored the proposed model. Steers and Mowday (1979) proposed that individuals have many responses to their work situation (Assumptions 3, 4, and 5 of present model) when they compare their expectations to their actual experiences (i.e., organizational mismatch or occupational mismatch). In their model, the intention to leave response was moderated by non-work influences (Assumption 6 in the present model), and individual characteristics were the starting point of the model (Assumption 1 of

present model and the present model's starting point).

Support for the Steers and Mowday model was found for many of their model's features. For example, one probable explanation for the unusual results found in Table 14 (i.e., that no one intended to change, even though mismatched) was that economic conditions seemed to affect change intentions (Table 22), which parallels Steers and Mowday's moderator of non-work influences. In addition, the results here might be interpreted as providing support for the mismatch-job dissatisfaction linkage. Regardless of the nature of the relationship between job dissatisfaction and mismatch, it was found that together these two variables accounted for over 30% of the variance in change intentions. Additional support for Steers and Mowday was also found in the results of Table 23, where it was found that change intentions were also affected by job dissatisfaction, organizational commitment (both responses in their model), sex, number of dependents, and tenure (all individual characteristics in their model).

The closest that previous research has come to including the linkage between the individual and the occupation has been Wanous' model (Figure 12) in which the degree of match between the individual's needs/motives and the organizational climates eventually determines voluntary turnover. This matching concept was very important to the present research as well. Since the present research found support for the organizational mismatch-job dissatisfaction linkage was well as an organizational mismatch-intentions linkage, general support for the Wanous model was also provided.

The model presented here builds onto the initial starting points of most of the models of voluntary turnover by better defining the role of the individual in the turnover process. For the most recent models of voluntary turnover by Price (Figure 5), Bluedorn (Figure 6), and Mobley (Figure 10), the individual's role in the process was not as well clarified as by the models of Steers and Mowday and of Wanous (Figures 11 and 12). A revised version of the hypothesized model should be incorporated into these models by including the interaction between individuals and their organizational environments as the starting point of the model. (The point where many turnover models begin is to propose that the particular responses of job satisfaction or organizational commitment are determinants of subsequent turnover intentions and behavior.)

In summary, the linkage between the individual and the organizational environment and the resultant degree of organizational mismatch could be easily incorporated into all the existing turnover models. This matching between individuals and their expectations about the organizational environment serves the purpose of clarifying the processes within the individuals which affect employee attitudes, intentions, and behaviors. The model could also be used by vocational psychologists to understand how individuals react to being mismatched to their occupations. In particular, the findings here suggested that being occupationally mismatched did not affect occupational change intentions or organizational change intentions, even though it should have affected occupational change intentions. Instead, occupational

change intentions were found to be a function of organizational mismatch and job dissatisfaction. Further research is needed to determine why this occurred. This research, at least, represented a first attempt to develop a model of occupational change and, as such, did contribute to the vocational change literature.

Further Testing of Model

The results presented here did not support the hypothesized model (Figure 14). Before discarding the model, however, further research should be done to determine if these results can be replicated. Some particular concerns in subsequent research are:

1. Is there a general continuum of responses to mismatched feelings for most people or for people belonging to a given personality type or occupational group? Do certain responses occur at lower degrees and others at higher levels? For example, is job dissatisfaction a usual response to being organizationally mismatched?

2. Do people misperceive their sources of mismatched feelings or do they refuse to acknowledge certain sources? Can individuals diagnose correctly their feelings of mismatch?

3. How do individuals handle mismatch when they are reluctant to change organizations or occupations? Why are they reluctant to change?

4. Does the developed organizational environment mismatch measure improve the determination of the differences between occupational groups or personality types?

5. What is the relationship between job dissatisfaction and organizational mismatch and occupational mismatch? Is it a response to lower degrees of mismatched feelings than intentions? Is it a moderator to the relationship between mismatch and the responses?

6. Are there certain responses which occur more often for certain personality types or occupational groups? For example, it might be that one personality type more often responds to mismatched situations by leaving their situations.

7. Is there an interaction between organizational mismatch and occupational mismatch?

    1. Are there certain responses which occur more often under different combinations of mismatch (Figure 14)? For example, do individuals who are mismatched to their occupations and not to their organizations (Cell C) usually leave their organizations, express job dissatisfaction, etc., while those only mismatched to their organizations decrease organizational commitment?

    2. If individuals are experiencing mismatched feelings in one area, does this affect the needs of individuals in organizational settings? For example, if individuals are occupationally mismatched and do not want to leave the situation, do they make extrinsic rewards more important, do they decrease career saliency, etc.?

    3. Why is it that when organizationally matched, occupational change intentions decrease when occupational mismatch exists?

    4. Why is it that when occupationally matched, organizational change intentions increase at a faster rate when organizationally matched than when organizationally mismatched?

8. How are the responses to mismatched situations affected by career stage, career saliency, personality type, needs, or values?

9. What are the needs and coping strategies for different personality types and occupational groups? And do they occur at different degrees or combinations of mismatch?

10. Is there a relationship between intrinsic and extrinsic needs and the responses to different mismatched conditions (Figure 14)? Or between the degree of higher order needs and the responses? Do these relationships have different effects for different combinations of mismatch?

More research should also be done with different populations and occupations. Identification of the differences in responses for different personality types or occupational groups could be particularly helpful to job design, job satisfaction, and performance research, as well as to research investigating dysfunctional employee behaviors.

IMPLICATIONS

Studying intentions can be beneficial even though intentions are not actual behaviors. Organizations should not be short-sighted by only being concerned with actual turnover behavior and not being concerned with what other outcomes are associated with being mismatched to one's situation (either organizationally or occupationally). For example, intending to leave may very well affect job performance. In other words, intending to leave and poorer job performance might be two of the coping strategies used by the individual to handle a mismatched situation. There may also be other dysfunctional coping strategies employed by the individual in a mismatched situation. In addition, other factors may also be affected by being in a mismatched condition, such as job satisfaction and organizational commitment. These last two factors have been researched extensively and have been related to job performance and actual turnover. Thus, looking at the interrelationships among the different coping strategies for different occupational groups or personality types can be very beneficial to organizations as well as being able to recognize these as coping strategies when they occur.

After further research on the proposed model, the available responses to varying degrees of mismatch and to different sources of mismatch might be identified. Also information concerning the conditions under which certain responses occur and what moderators or intervening variables exist can be used. For example, likely candidates as moderators already identified (Table 23) are sex, number of dependents, and tenure. Another likely candidate as a moderator is

career stage. It is probably very unlikely that individuals in their final career stage will leave an organization even if they are in a mismatched situation, for such reasons as loss of pension benefits. Thus, a major contribution by continued research in this area is in supplying managers with information which helps them to understand how and why people behave in certain ways or have certain attitudes and intentions and to understand how the occupational environment differs from the organizational environment. This increased awareness should be a prerequisite to effective management.

One of the major conclusions to be drawn from this research is that individuals intend to change occupations when organizationally mismatched (Table 10) and when dissatisfied with their jobs (Table 21). In other words, being occupationally mismatched was <u>not</u> related to occupational change intentions, even though it should be logically. Further research hopefully would clarify why this occurs. If research indicates that individuals are not acknowledging or are misinterpreting feelings of occupational mismatch, individuals will then express job dissatisfaction, feelings of organizational mismatch, and organizational change intentions when some of the individuals are actually mismatched to their occupations. This means that managers have some valuable information to apply to their own situations. Management can do much more than just change organizational and job characteristics to retain employees. Managers would first need to clarify further the causes of the mismatched feelings. If there is an occupational mismatch, management could take steps to decrease the feelings of mismatch through vocational education, vocational testing, and vocational counseling. In

this respect, the manager's job becomes three-fold. First, management will need to identify that job dissatisfaction, organizational mismatch, and/or organizational change intentions exist. Next, management will need to determine the cause(s) of these feelings. Finally, management can take corrective action on the cause(s) (i.e., change the organizational and job characteristics, provide vocational education, etc.). Further, managers could determine the degree of occupational mismatch for all employees periodically in an attempt to identify a potential pool of employees for career counseling and vocational guidance programs to assist employees in finding their best location in the work world. In this way, perhaps some of the job dissatisfaction, change intentions, and feelings of mismatch can be decreased. Training programs could be offered to these individuals and those individuals desiring to change occupations. Organizations could even offer this service to potential job applicants, allowing the individual to take the SDS or VPI and find out for which occupations s/he is best suited. For large organizations, such programs would be very feasible because of the likelihood of various types of jobs in the organization. For smaller organizatons, however, perhaps the best idea would be for these organizations to work together with other small organizations to provide a variety of job types, somewhat like a job co-op.

Reliable matching models for organizational and occupational change can guide managers towards more effective management. The show of concern by organizations for a proper fit between the worker and occupational-organizational environment will convey a desire to help employees. This could remove some of the impersonality associated with

organizations and improve the quality of work life. The fact that management is willing to share its employees with other organizational units or even with other organizations with the clearly stated objective of helping the individual find the best fit and not forcing the individual to work in a situation in which s/he is mismatched should raise the level of trust employees have for the organization and management as well as decrease the incidence of turnover.

APPENDIX A

COMPONENTS OF THE ORGANIZATIONAL ENVIRONMENT

Appendix A

Components of the Organizational Environment
Definitions and Relationship to Voluntary Turnover

Immediate Work Environment (including job design and job context factors)

	Definition	Research
Adequacy of authority	degree to which authority is delegated consistent with the perceived job demands (House and Rizzo, 1972). This component could be considered a part of the organization-wide component, centralization.	A significant positive relationship has been found between authoritarianism and voluntary turnover (see review by Muchinsky and Tuttle, 1979).
Adequacy of planning	degree to which plans are perceived as adequate to accomplish job objectives (House and Rizzo, 1972).	A significant positive relationship has been found between initiating structure and voluntary turnover (see review by Muchinsky and Tuttle, 1979).
Adequacy of resources	extent to which the worker is given enough of the following factors in order to work their best: information, equipment, assistance from coworkers, authority to tell others what and time (Quinn and Shepard, 1974).	Significant negative relationship (Mangione, 1973).
Autonomy/responsibility	degree to which the job provides substantial freedom, independence, and discretion for scheduling work and determining the procedures to follow (Hackman and Lawler, 1971; and Hackman and Oldham, 1975). This component can be considered a part of the organization-wide factor, centralization.	Consistent negative relationship (see reviews by Mobley et al., 1979; Muchinsky and Tuttle, 1979; Porter and Steers, 1973; also Mowday and Spencer, 1981, when autonomy was a component of task scope).
Career facilitation/ role orientation	perceived relevance of the job for the worker's career (Graen, Orris, and Johnson, 1973).	Significant negative relationship (see Mobley et al., 1979).
Dealing with others/ required interaction	degree to which the job requires employees to deal with others (customers, coworkers) to complete their work (Hackman and Lawler, 1971; and Hackman and Oldham, 1975).	Moderate negative relation for peer group interaction (see Porter and Steers, 1973).

Friendship opportunities	degree to which the job allows employees to talk with one another on the job and establish informal relationships with other employees (Hackman and Lawler, 1971). See also the organization-wide factor, integration.	
Hours	extent to which one's work hours are inconvenient, excessive, or irregular, interfere with one's personal life, or extent to which one has inadequate control over hours worked (Quinn and Shepard, 1974).	Significant negative relationship between satisfaction with hours and turnover (see Mobley et al., 1979).
Instrumental communication	extent to which information about the job or role performance is transmitted to organizational members (often signified by on-the-job training) (Bluedorn, 1980b; Martin, 1979; Price and Bluedorn, 1979; Price and Mueller, 1981). This component is closely associated with knowledge of organizational procedures and control processes, with feedback when actual work results are transmitted, and with formalization at the organizational level.	Consistent negative relation (see Martin, 1979; Price, 1977). Significant negative relation for knowledge of procedures (Marsh and Mannari, 1977). No effect (Bluedorn, 1980b).
Leader acceptance	satisfaction with specific aspects of the leader-member exchange (Graen and Ginsburgh, 1977).	Significant negative relation (Dansereau, Cashman, and Graen, 1974; Graen and Ginsburgh, 1977).
Optional interaction		
Potential role conflict	the probability that 2 or more sets of pressures will occur so that compliance with one set will make compliance with another set more difficult (Bluedorn, 1980b). This variable is a component of the factor conflict. However, as operationalized by Bluedorn (1980b), this variable is related to pressures from one's spouse.	Although Bluedorn (1980b) hypothesized an indirect positive relationship between role conflict and voluntary turnover, no effect was found.
Pressure	degree to which there is inadequate time and manpower to accomplish tasks (House and Rizzo, 1972).	No effect (Hellriegel and White, 1973).

Recognition/feedback	degree to which employees receive information as they are working which reveals how well they are performing their jobs (Hackman and Lawler, 1971, and Hackman and Oldham, 1976). This component includes both feedback from work and others, and could be considered an element of instrumental communication.	Significant negative relation (Mowday and Spencer, 1981, when feedback is a component of task scope; see Muchinsky and Tuttle, 1979; Porter and Steers, 1973).
Required interaction	SEE DEALING WITH OTHERS	
Role ambiguity	the predictability of a response or outcome of one's behavior and clarity of behavioral requirements that would serve to guide behavior and provide knowledge that the behavior is appropriate (House and Rizzo, 1972).	Consistent negative relation for role clarity (see Porter and Steers, 1973).
Routinization/task repetitiveness	degree to which a job or role performance is repetitive (Bluedorn, 1980b; Martin, 1979; Price and Bluedorn, 1979; Price and Mueller, 1981). This factor is closely associated with skill variety.	Significant positive relation (Bluedorn, 1980b; Martin, 1979; see Porter and Steers, 1973). Weak positive relation (Price and Mueller, 1981; see Muchinsky and Tuttle, 1979; Price, 1977).
Socialization	those changes in a new employee caused by the organization with respect to "1) accurate knowledge of what's expected, 2) the appropriate skills and abilities to do the job, and 3) the motivation to do at least the minimum acceptable performance" (Wanous, 1980, p. 168).	Significant negative relation between pre-employment interventions and voluntary turnover (see Muchinsky and Tuttle, 1979).
Supervisory style	degree to which one's supervisor uses his/her capacity and talents effectively, establishes effective instrumental interpersonal relationships with subordinates, and allows subordinates to exercise judgment in handling problems (Hellriegel and White, 1973).	Consistent negative relation (see Porter and Steers, 1973). Moderate negative relation (see Mobley et al., 1979).
Support/tolerance of error	degree to which errors are dealt with in a supportive, learning manner rather than in a threatening, punitive way (House and Rizzo, 1972).	

Task identity extent to which the employee does a whole piece of work and can identify the results of one's effort (Lawler, 1971; Hackman and Hackman and Oldham, 1975).	Significant negative relation (Mowday and Spencer, 1981, when task identity was a component of task scope).
Task scope See Feedback, Responsibility, Task Identity, Task Significance, and Variety.	
Task significance degree to which the job has substantial impact on the lives or work of other people inside or outside the organization) (Hackman and Oldham, 1975).	Significant negative relation (Mowday and Spencer, 1981, when task significance was a component of task scope).
Variety degree to which the job requires the employee to perform a wide range of operations (i.e., a variety of skills and abilities) and/or the degree to which one must use a variety of equipment and procedures at work (Hackman and Lawler, 1971).	Significant negative relation (see Krackhardt, McKenna, Porter, and Steers, 1981; Mowday and Spencer, 1981, when variety was a component of task scope).
Work unit size the number of participants in a given organizational unit.	Consistent positive relation for blue collar workers (see Muchinsky and Tuttle, 1979; Porter and Steers, 1973).
<u>Organization-Wide Factors</u>	
Centralization extent to which power is concentrated in an organization or social system (Bluedorn, 1980b; Martin, 1979; Price, 1977; Price and Bluedorn, 1979; Price and Mueller, 1981). This component can be considered to be associated with the immediate work environment factors, participation in decision-making and task autonomy (see Pierce and Dunham, 1977) and adequacy of authority.	Small positive effect (Price and Mueller, 1981). Consistent negative relation (see Price, 1977). Price (1977) hypothesized a negative relation with turnover when turnover is randomly distributed across organizations.
Conflict/inconsistency degree to which policies, standards of performance, directions, and procedures are inconsistent or inconsistently applied (House and Rizzo, 1972). This component includes the immediate work environment factor, role conflict which is related to the performance requirements of one's role.	Bluedorn (1980a) hypothesized that non-random turnover within the organization would be positively related to conflict reduction and that random turnover within the organization would be unrelated to turnover.

Differentiation	the number of structural components that are formally distinguished on one or more criterion such as knowledge (Blau, 1970).	Bluedorn (1980a) hypothesized that turnover would be positively related to role differentiation at a decreasing rate.
Distributive justice	extent to which conformity to the norms of the organization is followed by means of the distribution of positive and negative sanctions from the organization (Martin, 1979; Price and Mueller, 1981). This component contains the organization-wide factor of equity.	Significant relation (Martin, 1979; see Price, 1977). No effect (Price and Mueller, 1981)
Environmental opportunities foregone	the number and quality of unoccupied roles in an organization that a member has bypassed or rejected (Bluedorn, 1979, 1980b).	Bluedorn (1980b) proposed an indirect negative relationship between this factor and voluntary turnover.
Equity	extent to which one's job inputs and/or outcomes are perceived as equivalent to the inputs and/or outcomes of those in one's reference groups (Bluedorn, 1980b). This component can possibly be considered a special case of distributive justice.	Although Bluedorn (1980b) hypothesized an indirect positive relationship between equity and voluntary turnover, no effect was found.
Formal communication	extent to which information is officially transmitted to organizational members through memoes, training, etc. (Martin, 1979). This component could probably be considered a part of the organization-wide factor, formalization.	Consistent negative relationship (Martin, 1979; see Price, 1977).
Formalization	extent to which rules and procedures are established and known in the organization and the work unit (Bluedorn, 1980b) or the degree to which the norms of the social system are explicit (Bluedorn, 1980a; Price, 1977). This component is closely associated with instrumental communication and formal communication.	Price (1977) hypothesized that a positive relationship would exist; however, Bluedorn (1980b) suggests a curvilinear relationship.
Integration	degree to which an organizational member has close friends among the organizational members (Bluedorn, 1980b; Martin, 1979; Price and Bluedorn, 1979; Price and Mueller, 1981).	Consistent negative effect (see Price, 1977). No effect (Price and Mueller, 1981).

Appendix A (cont'd)

Internal opportunity structure	the number and quality of alternative jobs available in the organization (Bluedorn, 1979; Bluedorn, 1980b; Price and Mueller, 1981).	Significant negative relationship (Bluedorn, 1980b; Price and Mueller, 1981).
Pay/level of rewards	money or equivalents given to employees for services rendered (Bluedorn, 1980b; Martin, 1979; Price and Mueller, 1981).	Significant negative relationship (see Porter and Steers, 1973; Price, 1977). Small negative relationship (Price and Mueller, 1981).
Promotional opportunity/ upward mobility	the amount of potential movement from lower to higher levels within the organization (Bluedorn, 1980b; Price and Martin, 1979; Price and Mueller, 1981).	Significant negative relationship (Marsh and Mannari, 1977; Martin, 1979; see Porter and Steers, 1973; Price, 1977). Small negative relationship (Price and Mueller, 1981). No effect (Bluedorn, 1980b).
Size	the number of participants in an organization (Bluedorn, 1980a).	Inconclusive evidence found (see Mobley et al., 1979; Price, 1977). Turnover rates constant across organizations of different sizes (see Porter and Steers, 1973).
Structure	the formally prescribed task and authority relationships in an organization's design normally consisting of the already defined organization-wide components: centralization, formalization, and differentiation.	See Centralization, Formalization, Differentiation.
Technology	the types of knowledge, tools, equipment, and techniques used to convert the inputs of an organization into outputs.	Bluedorn (1980a) hypothesized that turnover would be disruptive (a serious condition) in non-routine technologies and that turnover would not be disruptive in routine technologies.

APPENDIX B

QUESTIONNAIRE

MICHIGAN STATE UNIVERSITY

PLACEMENT SERVICES · OFFICE OF THE DIRECTOR
STUDENT SERVICES BUILDING · (517) 355-9510

EAST LANSING · MICHIGAN · 48824

May 14, 1982

Please do NOT remove address label. Make any name or address corrections below. Thank you.

.....
Name

.....
Street

.....
City State Zip

Dear Michigan State Graduate:

The College of Business and Placement Services at Michigan State University are surveying selected Business graduates over the past fifteen years. The purpose of the survey is to better understand the attitudes and behaviors of business graduates in different occupational and organizational settings. We believe the information you and other selected graduates provide will give us a foundation for better advising Business majors and graduates with respect to the organizational and occupational environments they might pursue and for instituting curriculum changes.

As one of our selected Business graduates, your experiences, perspectives, and opinions are especially valuable to us as we consider issues related to providing more meaningful vocational guidance. Please take the time to complete and return this survey in the enclosed, stamped envelope. All answers are strictly confidential. Please respond by June 7, 1982. A copy of our summary results may be obtained by indicating 'yes' on the last question.

Your participation in this study will be sincerely appreciated.

Very truly yours,

John D. Shingleton
Director of Placement

Richard J. Lewis
Dean, College of Business

MICHIGAN STATE UNIVERSITY
Placement Services
East Lansing, Michigan 48823

Alumni Follow-up

General Instructions:

(1) Please complete the blanks or mark an X beside the response that best describes your situation.
(2) Please skip questions that do not apply to your current situation (e.g., if you are currently unemployed, please disregard any questions which refer to your current job.)

1. What is your present job status?

..... (1)Employed full-time
..... (2)Employed part-time
..... (3)Homemaker (no outside employment)
..... (4)Unemployed, but seeking a job
..... (5)Unemployed, but NOT seeking a job
..... (6)Graduate or undergraduate student

If you chose these answers, please do NOT respond to those items that request descriptions of your CURRENT job

2. a. What was the organization type (e.g., accounting, service, chemicals, etc.) and the job title associated with your FIRST FULL-TIME job after receiving your bachelor's degree? Be specific, i.e., if you were a teacher, indicate the grade level and subject.
   b. What is the type of organization and the job title associated with your CURRENT job?

a. _____
Organization Type-FIRST JOB Job Title-FIRST JOB

b. _____
Organization Type-CURRENT JOB Job Title-CURRENT JOB

3. a. What is the total length of time you have been employed in your present ORGANIZATION?
   b. What is the total length of time you've been employed in your present OCCUPATION?

.... (1)Less than six months
.... (2)Six months to one year
.... (3)1 to 3 years
.... (4)3 to 5 years
.... (5)6 to 10 years
.... (6)Over 10 years

4. How many OCCUPATIONS have you entered since receiving your bachelor's degree? .....

5. a. How has the recent recession affected you? (Mark ALL that apply)
   b. How has the recent recession affected your spouse (partner)? (Mark ALL that apply)

.... Laid off permanently
.... Laid off temporarily
.... Formally notified that you will or might lose your job (pink slip)
.... Job freeze or promotional freeze
.... Demoted (bumped down)
.... Lateral move (e.g., involuntary transfer to new assignment)
.... Fringe benefits reduced or not increased
.... Salary increases withheld
.... Decreased income (e.g., decreased commissions)
.... Promoted or other positive changes (e.g., business improved)
.... Other (Please specify): .....

6. How many hours per week, on the average, do you actually work (including overtime or a second job)?

..... (1)Less than 20 hours per week
..... (2)20 to 30 hours per week
..... (3)31 to 40 hours per week
..... (4)41 to 50 hours per week
..... (5)Over 50 hours per week

7. All in all, how satisfied are you with your job?

..... (1)Extremely satisfied
..... (2)Very satisfied
..... (3)Satisfied
..... (4)Only slightly satisfied
..... (5)Not satisfied

8. In general, how satisfying do you find the way you are spending your life these days? (Mark ONE)

..... (1)Extremely satisfying
..... (2)Very satisfying
..... (3)Satisfying
..... (4)Only slightly satisfying
..... (5)Not satisfying

9. Below are some statements about possible feelings that individuals might have about the organization for which they work. Consider your own feelings about your present organization and indicate your degree of agreement with each statement by circling the response number which matches your feelings.

7 Strongly Agree	6 Moderately Agree	5 Slightly Agree	4 Neither Agree nor Disagree	3 Slightly Disagree	2 Moderately Disagree	1 Strongly Disagree

a. I am willing to put in a great deal of effort beyond that normally expected to help this organization be successful.	7	6	5	4	3	2	1
b. I talk up this organization to my friends as a great organization to work for.	7	6	5	4	3	2	1
c. I feel very little loyalty towards this organization.	7	6	5	4	3	2	1
d. Deciding to work for this organization was a definite mistake on my part.	7	6	5	4	3	2	1
e. I would accept almost any job assignment in order to keep working for this organization.	7	6	5	4	3	2	1
f. I find that my values and the organization's values are very similar.	7	6	5	4	3	2	1
g. I am proud to tell others that I am part of this organization.	7	6	5	4	3	2	1
h. I could just as well be working for a different organization as long as the work was similar.	7	6	5	4	3	2	1
i. This organization really inspires the very best job performance in me.	7	6	5	4	3	2	1
j. It would take very little change in my present circumstances to cause me to leave this organization.	7	6	5	4	3	2	1
k. I am extremely glad that I chose this organization over others I was considering at the time I joined.	7	6	5	4	3	2	1
l. There is not too much to be gained by sticking with this organization indefinitely.	7	6	5	4	3	2	1
m. Often, I find it difficult to agree with this organization's policies on important matters relating to its employees.	7	6	5	4	3	2	1
n. I really care about the fate of this organization.	7	6	5	4	3	2	1
o. For me this is the best of all possible organizations for which to work.	7	6	5	4	3	2	1

10. At what point in your life did you select your current OCCUPATION? (Mark ONE)

..... (1)Before entering college
..... (2)After starting college but before your senior year
..... (3)During your senior year of college
..... (4)Within 1 year after graduation from college
..... (5)Within 5 years after graduation from college
..... (6)Later than 5 years after graduation

11. If you were just entering college again as a freshman, would you want to enter the same occupation that you prepared for in college?

..... (1)Yes GO TO ITEM 13
..... (2)No Which occupation would you choose to enter? .....

12. Why would you want to prepare for a different occupation? (Mark ALL that apply)

..... The career counseling I received in college was poor
..... Economic opportunities, including salaries, are better in other occupations
..... The sense of job satisfaction is likely to be better in other occupations
..... Job openings in my occupation have dwindled since college
..... I have developed different interests/skills since entering college
..... Job security and/or promotional opportunities are not available
..... Other (Please specify): .....
.....

13. Indicate which occupations INTEREST or APPEAL TO you by blackening the Y for YES. Indicate which occupations you DISLIKE or find UNINTERESTING by blackening the N for NO. Indicate which occupations you are UNDECIDED about by blackening the ? for UNDECIDED.

For example, ✗ or ✗ or ✗

Aviator	Y	N	?	Bank Teller	Y	N	?
Criminologist	Y	N	?	Business Executive	Y	N	?
Restaurant Worker	Y	N	?	Musical Arranger	Y	N	?
Detective	Y	N	?	Radio Operator	Y	N	?
Photoengraver	Y	N	?	Independent Research Scientist	Y	N	?
Truck Gardener	Y	N	?	Clinical Psychologist	Y	N	?
Airplane Mechanic	Y	N	?	Tax Expert	Y	N	?
Meteorologist	Y	N	?	Restaurant Manager	Y	N	?
Sociologist	Y	N	?	Journalist	Y	N	?
Bookkeeper	Y	N	?	Filling Station Worker	Y	N	?
Speculator	Y	N	?	Writer of Scientific Articles	Y	N	?
Poet	Y	N	?	Social Science Teacher	Y	N	?
Fish and Wildlife Specialist	Y	N	?	Inventory Controller	Y	N	?
Biologist	Y	N	?	Master of Ceremonies	Y	N	?
High School Teacher	Y	N	?	Portrait Artist	Y	N	?
Business Teacher	Y	N	?	Tree Surgeon	Y	N	?
Buyer	Y	N	?	Editor of a Scientific Journal	Y	N	?
Symphony Conductor	Y	N	?	Director of Welfare Agency	Y	N	?
Auto Mechanic	Y	N	?	Computer Operator	Y	N	?
Astronomer	Y	N	?	Salesperson	Y	N	?
Juvenile Delinquency Expert	Y	N	?	Concert Singer	Y	N	?
Budget Reviewer	Y	N	?	Long Distance Bus Driver	Y	N	?
Advertising Executive	Y	N	?	Geologist	Y	N	?
Musician	Y	N	?	Youth Camp Director	Y	N	?
Carpenter	Y	N	?	Financial Analyst	Y	N	?
Medical Laboratory Technician	Y	N	?	Real Estate Salesperson	Y	N	?
Speech Therapist	Y	N	?	Composer	Y	N	?
Certified Public Accountant	Y	N	?	Locomotive Engineer	Y	N	?
Manufacturer's Representative	Y	N	?	Botanist	Y	N	?
Author	Y	N	?	Personal Counselor	Y	N	?
Power Shovel Operator	Y	N	?	Cost Estimator	Y	N	?
Anthropologist	Y	N	?	Publicity Director	Y	N	?
Marriage Counselor	Y	N	?	Sculptor/Sculptress	Y	N	?
Credit Investigator	Y	N	?	Machinist	Y	N	?
Television Producer	Y	N	?	Scientific Research Worker	Y	N	?
Commercial Artist	Y	N	?	Psychiatric Case Worker	Y	N	?
Surveyor	Y	N	?	Payroll Clerk	Y	N	?
Zoologist	Y	N	?	Sports Promoter	Y	N	?
Physical Education Teacher	Y	N	?	Playwright	Y	N	?
Court Stenographer	Y	N	?	Electrician	Y	N	?
Hotel Manager	Y	N	?	Physicist	Y	N	?
Free-Lance Writer	Y	N	?	Vocational Counselor	Y	N	?
Construction Inspector	Y	N	?	Bank Examiner	Y	N	?
Chemist	Y	N	?	Sales Manager	Y	N	?
Playground Director	Y	N	?	Cartoonist	Y	N	?

14. Describe the way you usually behave. Circle the number on the scale below which best characterizes your behavior.

a. Casual about appointments	8	7	6	5	4	3	2	1	Never late
b. Not competitive	8	7	6	5	4	3	2	1	Very competitive
c. Never feel rushed, even when under pressure	8	7	6	5	4	3	2	1	Always rushed
d. Take things one at a time	8	7	6	5	4	3	2	1	Try to do many things at once; think about what I'm going to do next.
e. Slow doing things	8	7	6	5	4	3	2	1	Fast (eating, walking, etc.)
f. Express feelings	8	7	6	5	4	3	2	1	'Sit' on feelings
g. Many interests	8	7	6	5	4	3	2	1	Few interests outside work

15. Below is a list of characteristics which could be present in your current organization and which may or may not be important to you when you think about your IDEAL ORGANIZATION. For each item, think about how much you are getting in your CURRENT ORGANIZATION and how much you would like to have if you were in your IDEAL ORGANIZATION. Then indicate how much more or less you would like to have of this characteristic by circling the number which best corresponds to your rating.

7 Significantly more is desired	6 Somewhat more is desired	5 Slightly more is desired	4 About the same amount that I have now is desired	3 Slightly less is desired	2 Somewhat less is desired	1 Significantly less is desired

(01) Supervisors or co-workers who let me know how well they think I am performing my job.	7	6	5	4	3	2	1
(02) Chance to completely finish the pieces of work that I begin.	7	6	5	4	3	2	1
(03) Considerable opportunity for independence and freedom in how I do the work.	7	6	5	4	3	2	1
(05) Working closely with others (e.g., customers, clients, etc.) to complete my work.	7	6	5	4	3	2	1
(06) Using a variety of skills and talents.	7	6	5	4	3	2	1
(07) Significantly affecting the lives or well-being of other people by doing my job.	7	6	5	4	3	2	1
(08) Being able to see close friends among other employees while working.	7	6	5	4	3	2	1
(09) Doing the same job in the same way every day.	7	6	5	4	3	2	1
(10) Opportunities for advancement.	7	6	5	4	3	2	1
(11) Receiving a level of pay which is fair for the effort I put into my job when compared to the effort and pay of my co-workers.	7	6	5	4	3	2	1
(12) Being given information about what is to be done and the priority of the work to be done.	7	6	5	4	3	2	1
(13) Being given relevant information about organizational policies and procedures.	7	6	5	4	3	2	1
(14) Supervisors who help me get my work done, that is, who facilitate rather than hinder work accomplishments.	7	6	5	4	3	2	1
(15) Opportunities to access and use organizational information about how different jobs within the organization fit into different career programs.	7	6	5	4	3	2	1
(16) Supervisors who are concerned about the welfare of their subordinates.	7	6	5	4	3	2	1
(17) Enough time to get my work done.	7	6	5	4	3	2	1
(18) Opportunity to develop my own special abilities.	7	6	5	4	3	2	1
(19) Co-workers who are friendly and helpful.	7	6	5	4	3	2	1
(20-21) List below any other characteristics which are important to you in your ideal organization.							
(20). _____	7	6	5	4	3	2	1
(21). _____	7	6	5	4	3	2	1

Consider the above items and indicate which six (6) items are most important to you by placing the corresponding item number next to the line labeled MOST IMPORTANT. Indicate which six (6) items are least important to you by placing the corresponding item number on the line labeled LEAST IMPORTANT.

MOST IMPORTANT: ....

LEAST IMPORTANT: ....

16. a. Which of the following areas do you consider to be the most important to you for your overall satisfaction and happiness? (Mark ONE response)

..... (1)Family/marriage/home
..... (2)Work
..... (3)Friendships/socializing
..... (4)Political and/or social issues
..... (5)Religion
..... (6)Other (Please specify): .....

b. If you did NOT indicate Work in part a, and IF your conditions at work improved considerably, would you change your answer in part a to Work? .....(1)Yes .....(2)No .....(3)Does not apply

17. a. For the columns headed by 'Provided by CURRENT Job', indicate how OFTEN your CURRENT JOB SITUATION provides each of the following sources of SATISFACTION (Always, Usually, About as often as not, Usually Not, Almost Never).

b. For the columns headed by 'Provided by IDEAL Job', indicate how IMPORTANT each of the following sources of SATISFACTION would be for your IDEAL JOB SITUATION (Extremely High Importance, High Importance, Medium Importance, Low Importance, Extremely Low Importance).

	Provided by CURRENT Job					Provided by IDEAL Job				
	Always	Usually	As often as not	Usually not	Almost never	Extr. high impor	High importance	Medium impor.	Low importance	Extr. low impor.
a. Appropriate salary/commission										
b. Appropriate fringe benefits (retirement plan, insurance, etc.)										
c. Opportunity for promotions										
d. Fair and helpful supervisors										
e. Friendly and helpful co-workers										
f. Pleasant office or workplace										
g. Contact with clients or customers										
h. Ability to control your own time										
i. Variety of job duties										
j. Challenging job demands, responsibilities										
k. Opportunity to pursue leisure time activities										
l. Feedback on the results of your work										
m. Travel as part of job										
n. Opportunity to use the knowledge/skills you acquired in college										
o. Opportunity to be creative and imaginative										
p. Job security										
q. Social prestige										
r. Safe, healthy workplace										
s. Participation in decisions that affect your work										
t. Feeling of accomplishment										
u. Personal growth and development										
v. A leadership role										
w. Ability to influence those around you										
x. Taking some risks										
y. Directing the activities of others										
z. A 'team' atmosphere										
aa. Working alone										
bb. Chance to contribute to the welfare of others										
cc. Intellectual stimulation										
dd. Opportunity to use my special abilities										
ee. Chance to earn a good deal of money										
ff. Working with people rather than things										
gg. Opportunity to make friends										

18. What are your INTENTIONS with respect to quitting your present ORGANIZATION? (Mark ONE response for each line)

5 Definitely will leave	4 Probably will leave	3 Unsure	2 Probably will not leave	1 Definitely will not leave

a. Three months from now.	5	4	3	2	1
b. Six months from now.	5	4	3	2	1
c. One year from now.	5	4	3	2	1
d. Two years from now	5	4	3	2	1

If you did quit your present ORGANIZATION within the next two years, what would be the major reason(s)? (Please specify): _____

_____

19. What are your INTENTIONS with respect to leaving your present OCCUPATION? (Mark ONE response for each line)

5	4	3	2	1
Definitely will leave	Probably will leave	Unsure	Probably will not leave	Definitely will not leave

a. Three months from now.	5	4	3	2	1
b. Six months from now.	5	4	3	2	1
c. One year from now.	5	4	3	2	1
d. Two years from now.	5	4	3	2	1

If you did leave your present OCCUPATION within the next two years, what would be the major reasons(s)? (Please specify): _____

_____

20. On your job, who decides how much time you spend and when you spend it? Mark the response that indicates the amount of control that you personally have over the different aspects of your work time.

5	4	3	2	1
I have total control	I have a good deal of control	I have some control	I have very little control	I have no control

a. The number of hours I work every day.	5	4	3	2	1
b. The number of hours I work every week.	5	4	3	2	1
c. Which hours I work every day.	5	4	3	2	1
d. Which aspects of my job I work on, at different times during the day.	5	4	3	2	1
e. Which aspects of my job I work on, on different days of the week.	5	4	3	2	1
f. The amount of time I take for lunch every day.	5	4	3	2	1
g. Which time I go to lunch every day.	5	4	3	2	1
h. The amount of time I take for breaks every day.	5	4	3	2	1
i. Which time(s) I take for breaks every day.	5	4	3	2	1
j. Rearranging my work hours to deal with something special that comes up in my personal or family life.	5	4	3	2	1

21. Describe the conditions under which you work, using the following scale.

5	4	3	2	1
Very false	False	Neither false nor true	True	Very true

a. I feel certain about how much authority I have.	5	4	3	2	1
b. There are clear, planned goals and objectives for my job.	5	4	3	2	1
c. I have to do things that should be done differently.	5	4	3	2	1
d. I know that I have divided my time properly.	5	4	3	2	1
e. I can predict the demands which will be made on me at work.	5	4	3	2	1
f. I receive an assignment without the manpower to complete it.	5	4	3	2	1
g. I know what my responsibilities are.	5	4	3	2	1
h. I have to buck a rule or policy in order to carry out an assignment.	5	4	3	2	1
i. I know what my workload will be in enough time to plan ahead and prepare.	5	4	3	2	1
j. I work with two or more groups who operate quite differently.	5	4	3	2	1
k. I know what is expected of me.	5	4	3	2	1
l. I receive incompatible requests from two or more people.	5	4	3	2	1
m. I do things that are apt to be accepted by one person and not accepted by others.	5	4	3	2	1
n. There is no way I can predict how my work will be judged.	5	4	3	2	1
o. I receive an assignment without adequate resources and materials to execute it.	5	4	3	2	1
p. Explanation is clear of what has to be done.	5	4	3	2	1
q. I work on unnecessary things.	5	4	3	2	1

22. Other people sometimes help and sometimes hinder a person in his/her work. Describe how the people around you are about such things using the following scale.

5	4	3	2	1
Not at all	A little	Somewhat	Very much	Does not apply to me

a. How much can each of these people be relied on when things get tough at work?

1. My immediate supervisor (boss).	5	4	3	2	1
2. Other people I work with.	5	4	3	2	1
3. My spouse or partner.	5	4	3	2	1
4. My friends and relatives.	5	4	3	2	1

b. How much is each of the following people willing to listen to your work-related problems?

1. My immediate supervisor.	5	4	3	2	1
2. Other people I work with.	5	4	3	2	1
3. My spouse or partner.	5	4	3	2	1
4. My friends and relatives.	5	4	3	2	1

c. How much is each of the following people helpful to you in getting your job done?

1. My immediate supervisor.	5	4	3	2	1
2. Other people I work with.	5	4	3	2	1
3. My spouse or partner.	5	4	3	2	1
4. My friends and relatives	5	4	3	2	1

23. Sex: ..... (1)Male ..... (2)Female

24. Ethnic background: ..... (1)White/Caucasion ..... (4)Asian American/Pacific Islander
..... (2)Black/Afro-American ..... (5)Hispanic/Chicano
..... (3)American Indian/ Native American ..... (6)Other

25. Marital status: a. When you received your bachelor's degree: ..... (1)Single ..... (2)Married

b. Currently: ..... (1)Single ..... (2)Married

26. How many dependents do you have? (Please specify):.....

27. Since receiving your first bachelor's degree, what other college coursework have you completed? Respond by indicating the year in which you received the degree for each type of degree listed.

Year of Graduation	Degree	Year of Graduation	Degree
.....	Second Bachelor's	.....	Specialist's
.....	MBA	.....	Doctorate/Professional
.....	Other Master's degree (i.e., NOT an MBA)		

29. In what year were you born? .....

30. Would you like a copy of the summary results of this survey sent to you? ..... (1)Yes ..... (2)No

Thank you for your cooperation. Please make any name or address corrections on the front page of this questionnaire.

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