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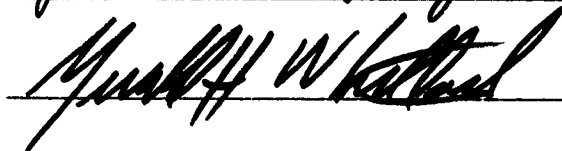
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AN EMPIRICAL TEST OF MOBLEY'S MODEL
OF EMPLOYEE TURNOVER

A Dissertation
Presented for the
Doctor of Philosophy
Degree
The University of Tennessee, Knoxville

Robert Paul Steel

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ABSTRACT

The study of employee turnover has received considerable attention from applied researchers. A number of attitudinal variables have proven useful in the prediction of turnover. Most prominent among these is the well established link between job dissatisfaction and turnover. Recent research has stimulated interest in the usefulness of behavioral intentions (i.e., intent to remain) for predicting turnover. The results of this work have proven most encouraging.

Dissatisfied by the lack of integration in the turnover literature, many students of the discipline are turning to the development of theories and models of the processes underlying turnover. Mobley (1977) has proposed a model of the psychological processes underlying the decision to resign. The model depicts several steps in the individual's decision processes beginning with the evaluation of the existing job and job satisfaction, through the search for and evaluation of alternatives, culminating in the intention to stay/quit and the eventual decision to stay or leave. In the present study an attempt was made to test the causal structure suggested by Mobley's model, by predicting each succeeding step in the model from all preceding steps. Mobley's work suggests that the adjacent preceding step of the model provides the best prediction of each step.

Additional tests were carried out to test for differences in the predictability of employee turnover from intrinsic and extrinsic satisfaction. An attempt was made to assess the generalization of model predictors from one to two year intervals for turnover measures.

There was no evidence of a predictive superiority for either intrinsic or extrinsic satisfaction in relation to one or two year turnover. The results indicated that the causal sequence of cognitive stages preceding employee turnover generally followed model predictions. In six of nine regression analyses, the best predictor of a step in the model was the immediately preceding step. However, results of this study failed to support the central position assigned in the model to turnover intentions. Turnover intentions were not well predicted by adjacent variables and failed to yield a substantial connection to one year turnover. The findings were mixed with respect to the generalization of turnover predictors across time intervals. Evaluation of alternatives was the best predictor of one year turnover. Intrinsic satisfaction explained the most variance in two year turnover. The intention to search for alternatives proved to be a useful predictor of turnover across both time intervals.

The results are discussed as providing partial support for the model. Reservations still remain particularly with respect to the role of turnover intentions. No firm conclusions could be drawn concerning the generalizations of

turnover predictors over time. Directions for future model building were given.

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INTRODUCTION

Industrial psychology, organizational behavior, and a number of related disciplines have long been concerned by the problem of employee turnover. Turnover has generally been regarded by members of these professional communities as something to be avoided or eliminated. Considerable research activity has been directed toward finding useful predictors of this phenomenon. The ultimate goal of much of this work is the early identification of potential leavers. This knowledge can be utilized by management in one of two ways. If the predictor is applied to a population of applicants, management may be able to use it to screen potential short-term employees from hiring decisions. Knowledge of the turnover proclivities of current employees may also be useful, on the other hand, in indicating the need for organizational interventions designed to alleviate the causes of worker discontent.

Turnover Defined

Until very recently, most writers have overlooked the importance of defining what they mean by turnover. While a number of operational definitions predominate, there is a lack of complete agreement among them. Possibly, the general circulation of formal definitions may lead to greater consistency among operational definitions. Van Der Merwe and Miller (1971) have presented a formal definition of labor turnover which is limited to controllable

turnover. While this definition may serve to meet the needs of most measurement applications, its failure to consider unavoidable turnovers unduly limits its scope. Price (1977) has defined turnover as "the degree of individual movement across the membership boundary of a social system" (p. 4). This definition includes both accessions (i.e., new hires) and separations (i.e., quits, dismissals) under the general rubric of turnover. The definition may be a bit overboard. The psychological literature has rarely, if ever, treated accessions as incidents of employee turnover. Rather, operational definitions have focused exclusively upon organizational separations. Smith (1976) notes that turnover has been defined as either "the average number of terminations and accessions divided by the average number in the working force" or "the number of terminations divided by the average number in the working force" (p. 755). While her definitions actually define the rate of turnover, they are useful for fashioning an acceptable definition of the event. Smith's first definition is consistent with the work of Price and is susceptible to the same criticisms. Her second definition is more in line with research practice since it limits turnover to terminations only. For present purposes turnover is defined as the severance of formal organizational ties. This definition excludes accessions from the boundaries of turnover. It recognizes that informal relationships may be retained after an

individual terminates his employment. It does not define turnover as a rate, but rather as an event. This formal definition of turnover will guide what follows including the development of an operational definition of turnover.

The Study of Turnover

Interest in the prediction of turnover has grown rapidly in the past decade. The increased attention devoted to turnover is partially a response by researchers to the spiralling monetary costs associated with finding and processing new employees. In the recent past, costs have risen drastically in all areas of induction including recruiting, hiring, orienting, and training new employees. A reduction in costs can be realized by selectively rooting out and eliminating applicants with a predisposition toward turnover. Estimates of the monetary costs associated with the filling of a job vacancy can be found in the literature for a number of occupations including those for clerical workers (Lee & Booth, 1974), bank clerks (Robinson, 1972), and sales clerks (Mosel & Wade, 1951). Aside from the obvious monetary costs, high turnover rates may have disastrous effects upon employee morale. For instance, a limited review of the turnover literature (Price, 1976) suggested that successively higher amounts of turnover may result in lower amounts of employee participation in primary work groups and decreased worker satisfaction.

Several authors (Farris, 1971; Price, 1976) have begun to speculate that, contrary to popular belief, all turnover may not be detrimental to the organization. These thinkers suggest that some amount of turnover is desirable because it insures the introduction of new ideas and innovations into the organization. Also, the turnover of low performers is seen as beneficial. Farris's work has suggested that different factors may effect the turnover of high and low performers. Research to date has not adequately dealt with these issues.

The increased research activity on turnover has also focused attention on the measurement of labor turnover. Van Der Merwe and Miller (1975) monitored turnover data from eighteen organizations over a period of two years. They were able to show that even though turnover rates varied considerably within companies, the relative ranking of organizations with respect to employee turnover was quite stable over time. Thus, useful comparisons may be made between organizations in terms of turnover rates. Price (1977) lists a total of eight approaches to the determination of turnover rates. Van Der Merwe and Miller (1971) have criticized most ratio estimates of turnover estimation. They propose instead the plotting of survival curves as a more accurate measure of employee termination behavior.

Most psychological research has been less concerned with turnover rates than with the measurement of turnover as an event. Turnover reduces fairly neatly to a dichotomous stay-leave criterion. This approach yields an objective and reliable criterion measure. Unlike productivity measurement, which traditionally has been fraught with the various errors and biases associated with subjective ratings (Smith, 1976), turnover yields an accurate "hard" criterion measure. Most of the debate surrounding error in turnover measures has to do with the issue of excluding involuntary terminations from the sample. Current thinking has held that manageable turnover represents the criterion of interest (Bluedorn, 1978; Porter & Steers, 1973). Since involuntary terminations are usually beyond the control of management, the focus should be upon avoidable turnovers. While the principle has not been disputed, the methodology has. Several authors (c.f. Forrest, Cummings, & Johnson, 1977; Taylor & Weiss, 1972) point to the results of studies on the exit interview (e.g., Lefkowitz & Katz, 1969; Lopez, 1965) indicating its unreliability. Critics of the methodology propose that all turnovers be treated identically.

Regardless of the difficulties with distinguishing voluntary and involuntary turnovers, Price (1977; p. 9) has outlined three reasons for continuing the practice.

1. Most turnover is voluntary [This assertion has been questioned, c.f. Van Der Merwe & Miller, 1971].
2. The formation of theory is easier when the phenomenon to be explained is homogenous.
3. Voluntary turnover is more subject to control by managers.

The measurement problems may not be as formidable as they first appear. It can be argued that the reasons reported for involuntary terminations should be fairly accurate. Many involuntary turnovers are the result of administrative decisions (e.g., firing, retirement). The only potential threat to the quality of such data stems from the accuracy of administrative records. Likewise, involuntary terminations due to such causes as illness or pregnancy should result in little reluctance by the employee to report the cause. In their study of exit interviews, Lefkowitz and Katz (1969) found their category for unavoidable terminations (e.g., leaving town or being pregnant) to be the most reliable of the categories studied. They note that these reasons are "extraorganizational in origin. As such, they pose little or no threat when revealed to a management representative during an exit interview" (pp. 454-455). It would seem that hesitation with respect to the reporting of reasons for leaving will be most prevalent in cases where involuntary turnover is involved. It is not surprising that the accuracy of reports suffer when an employee is leaving due to dissatisfaction with the job or the availability of a more lucrative offer. Studies

employing administrative records and exit interviews jointly to determine involuntary turnovers should be capable of accurately and reliably distinguishing between voluntary and involuntary turnovers. The potential advantages of distinguishing the two (i.e., purer criterion measures) seem to far outweigh the disadvantages of this practice.

Statement of the Problem

Historically, organizational research into the nature of turnover has been of a correlational nature. The usual strategy has been to correlate a multitude of predictors with this criterion in hopes that some useful links may be discovered. Such a hit and miss approach has provided some insights, but has often left more obscure than it has answered.

Recent trends have been away from bivariate correlation analysis and more toward theory and model building. Certain scholars have begun to argue that real advancements cannot be realized in this area of endeavor until we have a better understanding of the psychological processes underlying an employee's decision to quit his job. Hence, the need for the development of models illustrating the process.

To date, models of turnover behavior have dealt only with voluntary turnovers. This fact again reinforces the arguments for separating voluntary and involuntary turnovers into two groups. Mobley (1977) has presented a model

of employee turnover. This model will be treated more fully in a later section. Empirical tests of psychological models such as Mobley's are necessary so that they may be evaluated and refined. Model building can benefit from the feedback provided by empirical study. Likewise, models and theories benefit research by suggesting testable hypotheses. The present investigation represents an attempt to empirically test several of the causal properties of Mobley's (1977) original model of employee turnover.

CHAPTER I

LITERATURE REVIEW

The turnover literature has had a long and varied history. There have been some creditable discoveries, some established successes and some notable disappointments. Before a complete understanding of the theoretical and conceptual literature is possible, a thorough examination of the empirical turnover literature is obligatory. To their credit, turnover models have not been ivory tower speculations, but rather, logical extensions of existing empirical fact. Thus, the following review of turnover predictors will examine the building blocks upon which the majority of turnover models depend.

Predictors of Turnover

As the interest in turnover has grown, more attention has focused on the search for useful predictors of this phenomenon.

Job satisfaction. For years researchers have been interested in a possible connection between job dissatisfaction and employee withdrawal behavior. An abundant literature has grown up around this issue.

It is no mean feat these days to settle upon an acceptable definition of job satisfaction. While a variety of definitions predominate, there is little agreement with

respect to a suitable choice. Wanous and Lawler (1972) counted nine competing definitions and there are probably many more. This dilemma is not easily resolved. Some representative alternatives are presented here, and the reader is encouraged to settle the issue himself. Locke (1969) conceptualizes job satisfaction as "a function of the perceived relationship between what one wants from one's job and what one perceives it as offering or entailing" (p. 316). In the Minnesota studies of work adjustment (Lofquist & Dawis, 1969) satisfaction is defined in need fulfillment terms as a "correspondence between the reinforcer system of the work environment and the individual's needs . . . (p. 53)." Porter (1961) operationalized need satisfactions as "the differences between perceived amount of present fulfillment of needs and the amount of fulfillment Ss believed should be available in their positions" (p. 4). Porter has more recently suggested (c.f. Porter & Steers, 1973) that unmet expectations directly influence turnover through job dissatisfaction.

Early reviews of the job satisfaction literature seemed to bear out a link between job dissatisfaction and turnover (Brayfield & Crockett, 1955; Herzberg, Mausner, Peterson, & Capwell, 1957; Vroom, 1964). While the job satisfaction literature seemed to point to a link with turnover, this finding was still far from established. As Brayfield and Crockett (1955) pointed out, these early

studies were characterized by a number of methodological weaknesses. They often suffered from design problems, measurement problems, or both. While the studies Brayfield and Crockett reviewed were suggestive of a satisfaction-turnover relationship, the sparsity of results and the methodological weaknesses of the available research precluded any strong conclusions from being drawn.

More recent research has been characterized by firmer methodological foundations. Reviewers of this literature have been more able to draw definitive conclusions. Schuh (1967) reviewed the literature in order to identify the most useful predictors of labor turnover. He located seven studies probing a job satisfaction-turnover connection. Schuh concluded that biographical material seemed the most promising predictor of employee job termination. All seven job satisfaction studies indicated a consistent positive relationship between dissatisfaction and turnover.

Porter and Steers (1973) recently conducted a review of the contemporary literature connecting job satisfaction and employee withdrawal behavior. They pointed out that the methodological rigor characterizing the research they examined had improved greatly since the days of the early reviewers. The combined evidence of some 60 studies clearly pointed to a negative relationship between job satisfaction and withdrawal from the job. A moderate amount of research linked job dissatisfaction to employee

absenteeism. The results with respect to turnover were overwhelming.

Price (1977) has reviewed the evidence linking several variables to employee termination. He treats a number of demographic and organizational variables thought to be determinants of turnover. Their influence on turnover is viewed as indirect acting through mediating variables (i.e., job satisfaction). Price cites nine codifications, seven limited reviews, and five empirical studies tying job satisfaction to turnover.

Mobley, Griffeth, Hand, and Meglino (1979) have attempted to catalogue all known precursors of turnover and bring existing reviews up to date. They examined only job satisfaction studies which postdated the work of Porter and Steers. Six of seven studies found significant relationships between overall job satisfaction and employee turnover. In addition, a number of job satisfaction facets confirmed this connection. As the early review articles indicated, job satisfaction is an important determinant of labor turnover.

Job satisfaction facets have often been lumped into one of two categories. Factors associated with the organizational and social environment (i.e., pay, promotion, supervision, coworkers, and the like) have been called extrinsic or job context facets. Satisfactions deriving from the nature of the job (i.e., the job content,

autonomy, responsibility, etc.) have been classified as intrinsic or job content factors. Reviews by Porter and Steers (1973) and Mobley et al. (1979) have compiled evidence pertaining to the differential capabilities of these factors for predicting turnover. The Porter and Steers review indicated little to choose between the two classes of variables. Nineteen of twenty-four studies significantly related extrinsic job factors to job termination. Intrinsic satisfactions predicted turnover in twelve of thirteen cases. Mobley et al. have reported a somewhat different result. Their tables show only nine studies out of a total of thirty-one reporting a relationship between extrinsic satisfaction facets and turnover. Mobley et al. are consistent with Porter and Steers on the intrinsic factors question. In this case ten of eleven studies were confirmatory. Intrinsic facets of satisfaction are very important determinants of employee termination, it would seem. Extrinsic job facets also affect turnover, but their role is much less clear and consistent.

While the results of these review articles are quite conclusive, there are exceptions which appear to qualify these findings. Taylor and Weiss (1972) performed a discriminant function analysis to contrast the predictive capabilities of job satisfaction and biographical material for employee turnover. They found satisfaction to be a decidedly more efficient index of future job

separations than biographical material. Hence, Schuh's (1967) review may have understated the utility of job satisfaction measures. Waters and Roach (1973) attempted to extend a significant connection between satisfaction and one year turnover (Waters & Roach, 1971) to an expanded two year turnover update. Of nine initially significant relationships, only four cross-validated when the two year follow-up was conducted. Replicable effects were found for two measures of overall job satisfaction and two indices of facet satisfaction with the work itself. Waters and Roach (1973) conclude that "studies covering one time period at one organizational unit may overemphasize the saliency of satisfaction variables in predicting termination and absenteeism" (p. 342). Mobley et al. (1979) argue for more multivariate research into the determinants of turnover. They feel that real advances can be made by studies employing simultaneous tests of a number of established turnover precursors.

Other work attitudes. Evidence has begun to accumulate suggesting that a number of other work attitudes may be predictive of employee withdrawal from the job. One such job attitude, job involvement, is defined by Lodahl and Kejner (1965) as "the degree to which a person is identified psychologically with his work, or the importance of work in his total self-image" (p. 24). Farris (1971) found job

involvement significantly predictive of turnover for a sample of scientists and engineers. This finding did not replicate in a second organization. Siegel and Ruh (1973) found involvement significantly predictive of turnover ($r = -.17, p < .01$) for a sample of 238 blue collar workers. A recent paper (Koch & Steers, 1978) obtained a significant negative correlation ($r = -.40, p < .05$) between turnover and job attachment. Partial correlation analysis indicated that the effects of job satisfaction could be removed from this correlation with little loss in the predictability of the criterion.

A definition of organizational commitment advanced by Porter, Steers, Mowday, and Boulian (1974) describes commitment as "the strength of an individual's identification with and involvement in a particular organization" (p. 604). Several studies (Porter, Crampon, & Smith, 1976; Porter et al., 1974; Steers, 1977) have supported a relationship between organizational commitment and turnover. Correlational results are reported by Porter et al. (1976) for a sample of thirty-two management trainees ($r = .41, p < .05$) and Steers (1977) for a group of 382 hospital employees ($r = -.17, p < .01$). In the former investigation staying was coded one. Porter et al. (1974) contrasted job satisfaction and organizational commitment for predicting the turnover of psychiatric technicians. The results clearly

showed the superiority of organizational commitment for predicting job resignation.

At first glance one is tempted to explain the relationships of job involvement and organizational commitment to employee severance in terms of shared variance with job satisfaction. However, Koch and Steers (1978) and Mobley, Horner, and Hollingsworth (1978) feel differently. They have intimated that findings indicating involvement (Koch & Steers, 1978) and commitment (Porter et al., 1974) may be more predictive of turnover than job satisfaction suggests another explanation. They have proposed that the superiority of these attitudes may be partially attributable to their having a closer connection to behavioral intentions such as intent to remain.

Intent to remain. Unlike job satisfaction which spans the entire history of industrial psychology, behavioral intentions represent a fairly recent development. Papers by Locke (1968) and Locke, Cartledge, and Knerr (1970) have demonstrated the utility of goals and behavioral intentions for forecasting task performance. Fishbein and Ajzen (1975) have provided a theoretical framework for understanding the interrelationships between beliefs, attitudes, behavioral intentions, and overt behavior. Briefly they have proposed that a combination of beliefs about a stimulus object determine feelings or attitudes toward that object. Attitudes in turn influence behavioral intentions. In this

model intentions represent the most direct precursor of overt behavior. Fishbein and Ajzen (1975) define a behavioral intention as "a person's location on a subjective probability dimension involving a relation between himself and some action" (p. 288).

The majority of the very impressive evidence Fishbein and Ajzen marshalled for their model was gathered within a laboratory framework. Newman (1974) constructed a test of this model's generalizability to field settings. He contrasted traditional work attitudes (i.e., job satisfaction) with predictors derived from the Fishbein model (i.e., behavioral intentions, normative beliefs, object attitudes) for predicting withdrawal behavior. Newman found the traditional work attitudes better indicants of employee absenteeism, but the Fishbein model was superior for predicting employee resignation. Within the framework of the model, intentions yielded by far the strongest relationship ($\underline{r} = .39$, $p < .01$) to subsequent turnover.

A behavioral intention, intent to remain, which has shown a consistent association with turnover was introduced by Kraut (1975). Kraut hypothesized that "perhaps the best prediction of turnover can come from the employee's direct estimate of his future tenure" (p. 235). He found intent to remain predictive of both short-term ($\underline{r} = -.17$, $p < .01$) and long-term ($\underline{r} = -.17$, $p < .01$) turnover for a

sample of salesmen. Intent to remain yielded consistently better predictions than did facet job satisfaction.

Kraut's results have been confirmed and extended. Waters, Roach and Waters (1976) obtained a significant negative correlation ($\underline{r} = -.43$, $\underline{p} < .01$) between intent to remain and two year job termination. Similarly, Beehr and Gupta (1978) report a significant connection between intention to quit and turnover ($\underline{r} = .39$, $\underline{p} < .01$) for their sample of 651 industrial workers. Mobley, Horner, and Hollingsworth (1978) employed intention to quit to predict the one year turnover behavior of a sample of hospital employees. They report a correlational result ($\underline{r} = .49$, $\underline{p} < .01$) in line with other research.

Excepting Waters et al. (1976), the preceding research has consistently measured intent to remain on single item scales anchored to a particular time frame (i.e., one year or five years). Two studies conducted recently suggest that the predictive capabilities of intent to stay/quit measures are reduced somewhat when the time frame is not directly specified. Rousseau (1978) employed a three item index of propensity to leave. This index was not anchored to any specific interval of time. Turnover and propensity to leave were only moderately related ($\underline{r} = .13$, $\underline{p} < .05$) in her sample of workers engaged in the production of electronics equipment. Marsh and Mannari (1977) employed an intention to leave measure while studying the lifetime commitments of 1,033 Japanese industrial workers. Their intention

measure asked whether these employees intended to work at the same firm until retirement. Obviously, such a time frame is more ambiguous than concretely specified intervals. Marsh and Mannari obtained a result ($\underline{r} = -.13$, $p < .001$) consistent with that of Rousseau.

Intention to turnover has also occasionally appeared as a surrogate measure of actual turnover when the latter has not been immediately accessible for analysis (Lyons, 1971; Morris & Snyder, 1979; Rousseau, 1978; Steers, 1977). Inspection of some of this work reveals some interesting connections between job satisfaction and leaving intentions. Kraut and Ronen (1975) employed fourteen job satisfaction facets to predict intention to stay for samples of salesmen and repairmen in the electronics field. For the salesmen the best prediction of intent to remain came from an intrinsic satisfaction facet, job challenge. Opportunity for high earnings, an extrinsic satisfaction facet predicted best for electronics repairmen. Nicholson, Wall, and Lischeron (1977) used facet satisfaction to predict the turnover intentions of ninety-five steelworkers. By far, the largest correlation they obtained was between satisfaction with the work itself, an intrinsic factor, and propensity to stay ($\underline{r} = -.61$, $p < .001$). Multiple regression analysis confirmed the prominence of this measure. In a sample of Israeli civil servants, Maimon and Ronen (1978) demonstrated again the primacy of intrinsic satisfaction

factors (i.e., skill utilization, autonomy and initiative) to the prediction of staying and leaving tendencies.

Certainly, current literature with respect to the intentional aspects of remaining with an organization cannot help but to encourage researchers to further inquiry. Graen and Ginsburgh (1977; p. 15) have sounded a criticism to this whole line of inquiry, however. They posit that predictions based upon specific behavioral intentions become "increasingly more trivial" as they approach the act. Intentions, as they see it, do little to advance an understanding of the psychological processes at work producing the final behavior. Since good prediction with intentions does seem to depend upon the specification of a concrete time interval, we are forced to give this argument its due. Even so, there is considerable evidence that intentions can significantly predict turnover behaviors over quite long periods of time (i.e., two, four, and five year intervals). Also, from management's perspective the foreknowledge of an act such as turnover is an invaluable datum no matter what it indicates about employee attitudes in general. Predictive research should go on, and it most certainly will.

Behavioral intentions have come to play an indispensable role in models of the decisional processes underlying job resignation. It is to this conceptual literature that we will now turn.

Models of Employee Withdrawal

Porter and Steers (1973) upon concluding their review of job satisfaction and employee withdrawal make a plea for more conceptual and theoretical literature. The preponderance of bivariate correlational investigations are simply reproducing an established effect. They are doing nothing to further our understanding of underlying mechanisms. Without this basic understanding, we are restrained from improving upon current predictive capabilities. Thus, Porter and Steers (1973) propose that "more emphasis should be placed on the psychology of the withdrawal process" (p. 173).

An early model of employee withdrawal which is still widely applied today is that outlined by March and Simon (1958). Actually, the March and Simon model is the product of two distinct but interrelated models. Thus the decision to participate is seen as a function of the perceived desirability of movement and the perceived ease of movement. The perceived desirability of movement is contingent upon job experiences and the consequent feelings of satisfaction or dissatisfaction with the job. The perceived ease of movement depends upon a person's intentions to search, the visibility of other organizations, the labor market, and finally upon the number of extraorganizational alternatives perceived. This model of the employee's decision to participate has been extremely influential. Many of its tenets

can be found in later work. Even those authors who do not borrow directly from it still pay it considerable deference.

March and Simon held that their model of the perceived desirability of movement could be applied equally well to both absenteeism and turnover behavior. In this sense, it is a general model of employee withdrawal. The usefulness of the perceived ease of movement model is generally restricted to employee termination. Most subsequent speculation has leaned toward treating absenteeism and turnover as separate processes. Review articles examining the common correlates of absenteeism and turnover have generally found little to suggest the equivalence of the two behaviors. Lyons (1972) concluded that "there is little support for the notion of common correlates" (p. 279). Likewise, Porter and Steers (1973) suggest that "some important differences may exist between the causes of turnover and those of absenteeism" (p. 173). A direct test of this question (Beehr & Gupta, 1978; p. 77) obtained "only low to moderate" relationships between these forms of withdrawal. Such findings have led contemporary model builders to restrict their work to one form of withdrawal. Steers and Rhodes (1978) have recently proposed a model of absenteeism. So too, turnover models are limiting their scope.

While the trends have been to develop models restricted to voluntary job terminations, some exceptions do exist. Bluedorn (1978) has created a taxonomy of turnover.

His taxonomy classifies employee movement across the organization's boundary in terms of the direction of the movement and the source of the movement (i.e., from the employee or from the employer). He views both movement in and out of the organization as turnover. In this regard, he has been influenced by Price's 1977 definition of turnover which labels all movement across an organization's boundary as turnover. Bluedorn calls individuals who enter the organization accessions. Terminated employees are categorized as either voluntary or involuntary separations depending upon the origin of the decision to leave. The taxonomy is presented to alleviate semantic confusion, but may in fact be adding to it. Common parlance has come to regard turnovers as those employees exiting the organization. Incoming employees are usually called new hires or some such. While Bluedorn's taxonomy is certainly well intended, and the final result is useful, the instigating premise seems to be in error. It remains to be seen whether this taxonomy will enjoy wide currency.

Forrest, Cummings, and Johnson (1977) have also gone against the main stream of thinking. They present a model of employee withdrawal based upon expectancy theory. This model, unlike most of its contemporaries, is designed to apply to all employee decisions to participate in the organization (i.e., accessions, absenteeisms, separations, etc.). The model is basically a choice model. It explains an individual's choice between two or

more alternatives (e.g., two or more jobs) based upon the relative perceived attractiveness of each. In their model Forrest et al. have attempted a rapprochement between the study of turnover at the individual level, as in most of the literature cited here, and at the macro or labor market level, as occurs in economics research. While the model is intriguing, a more complete evaluation must await empirical test. Expectancy models are designed as individual choice models (c.f. Mitchell, 1974) and are not directly comparable to normative models. To the authors credit, they have paid particular attention to the problem of market conditions and the availability of attractive alternatives. Whereas these considerations have been incorporated in other models, these authors point out the almost total disregard of such considerations in the empirical literature. This oversight is potentially extremely serious.

Farris (1971) outlines and tests a model of voluntary turnover intended for scientific personnel. This model purports to combine March and Simon's (1958) perceived ease and perceived desirability of movement into a single formulation. The model is quite extensive. Among other factors it takes into consideration the effects of job factors and individual differences. Performance on the job is also seen as having a direct impact upon termination decisions. A unique aspect of this model is its exclusion of job

satisfaction. Job satisfaction seems to have been replaced in this model by job involvement. This is a somewhat surprising switch in light of previous research. While the satisfaction-turnover link is well established, the connection between turnover and involvement has just begun to be explored. The effect of attractive alternatives is downplayed in this model. Alternatives appear to become salient only when they are seen as contributing to an individual's career advancement. Tests of a number of the model's propositions in two organizations were not particularly supportive. Farris has made no clear case for the necessity of a turnover model geared to this particular occupational group. The model has not stimulated much subsequent investigation.

Price (1977) also has proposed a model of employee job resignation. His model focuses on a number of organizational level factors related to turnover. These structural factors (i.e., pay, integration, instrumental communications, formal communication, centralization) influence satisfaction which in turn directly determines an employee's decision to stay or quit. Opportunity mediates the direct relationship between satisfaction and turnover. An employee is only free to act on his feelings to the extent that alternative jobs are available. Price lays the groundwork for this model by reviewing literature linking turnover and the model's variables. He neglects to cite any research

relating the structural variables to job satisfaction. The structural variables are expected to produce their effects through satisfaction, but the possibility of joint effects was not ruled out. Price's model is unique in one respect. He extends his model to the effects of turnover on the organization. Turnover in the organization leads to an increase in administrative staffs, formalization, and reduced integration. Price also presents a thoughtful analysis of turnover's impact upon organizational effectiveness. The model has not been tested to date.

Martin's (1979) model is designed to predict employee turnover intentions. It does not directly deal with turnover itself. Implicit in the model is the belief that intentions are the most immediate precursors of acts. The model is similar in many respects to the one advanced by Price. A number of structural organization-level variables (e.g., integration, centralization, routinization) influence turnover intentions through their simultaneous effects upon job satisfaction. Personal characteristics are also given a role in this model. Opportunity operates in much the same way as it does in Price's earlier model. Martin tested the model employing data from 250 workers involved in the marketing of educational programs and services. Partial support was obtained for the model. A combination of organizational and demographic measures was capable of predicting job satisfaction. Likewise,

satisfaction was the most important determinant of intention to quit ($r = -.37$, $p < .01$). This model could benefit greatly by extending it to include turnover. In addition, further empirical tests are needed.

Price (1977) and Martin (1979) have been primarily concerned with the organizational process variables which influence turnover. While these models greatly benefit the sociology of organizations, they add little to an understanding of psychological processes. From a psychologist's perspective, these models reduce to the assertion that satisfaction and opportunity effect employee resignations, or in Martin's case, employee intentions. The predominately psychological models reviewed (Farris, 1971; Forrest, Cummings, & Johnson, 1977; March & Simon, 1958) have provided some important insights, but have been found wanting in one respect or another. Mobley (1977) has proposed the most comprehensive model to date of the psychological mechanisms leading up to the decision to quit. It is to this model we will now turn.

Mobley's Model of Turnover

Mobley (1977) has presented a normative model of employee decisional processes with respect to job termination. Mobley's model is diagrammed in Figure 1. This model possesses several features which recommend it to the researcher's attention. It combines March and Simon's

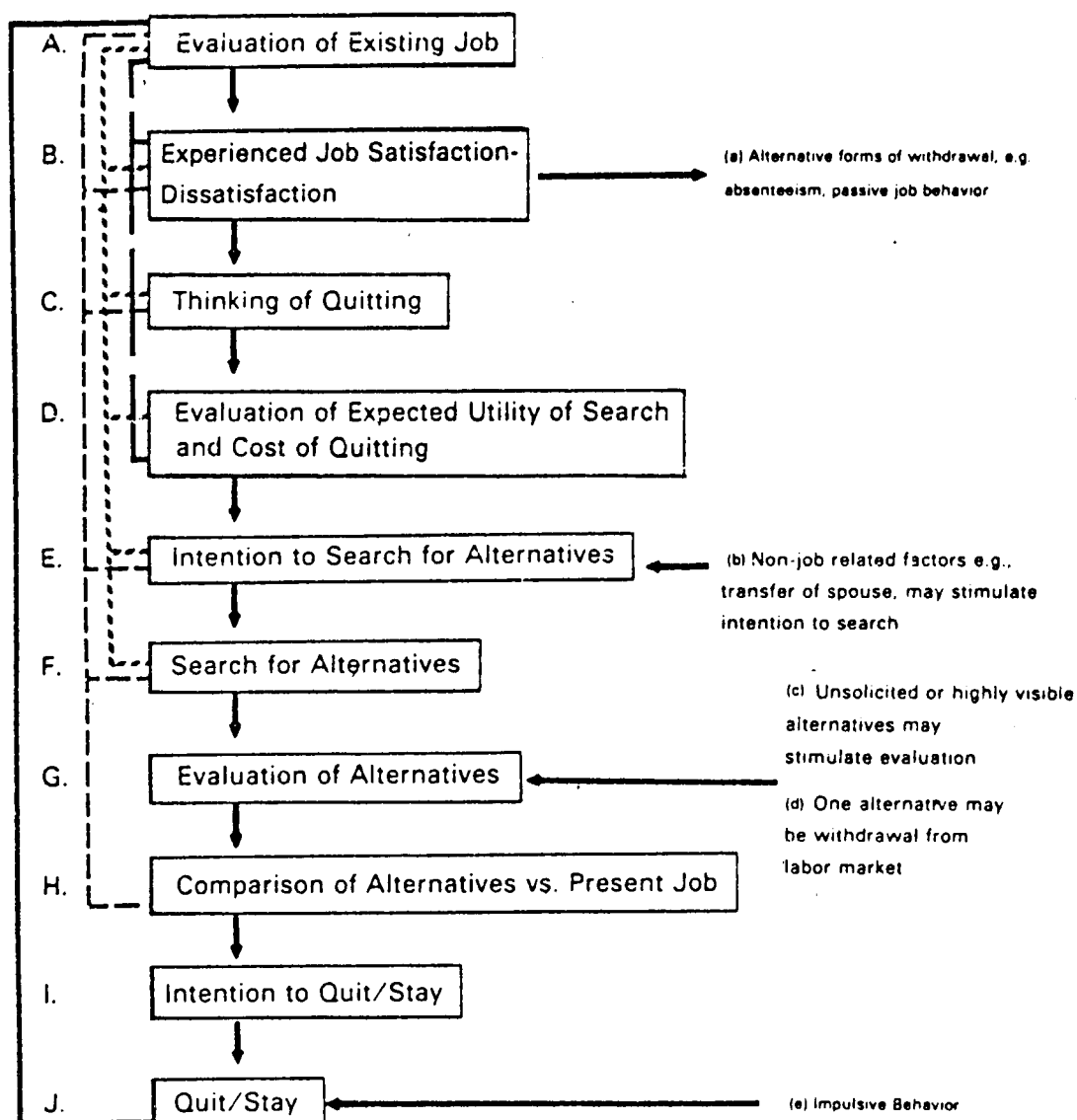


Figure 1. Mobley's original model of the decisional processes underlying employee turnover.

Source: William H. Mobley, "Intermediate Linkages in the Relationship Between Job Satisfaction and Employee Turnover" (Journal of Applied Psychology, Vol. 62, 1977), p. 238.

(1958) perceived ease and desirability of movement. It takes into account previous empirical literature by including job satisfaction-dissatisfaction as a major tenet. It expressly emphasizes the search for alternatives, and the evaluation and comparison of these alternatives to the present job. The model depicts the search for and evaluation of alternatives as an active goal directed sequence of events rather than as a passive response to available opportunities. Additionally, it possesses a unique ingredient by incorporating the recent empirical and theoretical breakthroughs with respect to behavioral intentions. Intention to search for alternatives precedes behavior along that line. Finally, intention to quit/stay (i.e., intent to remain) represents the step in the model immediately preceding the actual termination decision. The model is a causal model. That is, the preceding step is presumably the most immediate determinant of activity at the next step.

Mobley has actually presented three versions of the turnover model. The second version appeared in Mobley, Horner, and Hollingsworth (1978) and is reproduced as Figure 2. The model in Figure 2 is an abbreviated form of the original 1977 model. Mobley et al. (1978) simplified the original model to facilitate an empirical test of its predictive capabilities. This representation of the model bypasses some of the linkages proposed for the original model and appears to combine Blocks F, G, and H of the original model (i.e. search, evaluation, and comparison of

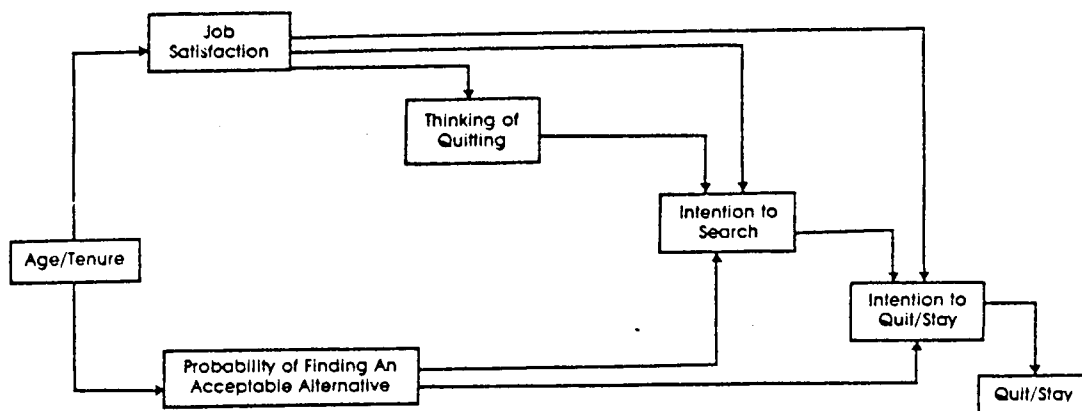


Figure 2. The abbreviated version of Mobley's turnover model.

Source: William H. Mobley, Stanley O. Horner, and A. T. Hollingsworth, "An Evaluation of Precursors of Hospital Employee Turnover" (Journal of Applied Psychology, Vol. 63, 1978), p. 410.

alternatives) into a single linkage, probability of finding an acceptable alternative.

A much more detailed version of the model appears in Mobley, Griffeth, Hand, and Meglino (1979). A reproduction of this form of the model can be found in Figure 3. This edition of the model is preceded by an extensive literature review and appears to be the authors' attempt to combine the review's conclusions into a single formulation. In this model organizational characteristics, individual characteristics, and labor market conditions operate simultaneously to influence job satisfaction, the evaluation of the job, and the evaluation of alternatives. These in turn lead to intentions (i.e., to search or to quit) and then eventually to turnover behavior. It is interesting to note that Mobley et al. (1979) have included alternative forms of withdrawal in this version of the model, a definite departure from earlier formulations and from current trends.

The latest model is much more complex than its predecessors. It remains to be seen whether it will prove to be any more predictive than the simpler forms. Its very complexity precludes a test of the entire model in a single investigation. A program of study will be necessary before an evaluation of this version of the model can be made with any confidence.

Mobley cited a number of studies preceding the development of his original 1977 turnover model. This work was

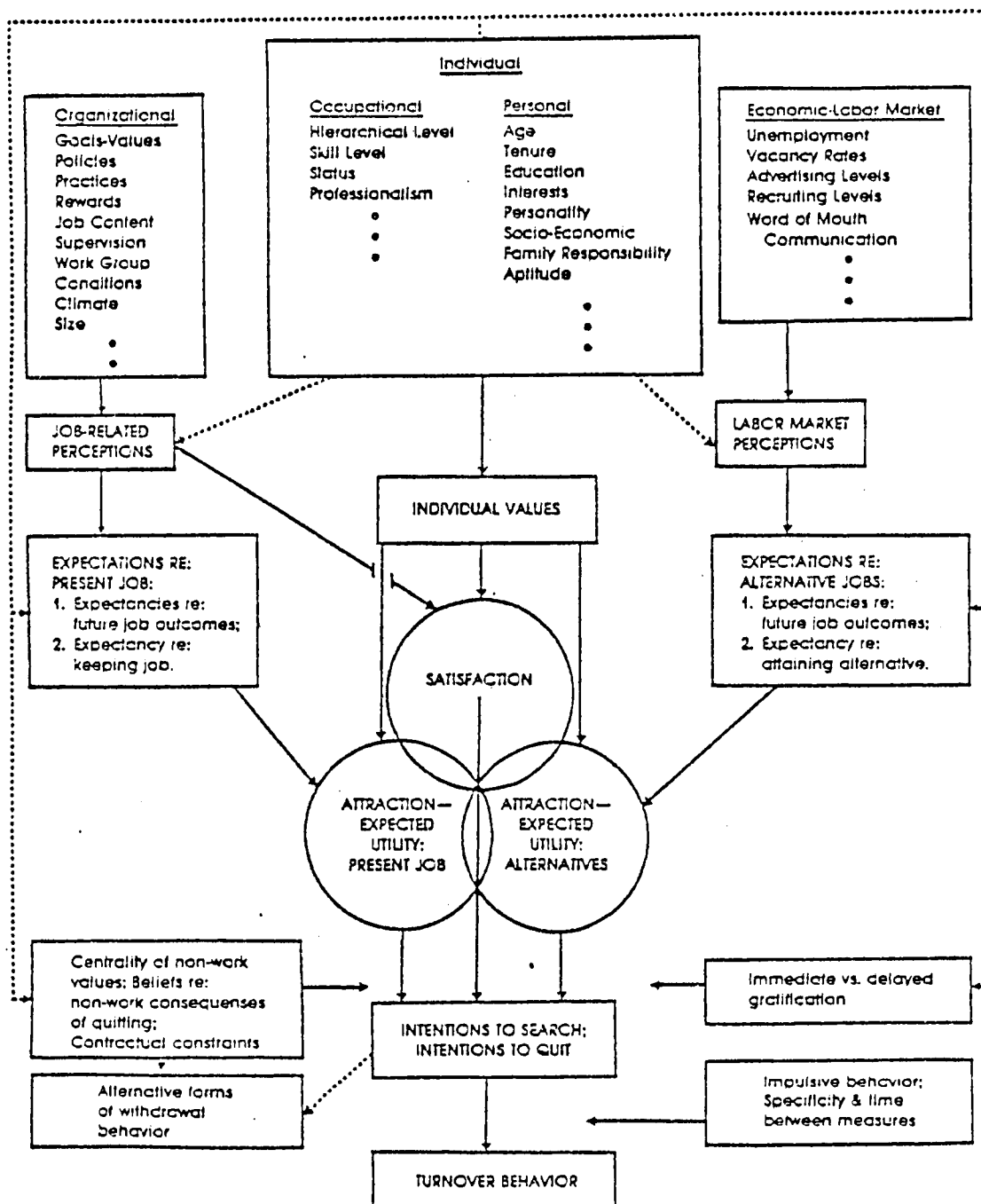


Figure 3. The most recent version of Mobley's model of turnover.

Source: W. H. Mobley, R. W. Griffeth, H. H. Hand, and B. M. Meglino, "Review and Conceptual Analysis of the Employee Turnover Process" (*Psychological Bulletin*, Vol. 86, 1979), p. 517.

interpreted as supporting a number of linkages proposed in that formulation. A brief overview of this evidence immediately follows. Then tests of the model will receive separate treatment.

Antecedent research. Mobley (1977) cites a number of studies supporting various components of the original turnover model (Figure 1). These and some additional evidence will be briefly considered. Mobley (1975) found a connection between dissatisfaction and thinking of quitting. Atchinson and Lefferts (1972) report on the discriminatory power of a single item pertaining to thinking of quitting. This item significantly distinguished leavers from stayers in a group of Air Force pilots questioned concerning reenlistment intentions. Mobley interprets this finding as supporting the model's link between thinking of quitting and actual resignation. Mobley cites a paper by Armknecht and Early (1972) as supporting his connections between Blocks dealing with the evaluation of expected utility of search and cost of quitting, the search for alternatives, and turnover. Armknecht and Early performed a regression analysis at the macro level of analysis and demonstrated a link between turnover and labor market conditions in the preceding business cycle. The foregoing literature review with respect to the connection between intent to remain and turnover is relevant to the model. Since most of that

literature antedates the model, Mobley employed Kraut (1975) as his major rationale for inclusion of this step.

Dansereau, Cashman, and Graen (1974) and Schneider (1976) are cited as papers demonstrating the importance of available alternatives upon the decision to resign. Dansereau et al. (1974) found that perceived expectancy of finding a comparable job moderated the correlation between attitudes and turnover. Schneider (1976) was able to show that consideration of an alternative work context significantly affected reenlistment intentions for a sample of Navy enlistees. Other writers have speculated along these same lines (cf. Carey, 1972; Herman, 1973) but have not directly performed tests of these associations. Mobley's model does not directly take into account the reason individuals choose one job over another. A behavioral choice model like the Forrest et al. (1977) model may be more useful in this regard. A few authors (Hellriegel & White, 1973; Swinth, 1967) have attempted to document the significant attributes effecting the attractiveness of employment alternatives. The Mobley model is concerned with relative attractiveness only to the extent that an alternative exists which is perceived as superior when compared to the presently held job.

Tests of the model. Mobley, Horner, and Hollingsworth (1978) attempted a test of the abbreviated turnover

model shown in Figure 2. Mobley et al. (1978) tested both the internal connections and the external predictability of this simplified model. They performed a one year turnover follow-up on a sample of 203 hospital employees. The results were interpreted as providing substantial support for the model. Mobley et al. performed stepwise regression with actual turnover, intention to quit, intention to search, and thinking of quitting each successively serving as the dependent measure. Entered into the regression analysis as predictors were only those steps in the model preceding the particular step acting as the criterion measure. Mobley et al. hypothesized that the step immediately preceding the criterion step would enter the regression equation as the most important determinant of that variable. The causal nature of the model was indeed born out. That is, the best predictor of actual turnover was intention to quit, the best predictor of intention to quit was intention to search, and so on. Also as hypothesized, the significant connection between job satisfaction and turnover reduced to near zero when intention to quit entered the regression model. Intention to quit was the variable most highly predictive of subsequent turnover.

Mobley, Hand, Baker, and Meglino (1979) provide partial evidence relative to the utility of the turnover model. While not presented as a direct test of the theory, this paper does measure some of the model's facets. The

study attempted to predict successful completion of Marine basic training for a sample of 1,521 Marine enlistees. It employed a role choice model borrowing somewhat from expectancy-valence theory (Vroom, 1964). Stepwise multiple regression predicting recruit attrition revealed that expectancy of completing enlistment, Marine role outcome expectancies, and expectancy of finding acceptable civilian employment all entered into the equation ahead of intention to complete Marine enlistment. The nature of the variables entering ahead of the intentional variable suggest the possibility that thinking of quitting and the availability of attractive alternatives measures may not always be inferior to intent to remain for predicting job termination. These results do not seem to wholly support the Mobley (1977) turnover model. They call into question the model's assertion that intention to stay/quit is always the immediate precursor of job resignation. However, in defense of Mobley it must be pointed out that the model is primarily designed for prediction of job turnover in the business sector. A number of unique characteristics of military life may reduce the model's applicability to such groups of individuals.

Study Rationale

While there are three versions of the Mobley turnover model, they all share some of the same ingredients. Consequently, a test of one of the models can answer

important questions about all of the models. The earlier versions of the model are more amenable to empirical verification within the framework of a single study. There is good reason to perform such tests even though there exists a later edition of the model. For the sake of parsimony, it may be found that the simpler version will suffice and recourse to the complex model may be precluded. Also, empirical evaluation of the simpler model may suggest needed revision in all forms of the model. Finally, such a test is warranted for the original 1977 model because acceptance or abandonment of any psychological model without such a test is premature.

Utilizing a methodology similar to that of Mobley, Horner, and Hollingsworth (1978) an attempt is made in the present study to provide a more complete test of Mobley's (1977) turnover model. Variables have been designed to measure each step of the model rather than excluding or combining steps as has been done in tests of other versions of the model. In this way a fuller understanding of the interworkings of the entire model may be obtained. Also, through this study an endeavor is made to clarify the discrepant findings pertaining to the model (Mobley, Hand, Baker, & Meglino, 1979; Mobley, Horner, & Hollingsworth, 1978). Taking into account the caution of Waters and Roach (1973) concerning turnover generalizations, data were obtained at several different research sites and turnover data were collected at both one and two year intervals.

The second wave of turnover data is employed to cross-validate results emerging from the one year longitudinal analysis.

Hypotheses

The hypotheses were derived directly from Mobley's (1977) model of the decisional processes underlying job termination and from the preceding literature review.

Hypothesis 1. Intrinsic job satisfaction will be a better predictor of voluntary job termination than extrinsic job satisfaction.

Hypothesis 2. The most important determinant of any given stage in the model will be the immediately preceding step.

Hypothesis 2a. Intrinsic and extrinsic job satisfaction will be significantly predictive of the evaluation of the existing job.

Hypothesis 2b. The best predictor of thinking of quitting will be either intrinsic or extrinsic job satisfaction.

Hypothesis 2c. The best predictor of the evaluation of expected utility of search and cost of quitting will be thinking of quitting.

Hypothesis 2d. The best predictor of the intention to search for alternatives will be the

evaluation of expected utility of search and cost of quitting.

Hypothesis 2e. The best predictor of the search for alternatives will be the intention to search for alternatives.

Hypothesis 2f. The best predictor of the evaluation of alternatives will be the search for alternatives.

Hypothesis 2g. The best predictor of the comparison of alternatives vs. present job will be the evaluation of alternatives.

Hypothesis 2h. The best predictor of the intention to remain will be the comparison of alternatives vs. present job.

Hypothesis 2i. The best predictor of one year turnover behavior will be intent to remain.

Hypothesis 3. Intent to remain will provide a better prediction of one year turnover than will either intrinsic or extrinsic job satisfaction.

The work of Waters and Roach (1973) suggests the final hypothesis.

Hypothesis 4. There will be no differences between the significant predictors of one year turnover and the

Hypothesis 4. There will be no differences between the significant predictors of one year turnover and the significant predictors of two year turnover.

CHAPTER II

METHOD

Samples and Research Site

Two samples from differing geographical regions were employed. The first sample was composed of 274 nursing home employees staffing eight facilities located in the Southeastern United States. The sample was predominately female consisting of 240 females and 30 males, with four cases indeterminate. The average company tenure of this group was 4.4 years. These employees were engaged in a number of health care and supporting occupations including nursing care, food services, clerical, and custodial activities.

A second sample consisted of 205 workers from three nursing homes and two hospitals. This group of subjects was working in the Midwestern section of the U.S. when first contacted. As with the former group, these subjects were predominately female--176 females, 23 males, and 6 giving no response. Their average company tenure had been 4.6 years. Generally these subjects were employed in the same capacities as the former group. In addition, the sample from the Midwest tended to be slightly more professionalized owing in large part to the presence of hospitals in this group.

Measures

The data for the present investigation were obtained in conjunction with a larger research project.

Job satisfaction. The short form of the Minnesota Satisfaction Questionnaire (MSQ; Weiss, Dawis, England, & Lofquist, 1967) was used to assess employee satisfaction. All twenty-one items are arrayed on a five-point Likert type scale ranging from "very dissatisfied" to "very satisfied." This measure provides indices of a worker's satisfaction with intrinsic and extrinsic aspects of the job. Internal consistency estimates of reliability were obtained separately for the samples to cross-check results. Coefficient alpha estimates of reliability for the Southeastern and Midwestern samples on the Intrinsic satisfaction scale were acceptable (.78 and .82) and were similar to the reliabilities yielded by the Extrinsic scale (.80 and .82).

Decision process indices. Seven single item scales were constructed to represent the decision processes indicated by the various steps of Mobley's (1977) model. All items discussed here are five-point scales. Block A of the model dealing with the evaluation of the existing job was measured by an item asking "How often have you evaluated your job in terms of likes, dislikes, and how it could be better?" Thinking of quitting (Block C) was measured by the item "How often have you thought of quitting or changing

jobs?" Both of the preceding items were distributed on a continuum from 1--often to 5--almost never. A single item "In terms of the amount of time I would spend looking for a new job and the costs of quitting my present job, it would still be worth it for me to leave this organization," provided an index of employee perceptions regarding their evaluation of expected utility of search and cost of quitting (Block D). Intention to search (Block E) was indicated via an item stating "I intend to look for a new job within the next year." Employees actually engaged in search for employment alternatives (Block F) reflected this through an item stating "I am presently looking for a new job or considering quitting my present job." The three items associated with Blocks D, E, and F provided response alternatives ranging from 1--strongly agree to 5--strongly disagree. Another single item appeared next in the questionnaire asking, "How many places can you think of in this community that you would prefer to work than at your present job?" Subject responses to this item were scaled as follows: 1--none or 2, 2--1 to 2, 3--3 to 4, 4--5 to 6, 5--more than 6. This item reflected opinions regarding respondents evaluations of available alternatives (Block G). Finally, Block H, comparison of alternatives versus present job, was measured by an item asking, "How does your present job compare to other ones in the community that you would consider taking?" Subjects indicated the results of these comparisons

on a scale ranging from 1--it is much better to 5--it is much worse.

Intent to remain. A single item stating, "If I have my own way, I will be working here a year from now," was used to determine intent to remain. Five response choices were provided ranging from "strongly disagree" to "strongly agree."

Data Collection Procedures

Procedures were similar for both samples. Questionnaires were distributed by the research team on-site during normal working hours. In some cases supervisors distributed questionnaires to night shift or absent personnel. All subjects were informed by a cover letter that participation was voluntary. To assure confidentiality, each respondent was provided with an envelope in which to seal the questionnaire before returning it to the collection site. Return rate varied across facilities so average response rates for the two geographically distinct samples are presented. Subjects in the Southeastern facilities responded at a 40% rate. The return rate for the Midwestern sample was 54%.

All subjects desiring feedback on the study's results completed a form with their name and address. Study results were then mailed directly to their home. A followup was conducted on this group to determine whether they had

terminated their employment. Combining samples ($N = 479$), a total of 351 employees (73%) requested feedback. This latter group of subjects provided the data for the present study.

At approximately one and two year intervals a follow-up check was performed to identify employees who had terminated within that time period. In the first year 25% of the study's respondents had terminated within the preceding year. This turnover rate was consistent with existing trends in the labor markets of these institutions. In what immediately follows figures for the second wave of turnover measures appear in parentheses. A total of 89 (32) employees had terminated within the first (second) year. Since this study was concerned with manageable turnover only, involuntary turnovers owing to firing, illness, retirement, and the like were eliminated from the terminated group. Thus, this group was reduced to 56 (21) voluntary resignations which were coded 1; stayers were coded 0.

Data Analyses

The two samples were combined for analytical purposes. Hence, all statistics began with a sample of 351 prior to elimination of cases for missing data. Analyses dealing with the second wave of turnover data actually involve a combination of first and second year voluntary terminations ($n = 77$). The second wave of data was

collected for cross-validated purposes and to increase the total amount of variance in the criterion.

Since the research questionnaire was fairly long, a number of questionnaires were returned containing partial responses. To utilize as much data as possible, individual scores on the multi-item attitude scales were based upon mean scores rather than an additive combination of item values. If at least half of the scale items had been responded to, a case was retained for statistical analysis.

All variables were intercorrelated via Pearson Product Moment correlations. Stepwise multiple regression analysis was employed to evaluate two hypotheses. With respect to hypothesis two, only variables preceding a step in the model were entered into the regression equation as predictors of that step (cf. Mobley, Horner, & Hollingsworth, 1978). Results of tests of this hypothesis are reported in terms of standardized regression coefficients.

CHAPTER III

RESULTS

All variables were intercorrelated via Pearson Product Moment correlations. Table 1 presents these correlations. Each correlation is based on a different number of cases. In order to utilize as much data as possible, cases containing missing data were eliminated in a pair-wise rather than case-wise fashion. Hence, each correlation is based on a different number of cases. These differences are quite small and should not have an effect upon the comparability of the tabled values. Means and standard deviations for all variables are also shown in Table 1.

Evaluation of Hypothesis 1

Data pertinent to this hypothesis are given in Table 1. The hypothesis predicts that intrinsic satisfaction will be more predictive of job termination than extrinsic job satisfaction. Neither extrinsic satisfaction nor intrinsic satisfaction yielded a significant relationship with first year turnover. Intrinsic job satisfaction did correlate higher with second year job termination ($r = -.25$, $p < .01$) than did extrinsic satisfaction ($r = -.15$, $p < .01$). Using Fisher's r to z transformation, the correlation coefficients were tested for a significant difference. The second year turnover-extrinsic satisfaction correlation was based on 278 cases, and the second year turnover-intrinsic

TABLE 1
INTERCORRELATION MATRIX

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. Evaluation of existing job	2.60	1.42		28**	26**	23**	12*	19**	19**	13*	10	14*	00	-07
2. Intrinsic job satisfaction	4.17	.50			64**	35**	21**	35**	26**	28**	24**	29**	-03	-25**
3. Extrinsic job satisfaction	3.62	.82				46**	28**	44**	40**	34**	08	28**	-04	-15**
4. Thinking of quitting	3.76	1.25					46**	50**	49**	43**	33**	40**	-19**	-11
5. Expected utility of search and cost of quitting	4.01	1.08						55**	53**	30**	27**	34**	-12*	-11
6. Intention to search	4.06	1.10							81**	44**	33**	52**	-27**	-21**
7. Search for alternatives	4.20	1.03								39**	30**	55**	-28**	-18**
8. Evaluation of alternatives	4.53	.84									41**	34**	-25**	-20**
9. Comparison of alternatives vs. present job	3.70	1.00										32**	-07	-18**

TABLE 1 (continued)

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12
10. Intent to remain	3.80	1.27											-23**	-11
11. First year turnover	.17	.38												NA
12. Second year turnover	.42	.85												

Note. Sample Size Varies; $275 \leq N \leq 291$.

* $p < .05$.

** $p < .01$.

satisfaction correlation was based on 280 cases. The test produced a $z = 1.29$ which was nonsignificant. Based on the foregoing results, hypothesis 1 was not supported.

Evaluation of Hypothesis 2

Hypothesis 2 reflects the causal chaining implied by Mobley's (1977) model (refer to Figure 1; p.28). The hypothesis states that the immediately preceding link in the model will be the most important determinant of the succeeding step.

Conclusions regarding this hypothesis depend upon the results of tests of the following subhypotheses.

Hypothesis 2a. This subhypothesis predicts a significant relationship between both intrinsic and extrinsic job satisfaction and the evaluation of the existing job. Since the only variable in the model immediately preceding job satisfaction is the evaluation of the existing job, correlational analysis was employed to evaluate this prediction. With only two measures involved, regression analysis provides no information beyond that yielded by bivariate correlation analysis. Referring to Table 1, the relevant correlations between the evaluation of the existing job and intrinsic satisfaction ($r = .28, p < .01$) and extrinsic satisfaction ($r = .26, p < .01$) are both significant. Hence, it appears that the evaluation of the existing job is significantly related to employee job satisfaction as the model

suggests. Within the confines of the present data, this subhypothesis receives support.

With the exception of Hypothesis 3, all remaining hypotheses and subhypotheses are tested via stepwise multiple regression analysis. Variables are included in the equation provided their Beta weights yield significant F ratios and they add significantly to the explanation of criterion variance.

Hypothesis 2b. Mobley's (1977) model presents job satisfaction as the step immediately preceding thinking of quitting. Table 2 shows the findings for this subhypothesis. Extrinsic job satisfaction entered significantly into the regression equation ($F = 51.30, p .01$) predicting thinking of quitting. Extrinsic satisfaction's contribution to the amount of variance explained (R^2 change) in the criterion was also significant. Intrinsic satisfaction was not a useful predictor of this link in the model. The model indicates a connection between job satisfaction and thinking of quitting. It makes no special distinctions between facets of job satisfaction. Since extrinsic satisfaction appeared as the most important precursor of thinking of quitting, the requirements of the model have been sufficiently met.

Hypothesis 2c. The next step in the model is the expected utility of search and cost of quitting. This stage is directly preceded in the model by thinking of quitting.

TABLE 2
RESULTS OF STEPWISE REGRESSION ANALYSIS
FOR PREDICTORS OF THINKING OF QUITTING

Predictor	Beta	$\frac{F}{\text{Enter}}$	Multiple $\underline{R}$	$\underline{R^2}$ Change
Extrinsic satisfaction	.45	51.30**	.45	.200**
Evaluation of existing job	.05	.70	.45	.003
Intrinsic satisfaction	.03	.09	.45	.000

Note. N = 260

** $p < .01$

In line with model predictions, the results of the regression analysis shown in Table 3 indicate that thinking of quitting was the foremost predictor of the expected utility of search and cost of quitting. Also, thinking of quitting explained a considerable amount of unique variance. Subhypothesis 2c is confirmed.

Hypothesis 2d. Mobley's (1977) model of employee turnover places the expected utility of search and cost of quitting immediately before the intention to search for alternatives. The causal nature of the model implies a direct predictive association. The relevant results appear in Table 4. The expected utility of search and cost of quitting variable did enter as the most important determinant of the intention to search ($F = 128.20$, $p < .01$) confirming this prediction. It also contributed the greatest proportion of criterion variance explained ($R^2 = .332$). Hence, this component of the model behaves as anticipated.

Hypothesis 2e. In line with current theory, the model assumes that intentions are the immediate precursors of overt behavior. An employee's intentions with respect to job search should provide the best predictions of the actual search for employment alternatives. As can be seen in Table 5, intention to search did significantly predict reported search behavior ($F = 502.34$, $p < .01$). It shared a significant amount of variance with the search for alternatives measure, as well. This result clearly confirms the

TABLE 3
RESULTS OF STEPWISE REGRESSION ANALYSIS FOR
PREDICTORS OF THE EXPECTED
UTILITY OF SEARCH AND
COST OF QUITTING

Predictor	Beta	<u>F</u> to Enter	Multiple <u>R</u>	<u>R</u> ² Change
Thinking of quitting	.46	69.79**	.46	.213**
Extrinsic satisfaction	.15	5.91**	.48	.018*
Intrinsic satisfaction	-.05	.54	.48	.001
Evaluation of existing job	-.03	.21	.48	.001

Note. N = 260

* $p < .05$

** $p < .01$

TABLE 4
RESULTS OF STEPWISE REGRESSION ANALYSIS FOR
PREDICTORS OF THE INTENTION TO
SEARCH FOR ALTERNATIVES

Predictor	Beta	F to Enter	Multiple R	R^2 Change
Expected utility of search and cost of quitting	.58	128.20**	.58	.332**
Thinking of quitting	.32	35.33**	.64	.081**
Extrinsic satisfaction	.21	16.38**	.67	.035**
Intrinsic satisfaction	.07	1.41	.67	.003
Evaluation of existing job	.05	1.27	.67	.003

Note. N = 260

** $p < .01$

TABLE 5
RESULTS OF STEPWISE REGRESSION ANALYSIS FOR
PREDICTORS OF THE SEARCH
FOR ALTERNATIVES

Predictor	Beta	<u>F</u> to Enter	Multiple <u>R</u>	<u>R</u> ² Change
Intention to search	.81	502.34**	.81	.661**
Thinking of quitting	.12	8.21**	.82	.011**
Expected utility of search and cost of quitting	.09	3.87*	.82	.005
Extrinsic satisfaction	.04	.80	.82	.001
Intrinsic satisfaction	-.06	1.63	.82	.002
Evaluation of existing job	.02	.44	.82	.000

Note. N = 260

* $p < .05$

** $p < .01$

prediction and reinforces the position of the intention precedes behavior theorists.

Hypothesis 2f. The step in the cognitive chain following the search for alternatives is the evaluation of alternatives. Inspection of Table 6 reveals that a stepwise regression employing the evaluation of alternatives as the criterion measure failed to support this causal link. The search for alternatives did not appear as a significant predictor of the evaluation of alternatives. Rather, best prediction was achieved by the measure of thinking of quitting ($F = 51.32, p < .01$). Subhypothesis 2f was clearly not supported in this case.

Hypothesis 2g. Once an employee has evaluated the available alternatives, the model asserts that he will compare these alternatives to his present job. The findings appearing in Table 7 are intended to evaluate this causal connection. Clearly, the evaluation of alternatives does predict the immediately following step. It easily met both the inclusion criteria; it passed the F test requirement ($F = 58.17, p < .01$) and significantly added to the explainable variance ($R^2 = .184; p < .01$). The link between the evaluation of alternatives and the comparison of alternatives to the present job does seem to operate much as the model implies.

TABLE 6
RESULTS OF STEPWISE REGRESSION ANALYSIS FOR
PREDICTORS OF THE EVALUATION
OF ALTERNATIVES

Predictor	Beta	<u>F</u> to Enter	Multiple <u>R</u>	<u>R</u> ² Change
Thinking of quitting	.41	51.32**	.41	.166**
Intention to search	.26	16.00**	.46	.049**
Expected utility of search and cost of quitting	.13	3.39*	.47	.010
Search for alternatives	.11	1.26	.48	.004
Extrinsic satisfaction	.03	.24	.48	.001
Evaluation of existing job	-.03	.22	.48	.001
Intrinsic satisfaction	.01	.03	.48	.000

Note. N = 260

*p < .05

**p < .01

TABLE 7
RESULTS OF STEPWISE REGRESSION ANALYSIS FOR
PREDICTORS OF THE COMPARISON OF
ALTERNATIVES VS. PRESENT JOB

Predictor	Beta	<u>F</u> to Enter	Multiple <u>R</u>	<u>R</u> ² Change
Evaluation of alternatives	.43	58.17**	.43	.184**
Intrinsic satisfaction	.25	20.02**	.49	.059**
Intention to search	.19	9.36**	.52	.027**
Thinking of quitting	.11	2.94*	.53	.008
Extrinsic satisfaction	-.07	.92	.53	.003
Search for alternatives	.05	.25	.53	.001
Evaluation of exisiting job	.02	.19	.53	.001
Expected utility of search and cost of quitting	-.02	.07	.53	.000

Note. N = 260

* $p < .05$

** $p < .01$

Hypothesis 2h. The model suggests that the employee's intent to quit or stay (intent to remain) is a function of the results of his comparison of the available alternatives with his present job. Table 8 gives the results of the regression analysis employing intent to remain as the dependent measure. Comparison of alternatives with the present job was an important predictor of staying intentions. That is, it did meet both inclusion criteria for incorporation in the prediction equation. Nevertheless, subhypothesis 2h was not supported, because it was not the foremost predictor of turnover intentions. Both the search for alternatives and thinking of quitting entered the equation ahead of the comparison of alternatives vs. the present job. They also made greater contributions to the explanation of criterion variance.

Hypothesis 2i. The ultimate test of the model's predictive capabilities comes when its connection to actual one year turnover is assessed. The model's eventual utility will be primarily determined by its ability to forecast actual turnover behavior. Mobley, Horner, and Hollingsworth (1978) employed one year turnover as their behavioral criterion.

Shared method variance insured at least a minimal connection between all of the measures in the preceeding tests, because they were all measured in a questionnaire format. No such situation confounds the prediction of

TABLE 8
RESULTS OF STEPWISE REGRESSION ANALYSIS FOR
PREDICTORS OF THE INTENT
TO REMAIN

Predictor	Beta	<u>F</u> to Enter	Multiple <u>R</u>	<u>R</u> ² Change
Search for alternatives	.54	105.32**	.54	.290**
Thinking of quitting	.18	9.21**	.56	.025**
Alternatives vs. present job	.13	5.71**	.57	.015*
Intention to search	.14	2.53*	.58	.007
Evaluation of alternatives	.08	1.89	.58	.005
Intrinsic satisfaction	.08	.15	.59	.005
Extrinsic satisfaction	.02	.07	.59	.000
Evaluation of existing job	.02	.09	.59	.000
Expected utility of search and cost of quitting	.02	.07	.59	.000

Note. N = 260

* $p < .05$

** $p < .01$

turnover activity. The questionnaire method employed to assess model features bore no relationship to the method of recording turnover measures. Thus, they share no common method variance. The models predictiveness with respect to behavior is not contaminated. The enhancing effect of the method artifact is eliminated.

Keeping with its theoretical orientation, the model again posits that intentions are the most immediate indices of subsequent behavior. In this case Mobley's model asserts that intent to remain should be most predictive of actual turnover behavior. To test this hypothesis all model variables were entered into a stepwise multiple regression analysis using first year turnover as the criterion variable. These results are contained in Table 9. This final subhypothesis was disconfirmed. Intent to remain did not appear as a significant predictor of turnover behavior in this regression. Two components of the model did appear as useful predictors of voluntary job termination. Foremost of these was the evaluation of alternatives. The intention to search also met the criteria for inclusion in the regression equation.

Hypothesis 2 depends on a synthesis of the foregoing tests. Valid conclusions regarding the interworkings of the total model depend upon the predictive efficiency of each stage of the model. Tests of the subhypotheses reveal that in six regressions the best predictor of a link in the chain

TABLE 9

RESULTS OF STEPWISE REGRESSION ANALYSIS FOR
PREDICTORS OF FIRST YEAR
TURNOVER

Predictor	Beta	<u>F</u> to Enter	Multiple <u>R</u>	<u>R</u> ² Change
Evaluation of alternatives	-.28	22.53**	.28	.080**
Intention to search	-.19	9.09**	.33	.031**
Alternatives vs. present job	.12	3.30*	.35	.011
Extrinsic satisfaction	.11	2.65*	.36	.009
Intent to remain	-.09	1.76	.37	.006
Expected utility of search and cost of quitting	.09	1.70	.38	.006
Evaluation of existing job	.08	1.71	.39	.006
Search for alternatives	-.11	1.11	.39	.004
Thinking of quitting	-.06	.60	.39	.002
Intrinsic satisfaction	.01	.01	.39	.000

Note. N = 260

* $p < .05$

** $p < .01$

was the immediately preceding stage. In each case the foremost predictor met both inclusion criteria strengthening the obtained result. Those predictors which did meet the model's requirements were the evaluation of the existing job, job satisfaction (i.e., extrinsic job satisfaction), thinking of quitting, the expected utility of search and cost of quitting, the intention to search for alternatives, and the evaluation of alternatives.

In three instances reversals on prediction occurred within a subhypothesis. Regressions on the evaluation of alternatives, intent to remain, and actual turnover did not meet expectations. A nonadjacent variable provided better prediction of these measures than the hypothesized determinant.

The weight of the evidence tends to confirm Hypothesis 2. However, important reservations remain. The central role of the intent to remain variable in the model is strongly questioned by the present data. Particularly distressing is the apparent tenuousness of the model's direct link between intentions and behavior. Hence, while the data are generally supportive of the causal network proposed by the model, certain modifications may still be necessary.

Evaluation of Hypothesis 3.

Hypothesis 3 derived from a similar hypothesis proposed by Mobley et al. (1978). They tested and supported the proposition that the variance in voluntary turnover

attributable to job satisfaction was redundant with the variance explained by intent to remain. Entering intent to remain in a regression equation superceded the significant effects due to job satisfaction.

Referring to the correlational results presented in Table 1 (p. 48) it may be noted that both intrinsic ($\underline{r} = -.03$) and extrinsic satisfaction ($\underline{r} = -.04$) did not correlate significantly with one year turnover. Intent to remain ($\underline{r} = -.23$, $\underline{p} < .01$) did correlate significantly with first year turnover. These correlational results clearly favor Hypothesis 3. In agreement with Mobley et al. (1978), it was found that intent to remain predicted one year turnover better than intrinsic or extrinsic satisfaction confirming Hypothesis 3.

Evaluation of Hypothesis 4.

Hypothesis 4 deals with the generalizability of turnover predictors. In this instance the generalization is over time. The hypothesis posits that the predictors of one year turnover behavior will also significantly predict two year turnover. Scant research has appeared on this subject. The importance of the problem warrants considerably more attention than it has received to date.

Table 10 contains the results of a stepwise multiple regression analysis employing job termination within the previous two years as the dependent measure. Four predictor variables yielded significant $\underline{F}$ ratios, but only two,

TABLE 10
RESULTS OF STEPWISE REGRESSION ANALYSIS FOR
PREDICTORS OF TURNOVER
WITHIN TWO YEARS

Predictors	Beta	<u>F</u> to Enter	Multiple <u>R</u>	<u>R</u> ² Change
Intrinsic satisfaction	-.23	14.22**	.23	.053**
Intention to search	-.14	4.82**	.27	.018*
Expected utility of search and cost of quitting	.14	3.32*	.29	.012
Evaluation of existing job	.10	2.72*	.30	.010
Evaluation of alternatives	-.10	2.31	.32	.008
Thinking of quitting	.05	.30	.32	.001
Extrinsic satisfaction	.02	.05	.32	.000
Search for alternatives	-.02	.05	.32	.000
Alternatives vs. present job	.01	.04	.32	.000

Note. N = 225. Intent to remain failed to meet default tolerance requirements and was excluded from the regression equation.

* $p < .05$

** $p < .01$

intrinsic satisfaction ($F = 14.22$, $p < .01$) and intention to search for alternatives ($F = 4.82$, $p < .01$), also significantly added to the explanation of unique criterion variance. These two variables combined to yield a multiple R with turnover of .27. First year turnover results were shown in Table 9 (p. 63). The evaluation of alternatives and the intention to search met significance requirements and formed the prediction equation for one year turnover. Their multiple correlation with one year turnover was .33. Comparing the predictions of one and two year turnover, the results both disagree and converge. The most predictive component of the model differed over the two intervals. The evaluation of alternatives proved to share the most common variance with first year turnover ($R^2 = .080$). In contrast, intrinsic job satisfaction was most predictive of two year turnover ($R^2 = .053$). In both regression models the intention to search for alternatives appeared as the second significant predictor of job termination. It explained more variance in first year turnover ($R^2 = .031$) than two year turnover ($R^2 = .018$). Both findings do represent significant contributions to the total R^2 .

The results pertaining to Hypothesis 4 are mixed. One variable was unique to each time interval. The intention to search for alternatives measure significantly generalized as a predictor of turnover across time intervals. Judgement must be suspended on this hypothesis until more data are available.

Summary of Results

Hypothesis 1 was clearly not supported. Intrinsic satisfaction exhibited no predictive superiority over extrinsic satisfaction for either one or two year turnover. Hypothesis 2 was tentatively supported. The causal relationships suggested by Mobley's (1977) model of employee job termination were generally found. However, a central link in the causal chain, intent to remain, failed to justify its role in the model. Hypothesis 3 was supported. Since in this study the job satisfaction variables bore no significant correlation to turnover, they provided scant competition for intent to remain in predicting one year turnover. Intent to remain did significantly predict employee turnover. On the basis of that evidence, the hypothesis was supported. No conclusion could be drawn about the results pertaining to Hypothesis 4. This hypothesis dealt with the question of turnover predictor generalization over time. The analyses revealed that only one of two significant predictors was a useful index of both one and two year turnover.

CHAPTER IV

DISCUSSION

Now that a connection has been well established between job satisfaction and turnover, researchers will be better served by dissecting this effect rather than reproducing it. One such promising dissection is the intrinsic-extrinsic satisfaction dichotomy. While some evidence suggests that intrinsic satisfaction may provide a more accurate forecast of job termination (Mobley, Griffeth, Hand, & Meglino, 1979), literature also exists indicating no differences (Porter & Steers, 1973). The results of the present investigation indicated no appreciable difference between the predictive capabilities of intrinsic and extrinsic job satisfaction. In disagreement with the mainstream, I found no significant correlation between either facet of satisfaction and turnover. Since the evidence indicating such a link is so overwhelming, I am inclined to disbelieve my own result. I may have observed a .05 phenomenon. Both intrinsic and extrinsic satisfaction did correlate significantly with two year turnover. These correlations did not differ significantly from each other. Lending credence to the conclusion of no predictive differences is the finding that both satisfaction measures behaved alike. Neither correlated with first year turnover. Both correlated significantly with two year turnover. The

present result fits best with the data reviewed by Porter and Steers (1973) which indicates little to choose between intrinsic and extrinsic facets of satisfaction for pre-saging job withdrawal.

The primary thrust of this paper has been a test of Mobley's (1977) model of the psychological processes underlying job resignation. The causal nature of the model was partially supported. In most cases each step of the model did predict the ensuing step fairly well. Of this group of successes, the weakest relationship was found between the evaluation of the existing job and intrinsic and extrinsic job satisfaction. This finding may be put down to the effects of common method variance, or rather the lack of same. Job satisfaction was measured in a separate section of the research questionnaire and employed a unique response format. Decision process indices were adjacent and employed a similar response format. Hence, relationships between decision process indices are apparently slightly inflated by data gathering practices.

The strongest relationship between adjacent steps was the prediction of the search for alternatives by the intention to search for alternatives. This finding is quite consistent with the school of thought distinguished by Fishbein and Ajzen (1975) which holds that the best predictor of an act is the behavioral intention to perform that particular act.

Mobley, Horner, and Hollingsworth (1978) tested the abbreviated version of the turnover model shown in Figure 2 (p. 30). They confirmed hypothesized model linkages for job satisfaction, thinking of quitting, and intention to search. In the present study tests investigating the pertinence of these same variables to the original model were also supportive. The consistency of these findings points to the conclusion that job satisfaction, thinking of quitting, and intention to search do play a recurring role in the worker's decision to resign. Further, it can be stated with some confidence that these psychological events are organized consecutively in conscious experience as the model predicts.

Mobley et al. (1978) also examined the fit of a composite variable, probability of finding an acceptable alternative, with the abbreviated turnover model. The current study did not include this variable. Rather, variables assessing employee job search and their evaluation of alternatives represented a decomposition of the more complex variable. Mobley et al. (1978) report an unanticipated link between thinking of quitting and the probability of finding an acceptable alternative. The present investigation obtained a similar result linking the evaluation of alternatives and thinking of quitting. The causal direction between these two variables is still unclear, but there does appear to be a direct link between thoughts of quitting and the availability of acceptable employment alternatives. Subsequent model should take cognizance of this apparent linkage.

While the causal nature of the model was generally supported, some serious problems remain. The other intentional variable in Mobley's (1977) model did not behave as the model or Fishbein and Ajzen's theory would allow. As constructed, the model indicates that the most immediate determinant of intent to remain should be the employee's comparison of his alternatives with his present job. However, best prediction of intent to remain was achieved by the search for alternatives measure. The comparison of alternatives vs. the present job did enter as a significant predictor in the analysis, but not until the third step. The thinking of quitting measure also entered the regression equation ahead of the comparison of alternatives vs. the present job variable. This result casts doubt upon the causal connection in the model leading directly to intent to remain.

A more telling blow to the status of intent to remain comes when the regression to predict first year turnover is considered. The model is designed such that the behavioral intention to quit or stay (i.e., intent to remain) represents the terminal cognitive process preceding the job behavior (i.e., resignation). Mobley, Horner, and Hollingsworth (1978) did find intent to remain more predictive of one year turnover than any other model feature, but they tested an abbreviated form of the model. A regression analysis performed here on one year turnover incorporating all

of the steps appearing in Mobley's (1977) original model did not obtain such confirmatory results. It was found that the evaluation of alternatives and the intention to search for alternatives combined to significantly predict voluntary turnover behavior with $R = .33$. Intent to remain did not enter as a significant predictor. Remember that Mobley, Hand, Baker, and Meglino (1979) found expectancy of completing enlistment, Marine role outcome expectancies, and expectancy of finding acceptable civilian employment better predictors of Marine recruit attrition than intention to complete enlistment. This work, coupled with the present finding, raises doubts about the invariant preeminence of turnover intentions for predicting job termination. Hence, at least in some cases, the availability of attractive alternatives seems to be the most immediate determinant of turnover behavior regardless of expressed intentions.

This is not a totally unreasonable conclusion. Individuals are subject to a number of forces, not all of which are directly under their personal control. Economic conditions, family considerations, and the like may influence their decision to resign regardless of their expressed intentions. Opportunity may represent the only indispensable condition.

The results of Mobley et al. (1979) and the present investigation have begun to raise serious doubts about the primacy of intent to remain for turnover models. Intent to

remain does possess a fairly well demonstrated connection to turnover. It will probably continue to represent an important feature of turnover models. However, employing it as the immediate precursor of turnover may be ill advised. Even where it has proven to be the best predictor of turnover, it has rarely explained more than .25 of the relevant variance. The only notable exception to this trend can be found in Hom, Katerberg, and Hulin (1979). They found reenlistment intentions highly predictive of the actual behavior ($\underline{r}^2 = .45$). Generally though, the amount of shared variance between these variables has been moderate.

Intent to remain may be more usefully employed when modified by certain yet to be identified situational constraints. Its predictive capabilities may be enhanced by employing it as a simultaneous rather than a terminal predictor. It may prove most useful when utilized as an interactive variable. Its interactions with other measures (e.g., job satisfaction, evaluation of alternatives) may provide real insights into the explanation of turnover variance. Work along these lines has already begun. Lounsbury, Horst, and Steel (1979) identified a variable they called "belief in remaining" which predicted one year turnover better than intent to remain. They concluded that belief in remaining represented a combination of behavioral intentions (i.e., intent to remain) and an evaluation of situational constraints (e.g., the availability of attractive alternatives,

family considerations, etc.). The leap from behavioral intentions to the act may prove to be a longer one than was first believed.

It is worth noting that intent to remain completely collapsed as a predictor when regressed against two year turnover. This finding is not surprising since its format anchored turnover intentions to one year. It was recognized earlier that intentions proved most predictive when anchored to a specific time interval (Kraut, 1975; Mobley et al., 1978). This represents a further limitation upon the generality of intentions, however. The belief in remaining variable employed by Lounsbury et al. (1978) showed little decrease in predictiveness with two year turnover even though it specified a one year time interval. A better understanding is needed of the limiting conditions to which intent to remain is subject. Also, research must proceed into the identification of other intention like variables which enhance the prediction of turnover.

The well established empirical relationship between job resignation and job satisfaction has led some thinkers to construct their models so that job satisfaction represents the final psychological event preceding termination (e.g., March & Simon, 1958; Price, 1977). The Mobley model (1977) employs intent to remain as the final cognitive event. In order to justify the extension of the model beyond satisfaction, it must be demonstrated that intent to

remain improves upon the predictive capacity of job satisfaction. Otherwise, the model brings us no closer to an understanding of the phenomenon of turnover.

Mobley et al. (1978) did find intent to remain more predictive of turnover than job satisfaction. The present investigation replicated this finding. I have already documented the failure of job satisfaction to correlate with one year turnover in the present study. Given that this finding contradicts an extensive body of literature, we are somewhat skeptical of our comparison of intent to remain and job satisfaction. Since the anticipated connection between turnover and satisfaction never materialized, the present result may not give an accurate picture of the intent to remain versus job satisfaction controversy.

Mobley et al. (1978) and the present investigation both supported the superiority of intent to remain for predicting turnover. Based on this limited evidence, it seems reasonable at this time to accord some merit to this hypothesis. Future research is needed on this point. Before intent to remain can replace job satisfaction in the prediction of turnover, its superiority must be well established. At present, the evidence is simply too scant for an informed decision to be made.

There is a real lack of evidence on the comparability of one and two year turnover predictors. The whole problem of generalization is an old one in psychology. Some

turnover researchers have examined the generalizability of predictors across organization (cf. Farris, 1971; Steers, 1977). A few have attempted to extend the generalizability of their results over time (Waters & Roach, 1973). I took the latter approach. The evaluation of alternatives and intention to search measures were the only significant predictors of one year turnover. Intrinsic job satisfaction and the intention to search combined to predict two year turnover. The intention to search variable was a consistent predictor across both years. One can interpret this result as suggesting that the search for time invariant predictors of resignation may prove fruitful. The intention to search might well be such a variable. It may be the first signal of an impending move. Actual turnover behavior may take longer for some individuals (i.e., more than one year) simply because suitable alternatives take longer to find.

The single best predictor from Mobley's (1977) model of one year turnover was the evaluation of alternatives. Apparently, the realization that attractive alternatives exist in the job market is an important impetus to job change. Recall that Price (1977) and Martin (1978) include an opportunity feature in their turnover (turnover intentions) models. They treat opportunity as a moderating condition influencing the connection between attitudes (i.e., job satisfaction) and behavior (intentions). The Mobley

(1977) turnover model treats the search for and evaluation of alternatives as direct determinants of both turnover intentions and actions. The model depicts the search for and evaluation of alternatives as an active goal directed sequence. The Price and Martin models insert opportunity as a situational moderator. The individual passively responds to opportunity rather than actively seeks it out. The regression results suggest that the Mobley view of the worker as an active information seeker and processor may provide a more accurate picture of turnover decisions. Rather than simply reacting to labor market conditions, one year turnovers had actively searched for and evaluated employment opportunities. These factors played a greater role in job resignation than job satisfaction, intent to remain, or any other measure underscoring their relevance to this issue.

Both intrinsic and extrinsic satisfaction correlated significantly with two year turnover. This result is rather curious since they failed to correlate with one year turnover. Apparently, job dissatisfaction played a role in the turnover decisions of these employees only after a time lapse of one year or more. Then, it played a substantial role since intrinsic job satisfaction appeared as the most important determinant of two year turnover. Waters and Roach (1973) found some of their satisfaction measures predictive of two year turnover, as well. The thrust of their paper is the decrease in predictiveness of satisfaction

measures when one and two year intervals are compared. In contrast, the present investigation obtained a substantial increase in the predictiveness of job satisfaction over time. The true relationship is still somewhat obscure, apparently, and requires further empirical treatment.

The best predictor of one year turnover was the worker's evaluation of alternatives while the best predictor of two year turnover was intrinsic satisfaction. This change in the significant predictors of turnover over time can be interpreted a number of ways. One possible explanation of this finding is that workers evaluated their jobs differently over time. They may have experienced change in their mental set. Intrinsic job satisfaction came to play a significant role in the way workers evaluated their jobs only after their length of service had exceeded the first year. Leavers in the organizations studied appeared to be generally quite young, largely unskilled, and fairly mobile. Such workers may accept a relatively unattractive job due to their lack of immediate employment alternatives. The job itself may not initially loom as large in their turnover decisions as the availability of attractive alternatives. However, as they gain experience with a particular job, intrinsic satisfactions with that job play a greater role in turnover decisions.

A second possible explanation for the change in significant predictors of turnover over time could be attributed

to something akin to a "last straw" phenomenon. Presumably, job satisfaction is dynamic and is somewhat changeable over time. Workers may have mental thresholds above which job dissatisfaction becomes intolerable. Intrinsic dissatisfaction may have become such a prominent predictor of two year turnover because it took longer to build up to such levels that thresholds were exceeded.

A third explanation of this finding is that some turnover predictors may not be particularly generalizable over time. They may be quite useful for predicting short-term forms of turnover but incapable of predicting turnover over longer spans of time.

Future researchers are encouraged to look more closely at the generalizability of turnover predictors beyond the typical one year turnover criterion. In addition, greater attention should be paid to the reliability of measures employed to index that criterion.

A potential limitation upon the interpretability of this study's results arises from the intercorrelations among the predictor variables employed. The problem of multicollinearity in multiple regression designs has received increased attention as a statistical constraint not easily overcome. Multicollinearity occurs when two or more predictor variables are highly intercorrelated. The effects of multicollinearity upon a study's results are both pervasive and insidious. In the extreme case, if the predictor

variables are perfectly correlated, it is not possible to determine the least-squares estimates of the regression coefficients. In less extreme instances of correlation, the effects of multicollinearity are often present but more subtle. Substantial predictor intercorrelation may depress the magnitude of effected regression coefficients. The estimates of the regression coefficients become increasingly unreliable as the correlation among predictor variables increases. Interpretation of results is also adversely influenced. Since the predictors involved lay claim to largely the same portion of criterion variance, it becomes increasingly difficult for them to make much in the way of unique contributions. A number of research strategies have been advanced for overcoming this problem including cross-validation, creation of a composite variable from highly correlated predictors, or hierarchical regression analysis. Sample size considerations precluded the allocation of cases to a cross-validation group. With a large number of predictors involved, beta weights will not stabilize under small sample conditions. The object of the study prohibited the employment of the latter corrective strategies. Creating a composite variable from highly correlated predictors would have altered the form of Mobley's (1977) model and omitted an exact test of certain linkages. Using hierarchical regression analysis was not feasible since I was attempting to determine which of a group of variables provided the best

prediction of a particular model step.

The foregoing discussion does not assume that multicollinearity permeates this study's results. It is intended to alert the reader to the possibility that such problems may exist. A particularly vexing aspect of the problem of multicollinearity is identifying it when it is present. When does predictor intercorrelation exceed tolerable limits? Martin (1979) has intimated that multicollinearity only requires corrective action when predictors correlate greater than .80. Such a criterion poses only minor limitations upon interpretation of the present results. Rules-of-thumb such as Martin's are useful so long as they are based on sound judgement.

Given that the multicollinearity problem cannot be completely ruled out via known corrective techniques, I am inclined to think its influence in this study has not been extensive.

Future Directions in Model Building

Current efforts in the development of turnover models are long overdue and have my wholehearted support. While I have occasionally sounded a critical note regarding current models, my criticism is intended to be constructive rather than destructive. Improvement in existing models and encouragement of original thought is my ultimate aim.

In the present investigation there were differences and similarities between the predictors of one and two year turnover. Lack of predictor generalizability across time intervals has already been advanced as one feasible explanation for the differences observed. This apparent lack of generalizability could be put down to predictor instability and interpreted in the fashion of Waters and Roach (1973) as findings "of rather limited value" (p. 342).

Lack of generalizability may be interpreted in a somewhat different vein, however. It may be signaling to researchers and theoreticians alike the presence of very real differences between short-term (i.e., one year turnover) and long-term turnover (i.e., two year turnover). I am not really implying that the criterion differs from one year to the next. The act of resignation is the same. Rather, the processes leading up to the turnover behavior are different. If this were true, then it could be expected that the predictors of one and two year turnover would exhibit some variation. At the same time, it must be noted that intention to search predicted turnover in both time intervals. It is probably most likely that turnover predictors will exhibit varying degrees of generalizability across short and long-term turnover criteria.

Future efforts in the realm of turnover model building would do well to heed this message. Broader models are needed which more completely explain the nuances of prediction

over time. Such models will obviously be more complex. They must clearly distinguish between those variables useful only for predicting short-term turnover and that set of variables which may be generalized across time. To do this more research activity must be devoted to understanding the limitations and strengths of various turnover predictors.

Greater theoretical and empirical attention would do well to focus upon the environmental and social context within which the turnover decision is made. Nonwork factors such as family considerations, job location, and the like must play an important, even decisive role, in a worker's decision to change his employment.

Greater understanding of the turnover phenomenon may be achieved by treating it as an evolving process rather than as an isolated decision. If different factors are determining of short and long-term turnover, the natural extension of this logic is to think of turnover as an evolving process influenced by different factors throughout its development.

Complex models such as I am suggesting would best be tested in a piecemeal fashion. Simultaneous tests of the entire model would have to be ruled out in favor of programs of study designed to test parts of the model in an incremental fashion. To gain a better understanding of the importance of different variables for predicting turnover at different intervals, longitudinal studies must be conducted

repeating their measurements over time. The understanding gained from such research could go far in advancing the development of turnover models with both explanatory and predictive capabilities.

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APPENDIXES

APPENDIX A
THE MINNESOTA SATISFACTION
QUESTIONNAIRE-SHORT FORM

How satisfied are you in your present job? Use the following rating scales to indicate your satisfaction.

1. VDS means you are very dissatisfied with this aspect of your job
2. DS means you are dissatisfied with this aspect
3. N means you can't decide if you are satisfied or not with this aspect of your job
4. S means you are satisfied with this aspect
5. VS means you are very satisfied with this aspect of your job

Circle the letter or letters which best describe how you feel about each of the following aspects of your job.

- | | 1 | 2 | 3 | 4 | 5 |
|---|-----|----|---|---|----|
| 1. Being able to keep busy all the time | VDS | DS | N | S | VS |
| 2. The chance to work alone on the job | VDS | DS | N | S | VS |
| 3. The chance to do different things from time to time | VDS | DS | N | S | VS |
| 4. The chance to be "somebody" in the community | VDS | DS | N | S | VS |
| 5. The way my boss handles his men | VDS | DS | N | S | VS |
| 6. The competence of my supervisor when he makes decisions | VDS | DS | N | S | VS |
| 7. Being able to do things that didn't go against my conscience | VDS | DS | N | S | VS |
| 8. The way my job provides for steady employment | VDS | DS | N | S | VS |
| 9. The chance to do things for other people | VDS | DS | N | S | VS |
| 10. The chance to tell people what to do | VDS | DS | N | S | VS |
| 11. The chance to do something that makes use of my abilities | VDS | DS | N | S | VS |
| 12. The way company policies are put into practice | VDS | DS | N | S | VS |

13.	My pay and the amount of work I do	VDS DS N S VS
14.	The chances for advancement on the job	VDS DS N S VS
15.	The freedom to use my own judgement	VDS DS N S VS
16.	The chance to try my own methods of doing the job	VDS DS N S VS
17.	The working conditions	VDS DS N S VS
18.	The way my co-workers got along with one another	VDS DS N S VS
19.	The praise I get for doing a good job	VDS DS N S VS
20.	The feeling of accomplishment I got from the job	VDS DS N S VS
21.	Enjoying the work itself	VDS DS N S VS

APPENDIX B
DECISION PROCESS
INDICES

The following questions and statements concern your feelings toward remaining at your present job (the one you have now) in this organization. Please indicate your best answer by checking one of the five alternatives to each question.

1. How often have you evaluated your job in terms of likes, dislikes, and how it could be better?

OFTEN		SOMETIMES		ALMOST NEVER
1	2	3	4	5

2. How often have you thought of quitting or changing jobs?

OFTEN		SOMETIMES		ALMOST NEVER
1	2	3	4	5

3. In terms of the amount of time I would spend looking for a new job and the costs of quitting my present job, it would still be worth it for me to leave this organization.

STRONGLY AGREE	AGREE	DON'T AGREE OR DISAGREE	DISAGREE	STRONGLY DISAGREE
1	2	3	4	5

4. I intend to look for a new job within the next year.

STRONGLY AGREE	AGREE	DON'T AGREE OR DISAGREE	DISAGREE	STRONGLY DISAGREE
1	2	3	4	5

5. I am presently looking for a new job or considering quitting my present job.

<u>STRONGLY AGREE</u>	<u>AGREE</u>	<u>DON'T AGREE OR DISAGREE</u>	<u>DISAGREE</u>	<u>STRONGLY DISAGREE</u>
1	2	3	4	5

6. How many places can you think of in this community that you would prefer to work than at your present job?

<u>NONE (0)</u>	<u>1-2</u>	<u>3-4</u>	<u>5-6</u>	<u>MORE THAN 6</u>
1	2	3	4	5

7. How does your present job compare to other ones in the community that you would consider taking?

<u>IT IS MUCH BETTER</u>	<u>IT IS BETTER</u>	<u>IT IS ABOUT THE SAME</u>	<u>IT IS WORSE</u>	<u>IT IS MUCH WORSE</u>
1	2	3	4	5

APPENDIX C
INTENT TO REMAIN

If I have my own way, I will be working here (for this organization) a year from now?

<u>STRONGLY AGREE</u>	<u>AGREE</u>	<u>DON'T AGREE OR DISAGREE</u>	<u>DISAGREE</u>	<u>STRONGLY DISAGREE</u>
1	2	3	4	5

VITA

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He was employed by the Proctor and Gambell company in Cincinnati during his undergraduate work in Psychology. Upon graduation he remained with Proctor and Gambell in a full-time capacity until September, 1975.

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