ORGANIZATIONAL, WORK AND PERSONAL FACTORS IN TURNOVER AND ABSENTEEISM

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Scientific Technical Report #11

Lyman W. Porter and Richard M. Steers

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This paper summarizes, within a conceptual framework, the research carried out over the last fifteen years on factors related both to turnover and absenteeism. Over sixty empirical studies are reviewed, organized under the following topics: overall job satisfaction, organization-wide factors, immediate work environment factors, job-related factors, and personal factors. A theoretical model is presented in an effort to explain the diversity of findings.
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- Turnover
- Absenteeism
- Expectations
- Job Satisfaction
- Withdrawal
To those concerned with studying the behavior of individuals in organizational settings, employee turnover and absenteeism represent both interesting and important phenomena. They are clear-cut acts of behavior (the employee has or has not terminated from the organization, was or was not present for work on a given day) that have potentially critical consequences both for the person and for the organization. It is for this reason that both turnover and absenteeism have been investigated in a relatively large number of studies to date and are likely to remain a key focus of personnel research by psychologists. It is the purpose of this article to provide a review that: (a) comprehensively covers the most recent research on the topic; (b) relates the research findings in a systematic fashion to the organizational and working environment; and (c) attempts to provide a basic conceptual framework for viewing the findings.

For purposes of the analysis in this paper, turnover and absenteeism will be regarded as facets of "organizational withdrawal." Withdrawal will thus refer both to the voluntary act of permanently leaving the organization and to the voluntary act of staying away from the organization for limited periods of time. Since both turnover and absenteeism can occur for unavoidable reasons--e.g., military service or the geographical transfer of a spouse for the former, and illness or family crises for the latter--we will focus our attention only on those studies that include data believed to represent
avoidable turnover or absenteeism. In other words, the behavior in question represents situations where the organization would (presumably) like the person to remain as an employee but he chooses to leave, or where the organization would like the person to be at work and he chooses to be absent from work. (While such problems as accidents and alcoholism might be considered as other forms of withdrawal, they will not be dealt with here—both in order to provide reasonable limits to the scope of the review and because there is relatively little research on them that relate them specifically to organizational and work factors.)

In the past there have been some four reviews of the literature dealing with turnover and absenteeism. Three of these (Brayfield & Crockett, 1955; Herzberg et al., 1957; and Vroom, 1964) are now out of date in relation to all of the research carried out during the past decade or so, and the fourth (Schuh, 1967) represents a highly specialized review of only a portion of the available literature. Before proceeding to our own analysis of the recent literature, however, it will be helpful to summarize briefly what was uncovered by the previous reviews:

Brayfield and Crockett (1955) reviewed seven studies of turnover and eight of absenteeism. They concluded that some evidence existed, mainly from studies using group rather than individual data, of a significant but complex relationship between employee dissatisfaction and withdrawal. However, these reviewers pointed to major methodological weaknesses in a number of the studies, such as the failure to obtain independent measures and the use of weak or ambiguous measurement techniques. Such flaws were so prevalent that they questioned whether methodological changes alone would substantially increase or decrease the magnitude of many of the obtained relationships.
In general, then, they pointed as much in the direction of a need for increased rigor in research techniques as toward acceptance or rejection of an attitude-withdrawal relationship.

About the same time, Herzberg et al. (1957) also published a review of investigations which in some manner related to attitudinal factors involved in withdrawal. They cited 24 articles concerning turnover, and 13 concerning absenteeism. Their basic conclusion was that job attitudes did indeed represent a significant force in the decision to participate or withdraw. They felt the literature to that date indicated there were at least three specific variables that were important determinants of attitudes that, in turn, affected withdrawal: (1) the nature of the social work group to which the individual belongs; (2) the discrepancy between starting salary and a worker's rate of pay on his previous jobs; and (3) the worker's opportunity to participate in the decision-making process and to feel useful in the total context of his work environment.

Caution should be exercised, however, in accepting the conclusions from the above-mentioned review. First, although many articles are referenced, only a few are described even briefly. The reader therefore is forced to rely on the reviewers' interpretations and conclusions since insufficient information is provided for independent judgment. Second, the review generally ignored the methodological problems and weaknesses in most of the research cited. Thus, it is difficult to evaluate the quality of the support for some of the conclusions. Finally, it should be pointed out that one of the three specific factors that was cited by Herzberg et al. as resulting in increased withdrawal—disparity between present pay and previous pay—was based on only one reported study. In summary, while the Herzberg et al. review
claims to have found definite evidence of causal relationships between job satisfaction with several aspects of the organizational situation and withdrawal, care should be taken in placing undue confidence in the strength of such conclusions reached in the review.

Several years later, Vroom (1964) again reviewed the literature pertaining to job satisfaction and withdrawal. His review included ten articles not previously covered by either Brayfield and Crockett or Herzberg et al. The results of his analysis generally reinforced the earlier conclusions. Vroom reported that the studies he reviewed showed a consistent negative relationship between job satisfaction and the propensity to leave. In addition, he found a somewhat less consistent negative relationship between job satisfaction and absenteeism. Vroom interpreted the findings concerning job satisfaction and withdrawal as being consistent with an expectancy/valence theory of motivation; namely, workers who are highly attracted to their jobs are presumed to be subject to motivational forces to remain in them, with such forces manifesting themselves in increased tenure and higher rates of attendance.

Schuh's (1967) review focused primarily on studies of the prediction of turnover by the means of individual inventories and biographical information. From his review, he concluded that there was not a consistent relationship between turnover and scores on intelligence, aptitude and personality tests. However, he felt there was some evidence that vocational interest inventories were predictive of turnover. Most predictive of all, though, were scaled biographical information blanks in relation to turnover. Also, a very small number of older studies pertaining to job satisfaction were cited in the review, and these too seemed predictive of turnover. The
review presents little in the way of conceptual analysis or interpretation, and scant attention was given to possible methodological problems in the various studies. Even so, the review is useful to the extent of summarizing the available evidence concerning the utility of biographical and test-type instruments in the prediction of turnover.

Taken as a whole, the above-cited reviews and their conclusions point to the importance of job satisfaction as a central factor in withdrawal, particularly as it may interact with more specific organizational and individual variables. In the review that follows, we shall attempt to build on the previous ones by citing the rather extensive literature (some 50 studies) that has not been previously covered. (In addition, a few key articles that have been previously reviewed will be referenced as they directly relate to the discussion of the most recent literature.) This review will be presented in a framework that relates the findings to the organizational employment context. First, recent studies concerning the role of overall job satisfaction in withdrawal will be reviewed. Next, and more specifically, the literature will be categorized according to: (1) organization-wide factors, (2) immediate work (job) environment factors, (3) job content factors, and (4) personal factors. These seem to us to be meaningful groupings in terms of the variety of possible "internal factors" (i.e., variables related to the individual's interaction with a work situation) that could be involved in withdrawal behavior. (Omitted from the present analysis, of course, is the obviously crucial set of "external" factors pertaining to such things as economic conditions, the availability of specific job opportunities, and so forth.)
Throughout this review we will be particularly concerned with the potential role that "unmet expectations" may have on withdrawal behavior. The concept of met expectations may be viewed as the discrepancy between what a person encounters on his job in the way of positive and negative experiences and what he expected to encounter. Thus, since different employees can have potentially quite different expectations with respect to payoffs or rewards in a given organizational or work situation, it would not be anticipated that a given variable (e.g., high pay, unfriendly work colleagues) would have a uniform impact on withdrawal decisions. We would predict, however, that when an individual's expectations--whatever they are--are not met, his propensity to withdraw would be increased. We will return to the possible role of "met expectations" following our review of the various segments of the recent literature pertaining to withdrawal.

Job Satisfaction and Withdrawal

Subsequent to the publication of the previous reviews, many new investigations have appeared concerning the relationship of overall job satisfaction to turnover and absenteeism. These findings will be briefly summarized here in order to determine how they relate to the earlier findings as previously reviewed.

In two related predictive studies of particular merit, Hulin investigated the impact of job satisfaction on turnover. In the first study (Hulin, 1966), the Job Descriptive Index (JDI) was administered to a large sample of female clerical workers. During the next twelve months, 43 girls who had completed the questionnaire left the company. Each of these "leavers" was matched with two "stayers" on the basis of several demographic dimensions
(e.g., age, education). Significant differences were found between the stayer and leaver groups on mean satisfaction scores. Hulin concluded that at least in this sample, subsequent leavers as a group could be accurately distinguished from stayers based on a knowledge of the workers' degree of job satisfaction up to twelve months prior to the act of termination.

These findings raised the question as to the possibility of reducing this turnover by increasing a worker's degree of satisfaction on the job. Toward this end, the company instituted new policies in the areas of wage and salary administration and promotional opportunities. Approximately one and one-half years after these changes, Hulin (1968) administered the JDI to a sample similar to the previous one. During the ten months following the questionnaire administration, sixteen identifiable employees left. Again these leavers were matched with two stayers each and again it was found that termination decisions were significantly related to the degree of worker satisfaction. An equally important finding of this study arose when Hulin compared these JDI satisfaction scores with the results previously gathered in the same firm before the policy changes (Hulin, 1966). An analysis showed significantly higher levels of satisfaction with four of the five scales comprising the JDI for the group sampled after the policy changes. Simultaneously, the department's turnover rate during these two periods dropped from 30% during the first study period to 12% during the second.

Other predictive studies have yielded essentially the same results among life insurance agents (Weitz & Nuckols, 1955), male and female office workers (Mikes & Hulin, 1968) and retail store employees (Taylor & Weiss, 1969a & b). And Wild (1970), in a survey of recently terminated female electronics operatives, found that job dissatisfaction (caused mainly by the nature of the work) was the major reason cited for leaving.
Taking a somewhat different approach to the topic, Katzell (1968) and Dunnette, Arvey and Banas (1969) investigated the role of original expectations at the time of hire as they related to later job experiences and turnover. Studying student nurses and young executives, respectively, these two investigations attempted to measure subject expectation levels upon entry into the organization and compared these responses to later measures of the degree to which such expectations had actually been met on the job. While the Katzell study was predictive in design, Dunnette et al. solicited such measures in a retrospective fashion. In both studies, no significant differences were found to exist at the time of entry between the expectation levels of those who remained and those who later decided to leave. However, as time went on, significant differences did emerge; those who remained generally felt their original expectations were essentially met on the job, while those who left felt their expectations had not been met.

Also relevant to the role of met expectations in the participation decision are the field experiments of Macedonia (1969) and Weitz (1956). Both of these studies (described in greater detail below) found that where individuals were provided with a realistic picture of the job environment—including its difficulties—prior to employment, such subjects apparently adjusted their job expectations to more realistic levels. These new levels were then apparently more easily met by the work environment, resulting in reduced turnover.

Many studies, then, point to the importance of job satisfaction as a predictor of turnover. However, it appears that expressed intentions concerning future participation may be an even better predictor. In a large scale investigation of managerial personnel employed by a computer manufacturer,
Kraut (1970) consistently found significant correlations between expressed intent to stay and continued employee participation. Such findings were far stronger than relationships between expressed satisfaction and continued participation. And, in a study of turnover among Air Force pilots, Atchison and Lefferts (1972) found that the frequency with which individuals thought about leaving their job was very significantly related to rate of termination. Based on these preliminary findings, an argument can be made that an expressed intention to leave represents the next logical step after experienced dissatisfaction in the withdrawal process.

While considerable investigation has been carried out since the previous reviews concerning the relation of job satisfaction to turnover, only two studies have been found considering such satisfaction as it relates to absenteeism. Talacchi (1960), using the SRA Employee Inventory, found a significant inverse relation between job satisfaction and absenteeism among office workers. He did not, however, find such a relation concerning turnover. And Waters and Roach (1971), using the JDI with clerical workers, found significant inverse relations between job satisfaction and both turnover and absenteeism.

In summary, the recent evidence concerning the impact of job satisfaction on withdrawal (especially on turnover) is generally consistent with the findings as reviewed by Brayfield and Crockett (1955), Herzberg et al. (1957), and Vroom (1964). (These new findings are summarized in Table 1). It appears, however, that the major asset of these more recent findings is
not simply their confirming nature, but rather their increased methodological rigor over those studies reviewed previously. Most of the earlier studies contained several design weaknesses (see, for example, the discussion by Brayfield & Crockett) which the more recent studies have overcome to a significant degree. For example, 11 of the 14 new studies reviewed here were predictive in nature. In addition, several of the research instruments used in the more recent studies (e.g., the JDI) appear to be more rigorously designed in terms of validity, reliability, and norms. Thus, these newer studies go a long way in the direction of providing increased confidence in the importance of job satisfaction as a force in the decision to participate.

Specific Factors Related to Withdrawal

While consideration of the role of overall job satisfaction in the decision to participate is important, it tells us little about the roots of such satisfaction. Knowing that an employee is dissatisfied and about to leave does not help us understand why he is dissatisfied; nor does it help us determine what must be changed in an effort to retain him. For the answer to these critical questions, it is necessary to look more closely at the various factors of the work situation as they potentially relate to the propensity to withdraw.

We will begin our discussion with those factors that are generally organization-wide in their impact on employees and move toward those factors that are more unique to each individual. Some investigations are relevant to more than one factor and will be cited more than once in this review. In such cases, these studies will also appear in more than one of the accompanying tables.
Organization-Wide Factors

Organization-wide factors for purposes of this discussion can be defined as those organizational variables affecting the individual that are in large measure determined by persons or events external to the immediate work group. Under this rubric would fall such factors as pay and promotion policies, job security and organization size. The relation of each of these organization-wide variables to withdrawal will be analyzed separately.

Pay and promotion. In exchange for his time and energies, the organization offers the employee a compensation package that includes not only financial remuneration, but also opportunities for advancement and promotion to more meaningful, challenging positions. Such payoffs to the employee for effective performance include, in addition to salary, increases in formal power, authority and status within the organization. Where the presence of such factors may serve as incentives to the individual, their absence presumably can lead to dissatisfaction, absenteeism and termination.

There is no lack of empirical investigations into the relationships between such compensation and turnover and absenteeism. Nor is there much disagreement over the conclusion that low pay and lack of promotional opportunities can represent a primary stated cause for withdrawal (Friedlander & Walton, 1964; Hulin, 1968; Knowles, 1964; Patchen, 1960; Ronan, 1967; and Saleh, Lee & Prien, 1965). The remaining analytic question is how pay and promotion affect withdrawal.

One answer to this question may be found in expectancy/valence theory (Porter & Lawler, 1968; Vroom, 1964). Using such an approach, it appears that at least two factors would account for the effect of compensation on withdrawal. First, the amount of pay received (or the rapidity of promotion)
must be considered by the individual to be commensurate to his own level of input on the job. In other words, the rewards received must be considered to be equitable when compared to expended effort. In addition, under this theory, the individual must be convinced that continued participation will result in the future in more positively valent outcomes than any alternative behavior (Lawler, 1971). In this sense, using pay and promotion to motivate improved attendance (or continued employment) would only prove effective to the extent that the individual valued such compensation and felt that improved (or continued) participation would, in fact, lead to it. If the individual felt he would receive the same compensation irrespective of attendance, or if he felt he could secure similar compensation in another organization, then such compensation would probably not serve as an effective motivator.

A significant amount of research exists to support the first part of such a theory (i.e., the necessity of perceived equitable rewards), while no research to date has been found that tested the role of anticipated rewards on withdrawal. One of the earliest studies on the perceived equity of compensation was carried out by Patchen (1969) among oil refinery workers. The results of this study demonstrated that it was the perceived fairness of pay and promotion rather than simply their amount or rapidity that was the primary cause of absenteeism. While the magnitude of the rewards was important, the more significant factor influencing the decision to come to work was the amount of loyalty and obligation created by the employee's perception of fair treatment by the company.

In a study of turnover among Australian factory workers, Knowles (1964) found that failure on the part of such workers to attain their "expected"
wage was a better predictor of propensity to leave than was the amount of the wage itself. And Bassett (1967), in his study of turnover among exempt technical personnel, found that employees who consistently averaged higher pay increases terminated at roughly twice the rate as their counterparts averaging lower increases. While several factors could account for this, Bassett hypothesized from these findings that continually receiving high raises serves to create high expectations on the part of the employee which, if not substantially met in the future, tend to result in increased terminations.

Studies by Belin (1968) among clerical workers and by Grout (1979) among computer salesmen arrived at similar conclusions. Both studies found satisfaction with pay and promotion (i.e., the degree to which their expectations had been met in this regard) to be negatively associated with turnover. And Dunnette et al. (1969), in their survey of young managers, found turnover to be inversely related to met expectations concerning rate of promotion. However, they found satisfaction with pay to be unrelated to turnover. Finally, Telly et al. (1971) found that perceived inequity or met expectations concerning both pay and promotion among hourly production workers was not significantly related to turnover. They explained this finding, however, by noting that the jobs were unionized and afforded little opportunity for compensation to be associated with individual effort.

Company incentive programs aimed at reducing absenteeism and turnover can also be subsumed under the compensation factor. Two related experimental field studies have recently appeared which investigated the impact of such programs—and the degree of participation in their design—on absenteeism. In the first experiment, three autonomous work groups independently developed their own incentive plans to reward good attendance (Lawler & Hackman, 1969).
These plans were then imposed on other work groups by the company. Two additional groups served as control groups and received no treatment. A significant increase in attendance resulted only in those three groups who formulated their own plans. Three possible explanations for such findings were posited by the investigators: (1) participation caused more commitment to the plan; (2) participation resulted in increased knowledge concerning the plan; and (3) participation increased the employee's trust of the good intentions of management with respect to the plan.

In a followup study one year later by Scheflen, Levler and Eckman (1971), incentives were discontinued in two of the three original participative groups. It was found that attendance dropped below pretreatment levels in these two groups, while attendance remained high in the third group. Apparently, the removal of a plan mutually agreed to among the workers by higher management served to destroy the norm of good attendance established by the group.

These two studies clearly point to the fact that attention by management solely to the mechanical aspects of a pay plan may be insufficient to insure the success of the plan. Employee participation in the design and implementation of such a plan may indeed have a greater impact on its success than the mechanics of the plan itself. While these investigations studied incentives for attendance, the results have general application to the entire area of compensation. Participation in the development or administration of various pay and promotion programs may result in an increase in the perceived equity of the program, which, in turn, could lead to reduced tendencies toward withdrawal. It is important to note, however, that these two studies were the only rigorous investigations found in the recent literature that dealt with the impact of participation in decision-taking processes on
turnover or absenteeism. While theories of the benefits of participative management abound, it appears far more effort is needed to demonstrate empirically their real implications for withdrawal.

The existing evidence, then, tends to indicate that when an employee withdraws from the organization because he failed to receive a certain level of pay or a promotion, he does not do so only because of a perceived need or desire for the extra income or higher position. In addition, the perceived inequity of the action—that is, the failure of such action to meet his expectations—apparently often has significant impact on his decision. The employee can therefore be seen as maintaining his investment of time and effort in many cases only so long as he receives what he considers a fair return on that investment.

Job security. Job security traditionally has been regarded as the primary objective of the blue-collar worker. What, then, is the effect on turnover and absenteeism when this security is threatened? The evidence is scarce. In an analysis of exit interviews of 91 employees at various levels in the organizational hierarchy, Rona (1967) found that threatened job security was mentioned most often as the reason for leaving among shop workers. Office workers and administrative personnel, on the other hand, made no mention of security among their reasons. It can be inferred from these findings, although not corroborated by them, that a possible explanation for such terminations was the desire to attain other sources of employment and thus security before the impending or perceived impending layoff. Such shop workers in the past have been far more subject to layoffs than were clerical or managerial personnel.
The findings reported by Guess (1966) appear to be congruent with such a possible explanation. He studied two samples of blue collar workers matched along the dimensions of geographical area and type of work. One sample was drawn from a population of employees in several repair shops not due for closure, while the second sample was drawn from a population of employees in repair shops that were due for closure. (The employees were then to be laid off, not transferred.) It was found that during the period of the study, reported absences due to "sickness" for the second group were over twice that of the first and the duration of such absences was longer. Whether such absences can in fact be attributed primarily to illness or to providing opportunities for seeking employment elsewhere could not be ascertained from the available data. In either case, it does appear in this study that the threat of a layoff had significant effects on increases in absenteeism.

On the other hand, a recent study of absenteeism among male and female production employees by Hershey (1972) did not yield similar results. In his matched study of employees from four companies, Hershey found no significant differences in attendance between those who were scheduled for layoff (and so informed) and those who were to be retained. He explained such findings by suggesting that the employees had a strong desire to earn as much as possible prior to layoff and that new employment during the study period was easy to secure, thus eliminating the need to take time off for job searching.

It should be emphasized here that these findings relating threatened job security to withdrawal were only based on samples of blue collar workers.
It should be further noted that none of these studies dealt with employee attitudes toward job security. Such attitudinal data were collected, however, by Tayler and Weiss (1969a & b). In a predictive study of retail store employees, they used the Minnesota Satisfaction Questionnaire (MSQ) to investigate satisfaction-based causes for termination. A discriminant function using MSQ scores as predictors was developed on one group of employees and applied to a cross-validation group. All terminations, both avoidable and unavoidable, were included in this study under the argument that such a procedure provided a more stringent test of the actual relationship between net expectations and termination. Significant differences were found in satisfaction scores of perceived job security between those remaining and those who later left. Those who were dissatisfied with their degree of job security demonstrated a far higher propensity to leave.

**Organizational size.** Only one study has been uncovered that empirically relates organizational size (as distinct from sub-unit size) to withdrawal. Ingham (1971) found size of the organization to be highly correlated with absenteeism but weakly correlated with turnover. In his examination of eight British firms of varying size, Ingham further found through interviews that, with technology controlled for, (1) the work tasks in small firms were more varied and allowed for greater individual autonomy, and (2) there was greater opportunity for social interaction both vertically and horizontally in the smaller firms. Based on these findings, Ingham advanced the argument that employees were attracted to either large or small organizations for different reasons. Workers in the larger plants (which paid higher wages) were viewed as being more sensitive to the economic aspects of their employment and less concerned with non-economic factors. Employees of
smaller plants, on the other hand, appeared to be setting their acceptable wage level at a much lower level and, simultaneously, demanding significantly higher non-economic rewards. Thus, according to Ingham, a similar degree of congruence between workers' expectations and the organizational reward system can be found in both large and small organizations, though for different reasons. The higher wages of the larger firms tend to satisfy those employees who are more monetarily oriented and have opted to join such larger companies. Similarly, the increased opportunity for more effective interpersonal interaction provided by the smaller firms is viewed as satisfying the types of needs of those who have chosen to work for such firms. Thus, according to Ingham, turnover rates would be expected to be about equal because of similar levels of net expectations.

On the other hand, Ingham argues that absenteeism is a function of the degree of employee identification with the organization. Following this approach, workers in large and small firms would have roughly the same rate of turnover because their differing expectations would be respectively met, but the greater degree of impersonality brought on by the increased bureaucratization of the larger firms would reduce the employee's identification with that type of firm. The result would be increased absenteeism in the larger organizations. Unfortunately, sufficient evidence is not presented in Ingham's own study to demonstrate the validity of such a hypothesis. Thus, while the theoretical explanation goes far in contributing thought-provoking insights into the withdrawal process, such more empirical
work is necessary before confidence in the hypothesis as a predictive device could be achieved.

The results of this study, along with the other investigations relating organizational environment factors to withdrawal, are summarized in Table 2.

Summary. Compensation, primarily in the forms of pay and promotion, appears to represent a significant determinant in the termination decision. While several of the recent studies reviewed above simply confirmed the conclusion of previous reviews that compensation was in fact a significant factor in turnover, other studies investigated the reasons behind such a relationship. These studies fairly consistently pointed out the importance of perceived equity and net expectations as important forces in such decisions. The size of the pay raise or the rate of promotion, while important in and of themselves, are in addition, weighed by the employee in the light of his expectations, given his level of self-perceived contribution. The resulting determination of his degree of satisfaction or dissatisfaction then apparently inputs into his decision to remain or to search for preferable job alternatives.

Much less can be said about the impact of job security. Three studies strongly suggest that threatened job security leads to increased withdrawal among blue-collar workers, while one study (of absenteeism) found no such relation. It appears here that more data cutting across functional areas and levels of various organizations are necessary to provide a clearer picture of the importance of job security as a factor influencing the participation decision.

Finally, the results of one study indicated that turnover rates appear to be fairly constant among organizations of varying sizes, while absenteeism is significantly higher in larger firms than in smaller ones. Some theoretical
considerations were offered to explain this variance, but were not effectively substantiated by empirical data.

Immediate Work Environment Factors

A second set of factors instrumental in the decision to withdraw center around the immediate work situation in which the employee finds himself. In previous reviews, Brayfield and Crockett (1955) found that negative employee attitudes toward their job context (especially at the lower levels) were significantly related to absenteeism and, to a lesser extent, to turnover. And Herzberg et al. (1957) found that such factors as the nature of the social work group were of particular importance in the decision to participate.

Since these reviews were published, significant research has been carried out which tends to supplement existing knowledge concerning the importance of immediate work environment factors for withdrawal. Factors to be considered here include: (1) supervisory style; (2) work unit size; and (3) the nature of peer group interaction.

**Supervisory style.** Since the importance of supervisory style on employee behavior was first brought into focus by the Michigan and Ohio State leadership studies (Katz et al., 1950; Katz et al., 1951; Stogdill & Coons, 1957), research on this subject has continued to grow. Several recent studies address themselves specifically to the relationship between the nature of supervision and turnover and absenteeism. The available evidence indicates that supervisory style, concern and interest vis-à-vis the employee do have an impact up to a point on the employee's decision to withdraw from the work environment.
Fleishman and Harris (1962) studied production workers in a truck manufacturing plant. Fifty-seven production foremen were selected for the study along with a random sample of workers from each of their work groups. The workers described their foreman's behavior by means of the Supervisory Behavior Description Questionnaire (SBDQ) (Fleishman, 1957a), while turnover was measured by the number voluntarily leaving over the previous 11-month period. Their findings demonstrated that turnover (and grievances) were highest for those work groups whose foremen were rated low in consideration, regardless of the degree of structuring behavior shown. However, this relationship was found to be curvilinear, not linear. Critical levels appeared beyond which increased consideration or decreased structure had no effect on turnover rates. Fleishman and Harris interpreted these findings as demonstrating that turnover may reflect an escape from a problem situation which cannot be resolved in the absence of mutual trust and two-way communication between foremen and workers.

Some reinforcement for these findings came in a later study by Skinner (1969). Studying 21 foremen and 64 workers in their departments, and using the SBDQ as well as the Leadership Opinion Questionnaire (Fleishman, 1957b, 1968), Skinner also found a curvilinear relationship between consideration and turnover. Up to a point, higher supervisory consideration was associated with lower turnover; beyond this point, little relation was detected between the two factors. The results were seen by Skinner as a direct confirmation of Fleishman and Harris' (1962) earlier findings.

The centrality of supervisory consideration as a factor in turnover has also been demonstrated by Saleh et al. (1965) in their survey of recently
terminated hospital nurses. Using an *ex post facto* study design, they found a lack of consideration to be the second most-cited reason for termination (after the nature of the work itself). And, in a study of male hourly production workers who quit within the first year of employment, Ley (1966) found a highly significant correlation ($r = .76$) between turnover and authoritarian ratings of employees' foremen.

In a more rigorous, predictive study among clerical workers, Hulin (1968) also found significant differences between stayers and leavers with respect to satisfaction with supervisory relations. Taylor and Weiss (1969a & b), however, took issue with Hulin in their study of retail store employees. In their sample, they found no significant relationship between turnover and satisfaction with the nature of supervision.

Finally, in an effort to test the applicability of Adam's theory of inequity to turnover, Telly, French and Scott (1971) surveyed a large sample of hourly production workers drawn at random from shops rated either high or low in turnover (based on previous turnover rates). The subjects were administered a Likert-type questionnaire designed to measure perceived inequities among various factors in the work environment. It was found that "high turnover" groups perceived significantly greater inequity with respect to the treatment they received from both supervisors and leadmen. Telly et al. speculated that when an employee perceives inequitable treatment, he may feel frustrated and will not contribute his best efforts toward the primary goals of the organization; if this perceived inequity becomes excessive, he will actually separate himself from the organization.

Several investigations have been published that looked at more specific facets of supervisory behavior as they relate to withdrawal. One previously
reviewed study of particular merit, carried out by Ross and Zander (1957), investigated the effects of recognition and feedback on turnover. Questionnaires were administered to a large sample of female skilled workers employed in 48 sections of a major corporation. Questions concentrated on the strength of certain needs as well as on the perceived extent to which the needs were met by the employment situation. From personal data, all subjects were assigned to one of six categories depending upon their need to work in an attempt to control for the effects of monetary considerations on withdrawal. During the next four months, 196 of the subjects resigned. Two control subjects who did not resign were systematically selected from the appropriate category to match each resigned employee. The results showed that no significant differences existed between those who remained and those who later terminated concerning their perceived need strength for recognition and feedback on their work. However, significant differences were found to exist between the two groups as to the perceived extent to which these needs were actually met. It was concluded by Ross and Zander that receiving sufficient recognition and feedback to meet expectations represented a significant factor in the employee's decision to participate.

Similar findings have been shown in a more recent study of turnover among engineers. This investigation involved matching a small sample of highly thought of engineers who voluntarily quit with a corresponding sample of remaining engineers who reported to the same managers (Behavioral Research Service, 1964b). Attitudinal measures were taken prior to termination. Two important findings came out of this study. Those who left had much less favorable attitudes with respect to the amount of feedback they received from their supervisor to improve their present or future performance. Their
expectations in this regard were substantially unmet. Secondly, major disagreements existed among those who eventually left between themselves and their supervisors over job goals. While a larger sample size would have been desirable here, the tendency does exist, according to these findings, for the supervisor to be able to exert at least some influence over the decision to leave through improved mutual understanding with the worker as to job requirements and methods for performance improvement. Such a conclusion is reinforced by a similar study in the same company (Behavioral Research Service, 1964a). Although this latter investigation did not study turnover, it did find that when a company-sponsored work planning and review program was used in work groups and departments, improvements in attitudes resulted in exactly the same two areas cited above as reasons for terminating.

Finally, one study has been found which attempted to relate the amount of managerial experience to turnover. In an investigation of white-collar personnel in a large manufacturing company, Bassett (1967) found that turnover was substantially higher among employees whose supervisors had less than five years of managerial experience. Among employees who themselves had less than five years of tenure with the company, the tendency to quit was roughly three times as high if they worked under a supervisor with less than five years experience than if they worked under one with more than five years experience. Bassett concluded from this finding that experienced managers demonstrate greater capacity "to hold young talent in the company [p. 6]." It should be noted here that years of experience as a manager was the only characteristic of supervisors studied; the nature of that supervision was not investigated. It is unfortunate that such data were
dichotomized here instead of presented in continuos form so analyses of a more informative nature could be carried out. The simple dichotomy and the arbitrary selection of "5 years" as the cutoff point raise questions not only as to the meaningfulness of the findings but also as to their usefulness for purposes of prediction. Even so, Bassett has raised an issue that appears particularly relevant to turnover among newly-hired employees. Future investigations may find that managerial experience must be considered by a company in determining where to place new employees if turnover among such personnel is to be reduced.

In summary, several factors should be noted about these studies of the influence of supervision on the withdrawal decision. To begin with, all studies investigated turnover, so no conclusions can be reached concerning the effect of supervisory behavior or style on absenteeism. This is surprising considering the widely-accepted notion of the centrality of the supervisor as a factor in absenteeism. Secondly, those studies that compared attitudinal measures with turnover consistently found that turnover was related to employee perceptions that his expectations concerning some aspect of supervision were not met. Thirdly, it is felt that more rigorous research methods (e.g., greater use of independent measurements) are in order here to reduce the possible influence of spurious variables on the results. And, similarly, more studies of a predictive nature (such as the studies by Hulin, 1968, & Ross & Zander, 1957) would add greatly to the confidence with which these results are viewed. The singular use of post-termination questionnaires are open to a wide range of possible errors which predictive studies could substantially reduce.
Work unit size. The literature concerning the relationship between the size of the work group and turnover and absenteeism was reviewed several years ago (Porter & Lawler, 1965). While the reader is referred to that source for details of the findings, the major points will be summarized briefly here since they are directly relevant to the overall picture of the withdrawal process.

Twelve studies were reviewed dealing with the impact of unit size on absenteeism. In ten of the twelve studies, a positive linear relationship was found between increased absenteeism and increases in unit size (Acton Society Trust, 1953; Baumgartel & Sobol, 1959; Hewitt & Parfitt, 1953; Indik & Seashore, 1961; Kerr, Koppelmeier & Sullivan, 1951; Metzner & Mann, 1953; Revans, 1958). Such findings appeared in factories, departments and primary work groups. However, all of the above results were demonstrated only among blue-collar workers. The only study that investigated both blue and white-collar workers' absences found no relationship between unit size and absenteeism among white-collar employees (Metzner & Mann, 1953). The final study reviewed was carried out by Argyle, Gardner and Cioffi (1958). They investigated work groups varying in size from "one" to "twenty plus" and found a curvilinear relationship between unit size and absenteeism. The lowest absence rates were found to occur in the middle-sized groups.

Four studies were also reviewed by Porter and Lawler that investigated the relationship between unit size and turnover, but only among blue-collar workers. Three of the four studies found that turnover was greater in large units than in small ones (Indik & Seashore, 1961; Kerr, Koppelmeier & Sullivan, 1951; Mandell, 1956), while the fourth found no such relationship (Argyle, Gardner & Cioffi, 1958).
No new studies relating work unit size to withdrawal have been found that were published since the 1965 review. A clear tendency emerges from that analysis for increases in the size of the work group to be positively related to withdrawal of blue-collar workers at least up to a point. However, no such relationship has yet been conclusively demonstrated among white-collar workers. A possible explanation for the trend in findings among blue-collar employees could be that increases in unit size result in increased dissatisfaction with the available intrinsic rewards. For example, increases in size could result in lower group cohesiveness, higher task specialization and poorer communications. Such results could make it more difficult to fulfill one's expectations, resulting in increased dissatisfaction that would lead to increased tendencies to withdraw. We would expect such an explanation to be more applicable to blue-collar than to white-collar employees since, on the whole, white-collar employees have more autonomy in their jobs and are usually in a better position to discover alternate avenues to intrinsic rewards.

Peer group interaction. One of the most potent forces in the socialization process within an organization is the interactive dynamics between the individual and his peers. Peer group interaction can provide support and reinforcement necessary for adjustment and attachment to the work environment. Conversely, failure to secure such support may result in alienation from the workplace. Because of the potential importance of such a factor, it should prove useful to investigate the effects of such interaction on the employee's decision to remain with or leave his employing organization.

In a study of turnover among management trainees, Evan (1963) found that avoidable terminations were significantly lower when a trainee was
assigned to a department with two or more other trainees than when he was
assigned to a department either alone or with only one other trainee. Evan
speculated from these findings that a new employee (trainee) who has the
substantive support of other new employees will be better able to contend
with the stresses and ambiguities created by a new job than he would without
such support.

The importance of co-worker support in retention has also been pointed
out by Farris (1971). In a predictive study among scientists and engineers,
he found that both perceived low inclusion in the organization and perceived
low group cohesiveness were somewhat effective predictors of employee turn-
over. And, Telly, French and Scott (1971), in their study of production

work

Insert Table 3 About Here

workers, found that perceived equity of the social aspects of their jobs
was significantly and inversely related to turnover. Apparently, the workers
were more inclined to stay when their expectations in their relations with
coworkers were substantially met. Findings of a similar nature were also
demonstrated by Hulin (1968). In his study of clerical workers, Hulin found
that turnover was significantly and negatively related to satisfaction in
the area of co-worker relations.

Also using the Job Descriptive Index, Waters and Roach (1971) studied
both forms of withdrawal among non-supervisory female clerical workers.
Their findings indicated that while co-worker satisfaction was significantly
and inversely related to absenteeism, it was unrelated to turnover. Here,
using the same instrument as Hulin on presumably similar populations quite
different results were obtained concerning turnover. Similarly, Taylor and Weiss (1969a & b) also found satisfaction with co-worker relations was unrelated to turnover in his sample of retail store employees. Thus, while the majority of investigations showed a strong positive relationship between satisfaction with co-worker relations and propensity to remain, these findings do not go unchallenged. It appears that, once again, satisfaction with a particular factor does not have equivalent degrees of impact on all types of employee groups with respect to the decision to participate.

Summary. The findings, summarized in Table 3, provide a relatively clear picture of the relation of at least three work environment factors to the employee’s decision to participate or withdraw. Several studies have pointed to the importance of supervisory style as a major factor in turnover. Apparently, when one’s expectations concerning what the nature of supervision should be like remain substantially unmet, his propensity to leave increases. No studies, however, have been found relating supervisory style to absenteeism.

The size of the working unit has been shown to be related to both turnover and absenteeism among blue-collar workers; however, insufficient evidence is available to draw conclusions concerning such influence on managerial or clerical personnel.

Finally, most of the research in the area of co-worker satisfaction demonstrates the potential importance of such satisfaction in retention. Such findings, however, are not universal; some studies show such satisfaction to be completely unrelated to retention for certain populations. A possible explanation for such divergent findings is that some people may have a lower need for affiliation than others and may place less importance on satisfactory co-worker relations. Alternatively, it is possible that
some organizational settings provide for a greater degree of peer group interaction, thereby increasing the probability that one's level of expectations would be met in this area. In either event, co-worker satisfaction cannot be overlooked as a possible cause of attrition.

Job Content Factors

It has long been thought that the duties and activities required for the successful performance of an individual's particular job can have a significant impact on his decision to remain with and participate in the employing organization. Such job requirements are presumed to represent for the individual either a vehicle for personal fulfillment and satisfaction or a continual source of frustration, internal conflict and dissatisfaction. In recent years, several new investigations have appeared which provide added clarity to the role of such job-related factors in the withdrawal process. Four such factors will be discussed here: (1) the general nature of the work; (2) job stress and repetitiveness; (3) job autonomy and responsibility; and (4) role ambiguity and conflict.

Nature of work. Several investigations studied turnover and absenteeism as they are affected by the nature of the job itself. We are concerned in this section primarily with studies concentrating on satisfaction with the overall nature of the assigned tasks. Investigations of such specific facets of work as job autonomy or stress will be dealt with in later subsections.

In a survey of recently terminated nurses, Saleh et al. (1965) found that the single most frequently cited reason for avoidable termination was dissatisfaction with the nature of the job itself. Included under such a category were dislike of hours, too heavy a workload, lack of opportunity to use abilities and dislike of actual work performed.
Dunnette, Arvey and Banas (1969) also studied the relation between turnover and met expectations with respect to task requirements. They mailed questionnaires to a large sample of low tenured managers employed by a major corporation and to an equally large sample of low tenured managers who had recently quit the same organization. Subjects were asked to recall their expectations at the time they left college and began work, what their first jobs with the company were like and what their present jobs were like. The information gathered was thus of a retrospective nature, not a predictive one. Based on these data, it was found that both groups recalled being highly optimistic concerning their job prospects at the time of entry into the organization. The level of expectations of both groups was essentially the same. The first job assignment, however, brought disappointment and dissatisfaction to both groups in four areas that were considered important by the subjects: (1) the use of their own abilities; (2) a sense of accomplishment; (3) interesting work; and (4) an opportunity to advance. But while the failure of the first job assignments to meet individual expectations existed for both groups initially, significant differences arose with later assignments. The employees who subsequently remained with the organization perceived themselves as moving into jobs more closely aligned with their expectations, while those who eventually left moved into jobs which were perceived as increasing the disparity between individual expectations and the realities of the job. Thus, again, failure to meet one's expectations appears to be a major contributing variable in the decision to withdraw.

In an effort to increase the accuracy of prediction of future turnover, Dunnette et al. also constructed and tested a Motivation Index on the sample.
Designed within an expectancy framework, this Index measured employee performance-reward expectancies, instrumentalities and valences on the job and combined such factors in a multiplicative relationship in an attempt to derive a measure of motivational force. Using this Index on their managerial sample, Dunnette et al. were able to successfully differentiate stayers from leavers, although no significance levels were reported. While it is difficult to evaluate the importance of these findings due to the retrospective data collection procedure, the use of such an instrument in the study of turnover appears to have potential benefits that should not be overlooked in future research.

Similar findings concerning the impact of the job itself on the participation decision have also been demonstrated elsewhere, without the use of retrospective techniques. Significant relations between turnover and dissatisfaction with the nature of work have been found among female clerical workers (Waters & Roach, 1971), female manual workers (Wild, 1970), male production workers (Telly et al., 1971) and computer salesmen (Kraut, 1970). One study, however, among female clerical workers, failed to find such a relationship (Hulin, 1968). Furthermore, such dissatisfaction has also been shown to be significantly related to increased absenteeism among female clerks (Waters & Roach, 1971). Finally, and more specifically, turnover has been found to be inversely related to the perceived opportunity to fully utilize one's abilities on the job (Taylor & Weiss, 1969a & b), and to the perceived importance of the work performed (Katzell, 1968; Taylor & Weiss, 1969a & b).
Job stress and repetitiveness. The required technology of a job often imposes severe constraints on personal actions and activities at work. Pressures for increased production or efficiency may result in increased fractionation or routinization of certain jobs. This repetitiveness of task may then contribute, along with other factors, to increased job stress as perceived by the position holder. While efficiency or reduced operating costs may be the goal of such actions as the routinization of job technology, such a goal may at times increase costs through rises in absenteeism and turnover. Several studies point to such a possibility.

Guest (1955), in a followup study of the classical investigations by Walker and Guest (1952), interviewed eighteen workers who quit their assembly line jobs after 12 to 15 years on the job. Despite the small number in the sample, a definite trend emerged in which the routine and fractionated nature of the required job technology was seen as the primary factor prompting termination from the organization. Unfortunately, from the data presented, it is not possible to ascertain whether those who remained on the assembly line had equally negative feelings toward their jobs. Guest's (1955) contention that highly routine, fractionated jobs can lead to withdrawal has received some later support from Wild (1970). He administered forced-choice questionnaires combined with unstructured interviews to female manual workers in a British electronics firm who recently terminated. The reason most often mentioned for their termination was overall dissatisfaction with the highly rationalized nature of the work. This reason was expressed by 36% of the sample. Again, however, no control group was sampled. This lack of adequate controls was overcome in the predictive study by Taylor and Weiss (1969a & b) among discount store employees. Here it was found that variety of work was significantly and negatively related to turnover.
A somewhat different conclusion was arrived at by Kilbridge (1961). Studying employees in various positions of two manufacturing firms, Kilbridge found no clear relationship between employee turnover and the repetitive nature of the job. However, absenteeism was found to be somewhat higher on the more repetitive jobs. On the basis of these results, Kilbridge advanced the notion that attempting to explain withdrawal in terms of the repetitiveness of the job represents too simple an explanation for an intricate relationship. He argued that such job conditions as group pressures and opportunities to earn incentive pay seem to have a greater influence (at least in the two companies under study) on withdrawal than task repetitiveness. Such an argument is in accord with the position advanced by Hulin and Blood (1968) that merely enlarging or enriching jobs will not necessarily result in reduced alienation and withdrawal from work.

Investigating the relationship between job stress and withdrawal, Melbin (1961) found that both turnover and absenteeism among psychiatric aides increased as a function of the frequency of job reassignment. According to Melbin, continual changes in assignment led to increased frustration and pressures to perform in unfamiliar situations. Katzell (1968), however, found that turnover among nurses was unrelated to the level of stress on the job. Such divergent findings here could result from differing measurement techniques or from differing definitions as to what actually constitutes job stress. Katzell used a post-termination questionnaire and asked respondents for perceived degree of experienced stress. Melbin, on the other hand, used personnel documents of the employing hospital and only inferred that continual reassignment would cause increased stress.
The factor of job stress was also investigated by Lefkowitz and Katz (1969) in their comparative study of differences between reasons cited for termination during exit interviews and those gathered through post-termination questionnaires. Questionnaires were administered to 80 recently terminated employees from a medium-sized factory. The results of these questionnaires were then compared against company records of exit interviews on these subjects. Both avoidable and unavoidable turnover were studied.

It was found that the most frequently cited reason during the exit interview for leaving was "needed at home." This reason was mentioned 18 times while "production stress" was only mentioned three times. However, the results of the post-termination questionnaire cited "production stress" most frequently as the major cause of termination. This reason accounted for 12 of the 30 responses for avoidable and voluntary turnover, while the second most cited reason was problems with peers and supervisors.

Lefkowitz and Katz concluded from these findings that, for various reasons, terminating employees tend to "clam up" during exit interviews and often do not reveal their true reasons for leaving. They therefore argue that more accurate information can be obtained through follow-up questionnaires, presumably administered through sources outside the company. While their point concerning the accuracy of exit interview data is well taken, it can also be argued that the time lapse between the employee's actual work experience that led up to termination and his completion of the post-termination questionnaire may also allow for distortions to occur as to his real reasons for leaving.
Job autonomy and responsibility. In addition to his findings concerning the relationship between job stress and turnover, Guest (1955; also Walker & Guest, 1952) also found turnover to be related to a perceived lack of autonomy over one's work. Since this finding, several other studies have appeared which attempted to clarify this relationship.

Ross and Zander (1957) found, in their matched-sample study of female clerical workers, that those who remained and those who later left both had essentially the same expectations concerning the degree of autonomy that would be present in their jobs. However, those who later left reported significantly lower levels of experienced satisfaction of these expectations. Thus, where expectations were not substantially met regarding the degree of job autonomy, the propensity to leave increased.

Turner and Lawrence (1965) investigated the relationship between various task attributes and absenteeism among workers employed in several different technologies. Using their Requisite Task Attribute Index as a measure primarily of the amount of autonomy and responsibility employees found in their job, they found that workers scoring low on the Index also demonstrated poor attendance. It was concluded from these findings that attendance, as a direct behavioral measurement of worker involvement in his work, would vary positively with increases in autonomy and responsibility on the job.

Building on the work of Turner and Lawrence and others, Hackman and Lawler (1971) surveyed lower level telephone company employees in an effort to further clarify the impact of various job dimensions on absenteeism. The primary independent variables used in this study were: (1) strength of desire for the satisfaction of higher order needs (e.g., feelings of accomplishment, personal growth, etc.) and (2) description of jobs on four
core dimensions (variety, autonomy, feedback and task identity). It was found that absenteeism was significantly and inversely related to both autonomy and task identity but not to variety or feedback. In addition, strong support was shown for the potential moderating effect of higher order need strengths on absenteeism. Employees who strongly sought satisfaction of higher order needs demonstrated lower absence rates when working on jobs rated high on the four job dimensions; no such relation was found for subjects rated low on such need strengths. Apparently, where the job provides a means by which the employees desireous of higher order need satisfaction can work towards the satisfaction of such needs, their resulting satisfaction with the job can be manifested through increased attendance.

Finally, two additional predictive studies among clerical workers and retail store employees have shown significant positive relationships between satisfaction with one’s perceived level of responsibility and autonomy and propensity to remain (Taylor & Weiss, 1969a & b; Waters & Roach, 1971).

Role ambiguity and conflict. Kahn et al. (1964) have suggested three conditions which can lead to role ambiguity: rapid organizational change, organizational complexity and managerial philosophies concerning communications. When such ambiguity remains for prolonged periods of time, a feeling of futility and general job dissatisfaction may result. Similarly, when role expectations on a job are conflicting, the individual will usually experience increased stress and reduced job satisfaction. According to this model, the typical end result of such role conflict and, to a lesser extent role ambiguity, can often be withdrawal, psychologically if not physically. Based on this thinking, it appears useful to assess the available research as it applies to the relationship of role clarity to withdrawal. All of the
data deal with turnover so, again, no conclusions can be reached concerning absenteeism.

In an early investigation, Weitz (1956) tested the hypothesis that job applicants who were provided with a clear picture of their jobs prior to employment would be more likely to remain with the organization than those who did not receive this information. Using a controlled experimental design, Weitz chose for his sample 103 district sales offices of a major insurance company. One-half of the offices served as the experimental group, while the other half served as the control. Each new job applicant in the experimental group received a booklet describing in detail the insurance agent's tasks and functions; applicants in the control group received no such booklet. During the period under study, 19% of those who were hired in the experimental group terminated, while 27% terminated in the control group. Weitz concluded from these results that prior knowledge and understanding of the role requirements on a job are a significant factor in continued participation.

Similar findings were reported by Macedonia (1969). Among a sample of applicants already accepted for admission into a college-level military academy, Macedonia sent a brochure to the subjects in the experimental group describing the academy's environment as well as what would be expected of the applicants should they decide to attend. Such information was not sent to subjects in the control group. Results indicated that a significantly larger proportion of the experimental group accepted the school's offer to attend. In addition, it was also found that a significantly larger number in the experimental group survived training and remained at the school beyond the first year. Macedonia concluded from these findings that
realistic role expectations were a key to reduced turnover among the subjects. When the subjects were better informed of what was before them, they were in a better position to judge the desirability of position acceptance in the first place. And, once accepted, they were better able to cope with an environment about which they had increased knowledge.

In a questionnaire survey of 156 staff nurses, Lyons (1971) found that perceived role clarity was negatively related to voluntary turnover, propensity to leave and job tension and positively related to work satisfaction. While the correlations were nonsignificant for nurses classified as low on a need-for-clarity index, such correlations were significantly higher for nurses with a high need for clarity. Lyons concluded from these findings that certain individuals have a higher tolerance for ambiguity in their job and that such persons are little affected by unclear roles. On the other hand, individuals less tolerant of role ambiguity tend to quit at a higher rate if their roles are left relatively unspecified.

All three of these studies represent excellent research in terms of methodology. While more research is deemed desirable here, the three investigations when taken together are clear in their results. Prior information concerning the nature of the job can lead to more realistic expectations on the part of many new employees as to what type of job environment they are entering. Such prior knowledge can allow the job applicant to know what is to be expected of him if he joins as well as what types of rewards are possible in exchange for his participation. Thus, we would expect some individuals to conclude prior to employment that the rewards offered by the organization did not justify the effort and to decide not to join in the first place. Those who did accept employment with such
prior knowledge, on the other hand, would have a more accurate picture of the required efforts and possible rewards, resulting in a greater degree of congruence between individual role and reward expectations and later job experiences. Since rewards would be perceived here as being far more equitable with the employee's adjusted (and presumably more realistic) expectations, turnover due to unmet expectations should tend to diminish.

Summary. Some fairly consistent results can be derived, then, from an analysis of the available literature concerning the impact on withdrawal of role clarity and particular aspects of the nature of the job. These results are summarized in Table 4.

In general, turnover has been found to be positively related to dissatisfaction with the overall nature of the job among blue-collar and clerical workers. Insufficient evidence is available to draw any such conclusions concerning absenteeism, but initial investigations point to a similar relationship. More specifically, the available data tend to indicate that both absenteeism and turnover are positively associated with job stress and repetitiveness, although such a conclusion may represent an oversimplification of the nature of the relationship (see, for example, Hulin & Blood, 1968). Finally, a strong positive relation has been consistently found between both forms of withdrawal and a perceived lack of sufficient job autonomy or responsibility.

The above conclusions relate only to clerical and blue-collar employees. Insufficient data are available to draw any such conclusions concerning the impact of the job itself on managerial withdrawal. While two studies (Dunnette et al., 1969; Kraut, 1970) indicate that dissatisfaction with the nature of work is positively related to turnover among white-collar workers,
it is clear that more investigation among such samples is necessary before firm generalizations can be made.

From a methodological standpoint, it should be noted that a few of the studies utilized data collected after termination and in some cases no comparative attitudinal data were sought for those who chose not to withdraw. Thus, a finding that a significant portion of those who terminated saw their jobs as having a high degree of stress may lose importance if it is also found that those who remained also perceived high stress. This problem of lack of suitable controls is not confined to job content factors; unfortunately, it can be found throughout much of the research literature on withdrawal.

The degree of role clarity on the part of the individual can apparently affect turnover in two ways. First, an accurate picture of the actual tasks required by the organization can function to select out prior to employment those who do not feel the rewards offered justify such tasks. And, secondly, accurate role perceptions can serve to adjust the expectations of those already employed to more realistic levels as to what is expected of them in terms of performance. The resulting increased congruence between expectations and actual experience can apparently serve to increase satisfaction and resulting tenure. No conclusions can be drawn concerning the effect of role clarity on absenteeism due to a lack of investigations on the subject.
Personal Factors

Factors unique to the individual also appear to have a significant impact on the problems of turnover and absenteeism. Such factors include: (1) age, (2) tenure with the organization, (3) similarity of job and vocational interest, (4) personality characteristics, and (5) family considerations. While often overlooked by investigators, the inclusion of such items are central to developing a comprehensive model explaining the dynamics of work participation.

Age. Existing empirical evidence generally agrees that there is a strong negative relationship between increases in age and turnover (Bassett, 1967; Farris, 1971; Fleishman & Berniger, 1960; Ley, 1966; Minor, 1958; Robinson, 1972; and Stone & Athelstan, 1969). One study, however, found such a relationship in women but not in men (Shott, Albright & Glennon, 1963). Also, this relationship was found to be reversed in another study for employees during training periods (Downs, 1967); employee turnover among new trainees in two English public service organizations was found to be higher in all groups over thirty-five years old. After six months with the organization, however, older recruits began showing a lower turnover rate than their younger colleagues. Several interpretations for Downs' findings exist on the conjectural level, including the possibility that older workers find it more difficult to adjust to new job requirements but, once adjusted, are more likely to remain on the job. Such an interpretation, however, has not been subjected to adequate empirical investigation.

While turnover generally appears to be inversely associated with age, absenteeism may well be directly related to it, although such relationships are probably weak. De la Mare and Sergean (1961), studying English industrial workers, and Cooper and Payne (1965), studying English
construction workers, both found increases in age to be positively related to not only the frequency of absences but also their duration. However, Naylor and Vincent (1959) found absenteeism among female clerical workers to be unrelated to age.

**Length of service.** Closely associated with age is tenure with an organization and, not surprisingly, many corresponding results emerged. In a study of turnover among workers in an Australian manufacturing concern, Knowles (1964) found that length of service on an employee's previous job represented a highly accurate predictor of the likelihood of his remaining on his present job. Also, Shott, Albright and Glennon (1963) found that clerical workers who had long tenure with their present employer also worked at least 10 months for their previous employer. Similar findings have also been demonstrated by Fleishman and Berniger (1960) and by Robinson (1972). Such findings reinforce the traditional "job hopper" phenomenon so common in the personnel manager's repertoire of evaluative employment tools.

The implications of tenure for absenteeism are somewhat less clear. Hill and Trist (1955) studied absenteeism among employees during their first four years of service and found that "sanctioned" absences increased slightly, while "unсанctioned" absences first increased, then tapered off slightly during the four years. Fluctuations in the rate of total absences (both sanctioned and unsanctioned) over time was, however, minimal. Hill and Trist hypothesized that such findings indicate that those employees who elect to remain with the organization discover legitimate (sanctioned) means for temporarily withdrawing from the pressures of organizational stress so as not to endanger their position. Nevertheless, such findings are probably of little value in analyzing patterns of absenteeism over a
man's tenure since four years represents a relatively small period of time when compared to someone's total working career.

Baumgartel and Sobol (1959) attempted to discover important trends in the relationship between tenure and absenteeism with the two variables of sex and "collar" held constant. Age was not held constant, however. Using a large sample of airline employees, they found that white-collar men and women and blue-collar women increased in absenteeism with length of service, while increased tenure among blue-collar men was associated with lower absenteeism. Several possible (and somewhat conflicting) hypotheses were offered to explain these findings but no firm conclusion could be drawn.

**Similarity of job and vocational interest.** In a previous review, Schuh (1967) pointed to vocational interest inventories as being somewhat predictive of turnover. He further hypothesized that such inventories may be even better predictors than evidence now indicates because of the apparent failure, in many cases, to use proper statistical techniques in analyses. The most important implication of Schuh's findings, though, is that a propensity to leave may possibly be accurately predicted before employment through the use of such interest inventories. Determining such predictions prior to employment represents a significant advantage to the organization over measuring such factors after employment, as is the case with most of the other predictors of turnover.

Unfortunately, while empirically sound interest inventories have existed for some time, there is a definite paucity of recent research relating such inventories to turnover and absenteeism. Only three relatively recent studies using interest inventories to predict turnover have been found. No studies have been found concerning absenteeism.
Furguson (1958) and Boyd (1961) both investigated the predictive value of the Strong Vocational Interest Blank (SVIB) for indicating potential turnover among white-collar workers. Using a large sample of life insurance salesmen, Furguson found no difference between termination rates among those who rated high on the "successful salesman" interests on the SVIR and those who did not. However, when scores were analyzed for only those salesmen rated average or above average in performance by the company, it was found that those with SVIR interests of successful salesmen terminated less frequently than those without. Furguson hypothesized from these findings that when the performance differential is equalized, the interests differential becomes paramount. Thus, the individual who attained a satisfactory matching of his interest to be a good salesman with his demonstrated superior sales performance was more likely to remain.

Also using the SVIB, Boyd (1961) studied engineers in one organization and found that those engineers who remained longer scored higher on the inventory on mechanical and technical interests and on artistic and literary interests, while scoring lower on preference for repetitive detail. In addition, those who remained longer clustered around the midpoint on the competitive-persuasive activities scale. While the implications of such findings are not thoroughly discussed by the investigator, it does appear that such scores are not totally incompatible with the engineer's job requirements; it is possible that many of the vocational interests and expectations of those who stayed were in large part met by the organization. A more obvious example of the implications for tenure of congruence between interests and job is provided by Mayeske (1964). Using the Kuder Preference Record in a study of 125 foresters, he found that turnover was significantly and inversely related to preference ratings for outdoor activities.
None of the three studies cited above represents a particularly rigorous design. Further, all three studied managerial or professional employees so no conclusions can be drawn concerning clerical or blue-collar workers. In view of the magnitude of the potential benefits to be derived from such knowledge, it is most surprising that far more well-designed studies have not been carried out. Given these limitations, it can be hypothesized from the findings that the propensity of an individual to remain would increase with increases in the similarity of task assignments and interests. Again, the employee is seen entering the organization with certain expectations concerning what he wants out of a job. The more such expectations can be met, the more probable it becomes that he will choose to remain.

**Personality characteristics.** Personal factors in addition to interests also appear to have a direct impact on turnover and absenteeism. Sinha (1963) discovered in his study of industrial workers a significant positive relationship between manifest anxiety and absenteeism. The extent to which anxiety influenced absenteeism, however, was not investigated. Similar evidence has been produced by Hakkinen and Toivainen (1960), who found "anxiety proneness" to be related to turnover among underground miners. Emotional stability was also found in this study to be an important factor for both remaining on the job and for attaining a degree of success on it.

In a further study of personality traits, Meyer and Cuomo (1962) found that, among a large sample of engineers in a major diversified corporation, those who terminated appeared to be somewhat more aggressive, independent, self-confident and outgoing. Such findings resulted from psychologists' interviews shortly after hire. Those who tended to stay, on the other hand,
were seen by the interviewers as possessing more emotional stability, sincerity, maturity, and strong identification with the job. In addition, those who left scored much higher in tests measuring verbal reasoning and educational breadth, while those who remained scored higher on tests of ability directly relevant to engineering work, such as engineering knowledge, mechanical comprehension and spatial relations.

From the limited evidence available, a tendency appears to emerge for those employees who leave the organization to manifest characteristics near polar positions at either end of various personality factor continua. For example, those who are fairly unstable emotionally or exhibit high anxiety tend to withdraw. Similarly, at the other extreme, employees demonstrating a high degree of independence, self-confidence and aggressiveness, as well as those with very high career aspirations, also appear to leave more often. It can be hypothesized from these limited findings that the organization tends to end up with as more permanent employees those clustering near the center of such continua. Such employees tend to exhibit a greater degree of emotional stability, maturity, sincerity, fairly narrow job interests and only moderate career aspirations.

Much work has been done recently which concentrates on the specific personal motive of need for achievement. McClelland and Atkinson and their associates have attempted to demonstrate through their research that all individuals possess in greater or lesser degree the potential behavior tendency to strive for achievement or accomplishment (Atkinson, 1958; Atkinson & Feather, 1964; McClelland, 1951; McClelland et al., 1953). In view of the importance of such findings, it is appropriate to investigate the relationship of achievement-type needs to turnover and absenteeism when
the individual feels either satisfied or dissatisfied with his level of achievement.

Ross and Zander (1957) found in their study of clerical workers that no essential differences existed among those who remained and those who later chose to leave in the strength of their need for achievement. However, those who later left indicated a significantly lower need satisfaction in the area of achievement. Those who remained perceived such a need to be substantially met. This study has been replicated among a sample of young managers with essentially the same results (Dunnette, Arvey & Banas, 1969).

Similarly, Meyer and Cuomo (1962) found terminations among engineers were directly associated with very high aspirations for administrative responsibilities. Apparently, these individuals possessed high expectations concerning their level of achievement. When such expectations were not met, their tendency to seek this satisfaction elsewhere increased. These findings are at least in part reinforced by Farris' (1971) finding that a major reason for turnover, again among technical personnel, was a feeling that changing jobs would help one's career.

Finally, Taylor and Weiss (1969a & b) found that satisfaction with one's achievement on the job was inversely related to propensity to leave among retail store employees. And, similarly, Waters and Roach (1971) found substantial evidence that such satisfaction was inversely related to both turnover and absenteeism among female clerks. In summary, consistent findings point to the importance to the individual in his withdrawal decision of feeling that his achievement-type needs have been substantially met.
Family considerations. It is generally thought that absences and turnover among female employees—especially if they are married—are higher than among male employees. Possibly because of this assumption, the majority of studies relating withdrawal to family reasons have concentrated on females. From the evidence available, however, it appears that family considerations have a significant impact on both men and women at work, although the nature of this impact is somewhat different.

Stone and Athelstan (1969) found turnover among female occupational and physical therapists increased in relation to the number of children they had. Naylor and Vincent (1959) found number of dependents was significantly and positively related to absenteeism among a sample of female clerical workers. And, Saleh, Lee and Prien (1965), in their survey of recently terminated nurses, found that a full 30% cited "family reasons" as their reason for resignation.

In an attempt to test the validity of an instrument designed to predict turnover among clerical employees, Minor (1958) found that female employees married over ten years tended to remain significantly longer with the organization than their counterparts married for shorter durations. The subjects of this study were employed by a major insurance company, with one-half the sample being used for purposes of cross-validation. A possible explanation for such findings could be that women who are married over 10 years have already had their children—many of whom have already entered school. The women are thus freer to take a job with some degree of permanence. Support for this explanation comes from Fleishman and Berniger (1960) and from Robinson (1972), both of whom found that women with older children tended to remain longer than either single women or married women with young children.
On the whole, then, available studies do indicate that family responsibilities take their toll on females in terms of attendance and tenure. The effects of the family on the man’s decision to participate, as noted earlier, are somewhat different. Knowles (1964) found in a study of male factory workers that employees with one or more children stayed with the organization longer than single men or married men with no children. In this case, increased dependents resulted in the opposite effect from that of the female studies cited above. This fact is easily explainable by the increased need for income and security that family responsibility places upon the "breadwinner."

While more dependents bring with them the need for greater job security, the family environment can also bring significant pressure to bear on the male to leave his job. Guest (1955) found, for example, that social pressures to quit were exerted on male workers by their wives who feared the physical and emotional strains of the job would break up what the wives considered to be a "normal" family life. Thus, as far as the male employee is concerned, the family can apparently represent very mixed forces concerning his decision to participate or withdraw from organizational activities while, for the female employee, family considerations in the past have generally represented forces only for withdrawal. Whether such trends will continue in the face of both increased efforts by women to enter more challenging job positions and the current reevaluation of the traditional role divisions between men and women remains to be demonstrated.

Summary. The findings concerning personal factors in withdrawal are summarized in Table 5. Age is strongly and negatively related to turnover, while being somewhat positively (though weakly) related to absenteeism.
Similarly, increased tenure appears to be strongly related to propensity to remain; no solid conclusions can be drawn concerning the impact of tenure on absenteeism, however, due to conflicting results.

From limited studies, turnover appears to be positively related to the similarity between job requirements and vocational interests. No studies were found that related such interests to absenteeism. Predicting turnover or absenteeism from interest inventories (assuming they are properly validated) represents an important possibility for organizations because such data can be collected prior to employment. This advantage does not exist for most predictors of withdrawal. Because of this benefit, research emphasis should be focused in the future on developing more rigorous research designs to investigate the true potential of such inventories.

The majority of studies investigating the relationship between personality traits and withdrawal center around turnover so no conclusions can be drawn about their relation to absenteeism. Apparently, the possession of more extreme personal characteristics can lead to an increased tendency to leave the organization. While further investigation is definitely in order here, a tendency exists for employees manifesting very high degrees of anxiety, emotional instability, aggression, independence, self-confidence and ambition to leave the organization at a higher rate than employees possessing such traits in a more moderate degree. The implications of such a phenomenon, if borne out by further research, need also to be investigated for their effects on organizational efficiency and effectiveness. That is, if such a pattern really exists, research is needed as to the desirability for the organization of accepting a higher turnover rate in exchange for possible resulting increases in performance
from such mobile employees. No research has been found that demonstrates that low turnover employees (those possessing more moderate personality traits) are in fact better performers. Thus, reduced turnover may be an undesirable goal if it is bought at the price of reduced work-force effectiveness.

The available research indicates that for some employees the inability to satisfy one's need for achievement can result in increased tendencies to leave. These investigations have only been carried out, however, among managerial and clerical employees. No such studies have been done on turnover among blue-collar workers and no conclusions can be made concerning absenteeism of personnel in any job classification.

Finally, marriage and family appear to have different effects on men and women. While family considerations usually result in forces for withdrawal for female employees, their impact on males can be both positive and negative with respect to leaving.

Summary and Discussion

The foregoing review clearly shows that a multiplicity of factors can be associated with the decision to withdraw. It is possible, however, to summarize briefly those factors for which sufficient evidence exists to draw meaningful conclusions concerning their relation to withdrawal.

In general, very strong evidence has been found in support of the contention that overall job satisfaction represents an important force
in the individual's participation decision. In addition, based on preliminary evidence, such satisfaction also appears to have a significant impact on absenteeism. These trends have been demonstrated among a diversity of work group populations and in organizations of various types and sizes. Moreover, the methodologies upon which these findings are based are generally of a fairly rigorous nature.

However, as noted earlier, it is not sufficient for our understanding of the withdrawal process to simply point to such a relationship. It is important to consider what constitutes job satisfaction. Under the conceptualization presented here, job satisfaction is viewed as the sum total of an individual's met expectations on the job. The more an individual meets such expectations, the greater his satisfaction. Viewing withdrawal within this framework points to the necessity of focusing on the various factors that make up the employee's expectation set.

We have proposed four general categories, or "levels" in the organization, in which factors can be found that affect withdrawal. Sufficient evidence exists to conclude that some of the most important of these influences on turnover can be found in each of these categories. That is, some of the more central variables related to turnover are organization-wide in their derivation (e.g., pay and promotion policies), while others are to be found in the immediate work group (e.g., unit size, supervision, and co-worker relations). Still others are to be found in the content of the job (e.g., nature of job requirements) and, finally, some are centered around the person himself (e.g., age and tenure). Thus, based on these findings, the major roots of turnover appear to be fairly widespread throughout the various facets of organizational structure, as they interact with particular types of individuals.
On a more tentative level, initial findings indicate that role clarity and the receipt of recognition and feedback are also inversely related to turnover. However, not all of the possible factors reviewed here have been found to be clearly or consistently related to termination. For example, conflicting data exist concerning the influence of such withdrawal of job stress and repetitiveness, family size and threatened job security.

Much less can be concluded about the impact of these factors on absenteeism due to a general lack of available information. Sufficient evidence does exist, however, to conclude with some degree of confidence that increases in unit size are strongly and inversely related to absenteeism. In addition, tentative evidence suggests that participation in decision-making and increased job autonomy are also inversely related to such behavior.

Methodological Considerations

Before discussing the implications of these findings, some attention should be paid to the methodologies employed in these studies. While methodological problems with particular studies have been discussed in the body of the review where appropriate, certain general issues warrant emphasis here.

A major weakness of many of the studies of the various factors is the failure to design the investigations in a predictive fashion. For example, all six of the studies reviewed here concerning job stress and repetitiveness collected the majority of their data (including attitudinal measures) after termination. Under such circumstances, it is difficult to ascertain which factor is the true dependent variable; indeed, it is quite probable that the act of withdrawal significantly altered the attitudinal predisposition under study.
Moreover, many studies failed to provide for adequate control groups in their study designs. Thus, as mentioned earlier, a finding that most terminees characterized their jobs as being high in stress may lose meaning if it is also found that those who remained also perceived high stress. The matching of stayers with leavers along several demographic dimensions, as has been done by Ross and Zander (1957) and Hulin (1966, 1968), reduce such potential spuriousness of results. Similarly, it should prove most useful if future studies would make greater use of cross-validational and cross-organizational designs for both turnover and absenteeism. If we are to use the knowledge we have gained or will gain in any meaningful way, it is important to have some idea of its generalizability across work environments.

With a few notable exceptions, the limited alternative questionnaire technique has been used almost exclusively in the attitudinal research on withdrawal. The singular use of such a procedure, while advantageous for statistical and analytical purposes, may have the effect of omitting from consideration important areas relevant to an individual's withdrawal decision. In this regard, it appears a useful strategy would be the increased use of supplemental data collection techniques (e.g., open-ended interviews) in concert with the questionnaires. Such a procedure would have the advantage of providing greater explanatory power and increased insight into the potential range of factors associated with withdrawal.

Since the earlier reviews by Brayfield and Crockett (1955) and Herzberg et al. (1957), some advancements have been made in the literature in the areas of increased validation and reliability of the instruments
employed. Good examples of such instruments for use in turnover and absenteeism studies are the Job Descriptive Index and the Minnesota Satisfaction Questionnaire. However, further efforts are necessary in the area to provide a broader array of validated instruments to gain increased comprehension of the phenomena.

In addition, the majority of the studies reported here collected attitudinal measures at one point in time and compared these measures to withdrawal rates. Such procedures fail to take into account changes in attitudes as they may or may not affect the withdrawal decision. Furthermore, such studies do not provide an adequate basis for drawing conclusions concerning directions of causality. More attention should be paid in the future to designing investigations which include researcher interventions designed to alter expectancies, and comparing the effects of such interventions to potential differences in rates of withdrawal. A useful lead has been taken here by Lawler and Hackman (1969; also Scheflen et al., 1971), where variables in the work situation were experimentally manipulated and changes in attendance rates over time were systematically compared against control groups. Future research should therefore make better use of the longitudinal and field experimental designs (including adequate controls) to more accurately isolate the study variables for purpose of analysis.

Met Expectations and Turnover

The preceding review of turnover and absenteeism highlights the fact that there is an abundance of findings concerning the former and a relative paucity of findings concerning the latter. Because of this difference, and because of the potential danger of undue generalizations from a joint treatment of the topics, turnover and absenteeism will be treated separately here for purposes of discussion.
The major turnover findings of this review, when taken together, point to the centrality of the concept of met expectations in the withdrawal decision. Under such a conceptualization, each individual is seen as bringing to the employment situation his own unique set of expectations for his job. It is likely, based on the results presented here, that most employees place a fairly high valence on the attainment of their expectations in certain areas, such as pay, promotion, supervisory relations and peer group interactions. In addition, however, each individual appears to place varying importance on a host of other potential "rewards" available from his job. For some, the most important factor may be challenging work, while for others it may be the status attached to one's job; for some, it may be both. Whatever the composition of the individual's expectation set, it is important that those factors be substantially met if the employee is to feel it is worthwhile to remain with the organization. Doubling the salary of a man who is genuinely disinterested in money may have little effect in insuring his continued participation. While this set of expectations may be modified over time in response to past rewards, available alternatives and other factors, it is toward the past or anticipated satisfaction of this fairly unique set of expectations that we must direct our attention if we are to understand the termination decision.

In general, then, the decision to withdraw may be looked upon as a process of balancing received or potential rewards with desired expectations (in much the same manner as the model proposed by March & Simon, 1958). Such an explanation, however, raises questions as to what the organization can do if it wants to reduce such turnover. Based on
the literature, several seemingly contradictory approaches result. In an effort to clarify these apparent contradictions, we will discuss in detail the findings of four studies, by way of example, which are highly relevant to the problem at hand.

Katzell (1968) and Dunnette et al. (1969) found that the mean levels of initial expectations of those who remained and those who later decided to leave were essentially the same. Thus, while individuals may vary considerably in terms of their own expectation set, no significant differences were found between stayers and leavers as a group at the time of entry into the organization. However, those who later left reported significantly lower levels of met expectations as time went on. Since the original expectations were similar, the significant differences between the two groups in the degree to which such expectations were actually met could have resulted from the existence of differential reward levels. Those who left may have failed, in general, to meet their expectations on the job and sought satisfaction elsewhere. Following this approach, turnover could presumably be reduced somewhat through an increase in the reward levels so they would be more congruent with the more stationary expectation levels.

Weitz (1956) and Macedonia (1969), on the other hand, altered the experimental groups' initial expectations, resulting in distinct differences between the stayers and leavers' mean levels of expectation at the time of entry into the organization. Those who later decided to remain presumably had more realistic levels upon entry. A unitary reward system can be inferred from these findings, suggesting that one key to the reduction of turnover would be to clarify expectations among entering
personnel so as to bring them into closer alignment with the available rewards.

While the Katzell and Dunnette et al. findings appear to be in conflict with the Weitz and Macedonia findings, closer analysis demonstrates that it is quite possible to achieve a viable synthesis. It appears from these investigations that both expectation levels and reward levels are variable within certain limits. Such possible fluctuations are depicted in the hypothetical example shown in Figure 1. Following this example, we can first apply the results of Katzell and Dunnette et al. where both stayers and leavers entered the organization with similar mean expectation levels, represented in Figure 1 by the column labelled $E_1$. As a result of differential reward levels, represented in Figure 1 by $R_1$, $R_2$ and $R_3$, some employees would tend to perceive that rewards met or exceeded expectations (in the case of $R_1$) resulting in increased satisfaction and an increased propensity to participate. Other employees, however, would perceive rewards to be below their expectations (in the case of $R_2$ and $R_3$), resulting in decreased satisfaction and an increased propensity to leave.

Next, we can apply the model to the findings of Weitz (1956) and Macedonia (1969). Here, the mean expectation level of those who later left remained unchanged (represented by $E_1$), while the mean level of those who stayed was adjusted downward (to $E_2$) by increasing the employees' knowledge about the nature of the job. Thus, even with the impact of
differential reward levels, it can be seen that, on the whole, a greater number of those who stayed would be more likely to experience met expectations than those who later left. The stayers, with more realistic expectation levels, would have a greater number of potential reward levels ($R_1$ and $R_2$) lying above their expectation levels than would the leavers ($R_1$ only), thereby increasing the chances of meeting or exceeding their expectations on the job.

The use of such a model points to at least three actions that the organization might attempt in its effort to reduce turnover. First, attempts can be made to enrich the total amount of potentially available rewards. This action should serve to increase the probability that reward expectations will be met. Such a procedure may have limited applicability, of course, due to structural and financial constraints on the organization. But various feasible approaches do exist for improving "rewards" in such areas as supervisory and co-worker interactions, recognition and feedback on performance, and fairness (if not increases) in compensation policies. Second, organizations may consider the installation of cafeteria-style compensation plans (Lawler, 1971) to allow the employee a greater selection of rewards toward which to work. Such increased selection should serve in part to increase the likelihood that more of his expectations can be met on the job. Third, and perhaps most important, the organization can attempt to increase the present or potential employee's accuracy and realism of expectations through increased communications concerning the nature of the job and the probable potential payoffs for effective performance. Where the employee fully understands what is expected of him and what the organization
offers in return, the likelihood of him forming unrealistic expectations should decrease, resulting in increased possibilities that his expectations are actually met.

The clarification for the employee of both expectations and potential rewards, then, should have the effect of generally increasing the degree to which such expectations are met. Where these expectations have been essentially satisfied, and where the employee has no reason to believe they will not continue to be satisfied in the future, we would expect an increase in the propensity to remain and participate in the activities of the organization. Where the individual by and large fails to satisfy his expectations, and where alternative forms of employment exist which promise greater satisfaction, we would expect an increased tendency to leave.

A final word is in order concerning the above studies relating to turnover. To a large extent, there is an underlying assumption, often inferred but sometimes stated, that the reduction of all turnover is a desirable goal. Such an assumption may be questioned on several grounds. First, from the individual's point of view, leaving an unrewarding job may result in the procurement of a more satisfying one. Second, from the organization's standpoint, some of those who leave may be quite ineffective performers, and their departure would open positions for (hopefully) better performers. The important point here is that a clear distinction should be made in future research efforts between effective and ineffective leavers. The loss of an effective employee may cost far more than the loss of an ineffective one, and the costs of efforts to retain the latter may well exceed the benefits.
Third, given the present state of technological flux, turnover may in some ways be considered a necessary evil. It may be necessary to simply accept certain levels of turnover as the price for rapid change and increased efficiency.

**Met Expectations and Absenteeism**

The organization's tendency not to accept even minimal turnover appears often to be matched by a somewhat unconcerned attitude toward absenteeism. Perhaps this is due, in part, to an inability in many cases to distinguish accurately between avoidable and unavoidable absenteeism for purposes of measurement. It may be, however, that the costs to the organization due to poor attendance may be far greater than the costs of turnover. The studies reviewed here indicate that those employees in which the organization has the least investment (young, low tenured employees) have the greatest incidences of turnover, while those employees who are older and more mature (and in whom the organization typically has greater investment) apparently have increased incidences of absenteeism. If this is the case, a redirection of effort may be in order away from the study of turnover and toward a better understanding of the more temporary forms of withdrawal. Too often in the past, absenteeism has been considered the "step-child" of turnover and it has been assumed, without sufficient evidence, that the two shared identical roots.

Several important dimensions exist along which absenteeism as a form of withdrawal can be distinguished from turnover: (1) The negative consequences for the individuals that are associated with absenteeism are usually much less than those associated with turnover. For example,
with the prevalence of company sick pay policies, an employee can miss work (up to a point) without salary loss. (2) Absenteeism is more likely to be a spontaneous and relatively easy decision, while the act of termination can be assumed to be more carefully considered over time in most cases. (3) Absenteeism may sometimes represent a substitute type of behavior for turnover, particularly where alternative employment is unavailable. In this sense, absenteeism may allow for temporary avoidance of an unrewarding situation without the loss of the benefits of employment; turnover, on the other hand, represents a complete severance of the individual from such benefits.

In view of some of these differences, it is interesting to investigate the degree of similarity or difference between the two types of withdrawal as they relate to the various factors in the work environment. March and Simon (1958) hypothesize that no differences exist between absenteeism and turnover insofar as the factors inducing such forms of behavior are concerned. However, the evidence as reviewed above does not entirely support such a position. For example, Waters and Roach (1971) found that satisfaction both with job responsibility and with one's rate of growth and advancement were significantly related to turnover but not to absenteeism. Similarly, Kilbridge (1961) found significant associations between job stress and absenteeism but not for turnover. In fact, of the 22 tested relationships in the studies reviewed here where data were available on both turnover and absenteeism among the same samples, only six found significant relations in the same direction between the factors under study and both types of withdrawal. The remainder found certain factors significantly related to one form of withdrawal but
Such findings suggest that some important differences may exist between the "causes" of turnover and those of absenteeism. While sufficient data are available only to draw tentative conclusions, support for this position can be found elsewhere. Herzberg et al. (1957) reviewed three studies investigating both turnover and absenteeism. Two of these studies found positive correlations between the factor under study and both types of withdrawal, while one found the two types to be inversely related to the factor. Moreover, Lyons (1972), in a recent review of 11 samples, concluded that "there is little support for the notion of common correlates [p. 279]" between various factors and turnover and absenteeism.

It is important to realize, then, that important differences do appear to exist between the strength and nature of some of these factors as they differentially relate to turnover and absenteeism. Even so, one can speculate that the above model of met expectations as they affect turnover (Figure 1) may also apply in a slightly modified version to the attendance decision. Based on initial findings, an argument can be made that when an individual's expectation set is not substantially met, the tendency to temporarily withdraw and avoid an unrewarding situation would increase, particularly if more preferable alternative activities are not available.

Future Directions for Research

Based on this review, several fairly obvious voids exist in our knowledge of turnover and absenteeism which require further study. To begin with, much more emphasis should be placed in the future on the psychology of the withdrawal process. While correlational studies abound
(particularly with respect to turnover) which relate various factors to withdrawal, our understanding of the manner in which the actual decision is made is far from complete.

Second, a major focus should be placed on differential expectation levels at the time of entry into the organization and the extent to which these expectations are met or altered over the course of employment. This strongly suggests the need for as much attention to "expectations" as to "reactions" to the work situation.

Third, some attention should be directed toward the study of differentially "valued" employees in relation to withdrawal. Organizational investments (e.g., compensation, additional training, experience) in employees can vary considerably across hierarchical levels and functions. Similarly, some employees are rated higher by the organization in terms of performance and potential. Little is known about the relation of these factors to withdrawal. It is possible that the more "valued" employees quit or exhibit high rates of absenteeism for quite different reasons than those who are less valued.

Fourth, more investigation is necessary which simultaneously studies both turnover and absenteeism among the same samples as they are affected by various factors in the organizational situation. Such designs would increase our knowledge not only of the potentially different roots or each type of withdrawal, but also of possible interactive effects between the two.

Finally, future research should include more emphasis on determining the effects of specific organizational interventions on turnover and absenteeism. The increased use of longitudinal designs and well-
controlled field experiments would significantly increase the confidence
we could place in the presumed impact of significant variables on with-
drawal.
References


Naylor, J. E., & Vincent, N. L. Predicting female absenteeism. Personnel Psychology, 1959, 12, 81-84.


Table 1
Studies of Relation of Job Satisfaction
To Turnover and Absenteeism

<table>
<thead>
<tr>
<th>Investigators(s)</th>
<th>Population</th>
<th>N&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Type of Withdrawal Studied</th>
<th>Relation to Withdrawal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weitz &amp; Nuckols (1955)</td>
<td>Insurance agents</td>
<td>990</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td>Weitz (1956)</td>
<td>Insurance agents</td>
<td>474</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td>Talacchi (1960)</td>
<td>Departmental workers</td>
<td>NA</td>
<td>Turnover</td>
<td>Zero</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Absenteeism</td>
</tr>
<tr>
<td>Hulin (1966)</td>
<td>Female clerical workers</td>
<td>129</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td>Hulin (1968)</td>
<td>Female clerical workers</td>
<td>298</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td>Katzell (1968)</td>
<td>Student nurses</td>
<td>1,852</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td>Mikes &amp; Hulin (1968)</td>
<td>Office workers</td>
<td>660</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td>Dunnette et al. (1969)</td>
<td>Lower-level managers</td>
<td>1,020</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td>Macedonia (1969)</td>
<td>Military academy cadets</td>
<td>1,160</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td>Taylor &amp; Weiss (1969a&amp;)</td>
<td>Retail store employees</td>
<td>475</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td>Kraut (1970)&lt;sup&gt;b&lt;/sup&gt;</td>
<td>Computer salesmen</td>
<td>Varied</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td>Wild (1970)</td>
<td>Female manual workers</td>
<td>236</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td>Waters &amp; Roach (1971)</td>
<td>Female clerical workers</td>
<td>160</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td>Atchison &amp; Lefferts (1972)&lt;sup&gt;b&lt;/sup&gt;</td>
<td>Air Force pilots</td>
<td>52</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
</tbody>
</table>

<sup>a</sup>Sample sizes reported here and on the following tables reflect the actual number of subjects used in the data analysis from which the reported results were derived.

<sup>b</sup>Both Kraut and Atchison and Lefferts found that an expressed intention to leave represented an even more accurate predictor of turnover than job satisfaction.
Table 2

Studies of Relations Between Organization-Wide Factors and Turnover and Absenteeism

<table>
<thead>
<tr>
<th>Factor</th>
<th>Investigator(s)</th>
<th>Population</th>
<th>N</th>
<th>Type of Withdrawal Studied</th>
<th>Relation to Withdrawal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td>Patchen (1960)</td>
<td>Oil refinery workers</td>
<td>487</td>
<td>Absenteeism</td>
<td>Negative</td>
</tr>
<tr>
<td>with Pay &amp; Promotion</td>
<td>Friedlander &amp; Walton (1964)</td>
<td>Scientists &amp; engineers</td>
<td>82</td>
<td>Turnover</td>
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</tr>
<tr>
<td></td>
<td>Knowles (1964)</td>
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<td>56</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>Saleh et al. (1965)</td>
<td>Nurses</td>
<td>263</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>Bassett (1967)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>Engineers</td>
<td>200</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>Ronan (1967)</td>
<td>Administrative &amp; professional personnel</td>
<td>91</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>Hulin (1968)</td>
<td>Female clerical workers</td>
<td>298</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>Katzell (1968)</td>
<td>Student nurses</td>
<td>1,852</td>
<td>Turnover</td>
<td>Negative</td>
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<td></td>
<td>Dunnette et al. (1969)</td>
<td>Lower level managers</td>
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<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(Pay)</td>
<td>Zero</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>(Promotion)</td>
<td></td>
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<td>Kraut (1970)</td>
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<td>Turnover</td>
<td>Negative</td>
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<tr>
<td></td>
<td>Farris (1971)</td>
<td>Scientists &amp; engineers</td>
<td>395</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>Telly et al. (1971)</td>
<td>Factory workers</td>
<td>900</td>
<td>Turnover</td>
<td>Zero&lt;sup&gt;b&lt;/sup&gt;</td>
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Table 2 (Cont.'d)

Studies of Relations Between Organization-Wide Factors and Turnover and Absenteeism

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<th>Population</th>
<th>N</th>
<th>Type of Withdrawal Studied</th>
<th>Relation to Withdrawal</th>
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<tbody>
<tr>
<td></td>
<td>Scheflen et al. (1971)</td>
<td>Custodians</td>
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<td>Negative</td>
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<tr>
<td>Threatened Job Security</td>
<td>Owens (1966)</td>
<td>Railway workmen</td>
<td>1,143</td>
<td>Absenteeism</td>
<td>Positive</td>
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<tr>
<td></td>
<td>Ronan (1967)</td>
<td>Blue-collar workers</td>
<td>91</td>
<td>Turnover</td>
<td>Positive</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Clerical &amp; white collar workers</td>
<td></td>
<td>Turnover</td>
<td>Zero</td>
</tr>
<tr>
<td></td>
<td>Taylor &amp; Weiss (1969a &amp; b)</td>
<td>Retail store employees</td>
<td>475</td>
<td>Turnover</td>
<td>Positive</td>
</tr>
<tr>
<td></td>
<td>Hershey (1972)</td>
<td>Production workers</td>
<td>200</td>
<td>Absenteeism</td>
<td>Zero</td>
</tr>
<tr>
<td>Organization Size</td>
<td>Ingham (1970)</td>
<td>Factory workers</td>
<td>8 units</td>
<td>Turnover</td>
<td>Zero</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Absenteeism</td>
<td>Positive</td>
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</table>

\(^a\) Bassett posited such a relationship but did not specifically test for it.

\(^b\) This relation was explained by the nature of the union contract, which standardized pay and promotion procedures based essentially on seniority.
<table>
<thead>
<tr>
<th>Factor</th>
<th>Investigator(s)</th>
<th>Population</th>
<th>N</th>
<th>Type of Withdrawal Studied</th>
<th>Relation to Withdrawal</th>
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</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td>Fleishman &amp; Harris (1962)</td>
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<td>Negative</td>
</tr>
<tr>
<td>with Supervisors</td>
<td></td>
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<td></td>
<td></td>
<td>(Curvilinear)</td>
</tr>
<tr>
<td>Lyness Relations</td>
<td>Salow et al. (1965)</td>
<td>Nurses</td>
<td>263</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>Lay (1966)</td>
<td>Production workers</td>
<td>100</td>
<td>Turnover</td>
<td>Negative</td>
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<tr>
<td></td>
<td>Hill (1968)</td>
<td>Female clerical workers</td>
<td>298</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>Skinner (1969)</td>
<td>Production workers</td>
<td>85</td>
<td>Turnover</td>
<td>Negative</td>
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<tr>
<td></td>
<td>Taylor &amp; Wales (1969a,b)</td>
<td>Retail store employees</td>
<td>475</td>
<td>Turnover</td>
<td>Zeta</td>
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<tr>
<td></td>
<td>Tally et al. (1971)</td>
<td>Production workers</td>
<td>900</td>
<td>Turnover</td>
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<tr>
<td>Variance of Recognition</td>
<td>Ross &amp; Zander (1957)</td>
<td>Female skilled workers</td>
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<td>Turnover</td>
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<tr>
<td>&amp; Feedback</td>
<td>Behavioral Research</td>
<td></td>
<td></td>
<td></td>
<td>(Curvilinear)</td>
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<tr>
<td></td>
<td>Service (1964b)</td>
<td>Engineers</td>
<td>36</td>
<td>Turnover</td>
<td>Negative</td>
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<tr>
<td>Supervisory Experience</td>
<td>Basnett (1967)</td>
<td>Technicians &amp; engineers</td>
<td>200</td>
<td>Turnover</td>
<td>Negative</td>
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<table>
<thead>
<tr>
<th>Factor</th>
<th>Investigator(s)</th>
<th>Population</th>
<th>N</th>
<th>Type of Withdrawal</th>
<th>Relation to Withdrawal</th>
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<tbody>
<tr>
<td>Work Unit</td>
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<td></td>
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<tr>
<td>Blue</td>
<td>Kerr et al. (1931)</td>
<td>Production workers</td>
<td>894</td>
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<td>Positive</td>
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<tr>
<td></td>
<td>Acton Society Trust (1953)</td>
<td>Factory workers</td>
<td>91</td>
<td>Absenteeism</td>
<td>Positive</td>
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<tr>
<td></td>
<td>Hewitt &amp; Parfitt (1953)</td>
<td>Factory workers</td>
<td>179</td>
<td>Absenteeism</td>
<td>Positive</td>
</tr>
<tr>
<td></td>
<td>Matsner &amp; Mann (1953)</td>
<td>Blue-collar workers</td>
<td>251</td>
<td>Absenteeism</td>
<td>Positive</td>
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<tr>
<td></td>
<td></td>
<td>White-collar workers</td>
<td>375</td>
<td>Absenteeism</td>
<td>Zero</td>
</tr>
<tr>
<td></td>
<td>Mandell (1956)</td>
<td>Clerical workers</td>
<td>320</td>
<td>Turnover</td>
<td>Positive</td>
</tr>
<tr>
<td></td>
<td>Arbyle et al. (1958)</td>
<td>Production departments</td>
<td>86</td>
<td>Turnover</td>
<td>Zero</td>
</tr>
<tr>
<td></td>
<td>Ravas (1958)</td>
<td>Factory workers</td>
<td>Varied</td>
<td>Absenteeism</td>
<td>Positive (Curvilinear)</td>
</tr>
<tr>
<td></td>
<td>Anumgartel &amp; Sobol (1959)</td>
<td>Blue &amp; white collar workers</td>
<td>3,900</td>
<td>Absenteeism</td>
<td>Positive</td>
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<tr>
<td></td>
<td>Irdik &amp; Saschova (1961)</td>
<td>Factory workers</td>
<td>NA</td>
<td>Turnover</td>
<td>Positive</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Absenteeism</td>
<td>Positive</td>
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</tbody>
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### Table 3 (Cont.'d)

**Studies of Relations Between Immediate Work Environment Factors and Turnover and Absenteeism**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Investigator(s)</th>
<th>Population</th>
<th>N</th>
<th>Type of Withdrawal Studied</th>
<th>Relation to Withdrawal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction with Coworker Relations</td>
<td>Evan (1963)&lt;sup&gt;b&lt;/sup&gt;</td>
<td>Management trainees</td>
<td>300</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>Salih et al. (1965)</td>
<td>Nurses</td>
<td>263</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>Hulin (1968)</td>
<td>Female clerical workers</td>
<td>298</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>Taylor &amp; Weiss (1969a&amp;b)</td>
<td>Retail store employees</td>
<td>475</td>
<td>Turnover</td>
<td>Zero</td>
</tr>
<tr>
<td></td>
<td>Farriss (1971)</td>
<td>Scientists &amp; engineers</td>
<td>395</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>Tally et al. (1971)</td>
<td>Production workers</td>
<td>900</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
</tbody>
</table>

<sup>a</sup>36 foremen plus approximately 3 subordinates of each foreman took part in study; specific N not reported.

<sup>b</sup>Inference based on study results.
<table>
<thead>
<tr>
<th>Factor</th>
<th>Investigator(s)</th>
<th>Population</th>
<th>N</th>
<th>Type of Withdrawal Studied</th>
<th>Relation to Withdrawal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td>Saloh et al. (1965)</td>
<td>Nurses</td>
<td>263</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td>With the Nature of Work</td>
<td>Hulin (1968)</td>
<td>Clerical workers</td>
<td>298</td>
<td>Turnover</td>
<td>Zero</td>
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<tr>
<td></td>
<td>Dunnatto et al. (1969)</td>
<td>Lower-level managers</td>
<td>1,020</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>Krut (1970)</td>
<td>Computer salesmen</td>
<td>Varied</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>Wild (1970)</td>
<td>Female manual workers</td>
<td>236</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>Tally et al. (1971)</td>
<td>Production workers</td>
<td>900</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>Wators &amp; Ronch (1971)</td>
<td>Clerical workers</td>
<td>160</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Absenteeism</td>
<td></td>
</tr>
<tr>
<td>Job Stress &amp; Repetitiveness</td>
<td>Guest (1955)</td>
<td>Automobile assemblyline workers</td>
<td>18</td>
<td>Turnover</td>
<td>Positive</td>
</tr>
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<td></td>
<td>Kilbridge (1961)</td>
<td>Production workers</td>
<td>568</td>
<td>Turnover</td>
<td>Zero</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>331</td>
<td>Absenteeism</td>
<td>Positive</td>
</tr>
<tr>
<td></td>
<td>Malbin (1961)a</td>
<td>Psychiatric aides</td>
<td>153</td>
<td>Turnover</td>
<td>Positive</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Absenteeism</td>
<td>Positive</td>
</tr>
<tr>
<td></td>
<td>Katzell (1968)</td>
<td>Student nurses</td>
<td>1,852</td>
<td>Turnover</td>
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<td></td>
<td>Lofkowitz &amp; Katz (1969)</td>
<td>Factory workers</td>
<td>80</td>
<td>Turnover</td>
<td>Positive</td>
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<tr>
<td></td>
<td>Wild (1970)</td>
<td>Female manual workers</td>
<td>236</td>
<td>Turnover</td>
<td>Positive</td>
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Table 4 (Cont.'d)

Studies of Relations Between Job Content
Factors and Turnover and Absenteeism

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<th>Factor</th>
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<th>Population</th>
<th>N</th>
<th>Type of Withdrawal Studied</th>
<th>Relation to Withdrawal</th>
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</thead>
<tbody>
<tr>
<td>Job Autonomy</td>
<td>Guest (1955)</td>
<td>Automobile assemblyline workers</td>
<td>18</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>Hous &amp; Zander (1957)</td>
<td>Female skilled workers</td>
<td>507</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td>&amp; Responsibil-</td>
<td></td>
<td>Blue-collar workers</td>
<td>403</td>
<td>Absenteeism</td>
<td>Negative</td>
</tr>
<tr>
<td>ity</td>
<td>Turner &amp; Lawrence (1965)</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Taylor &amp; Weiss (1969a&amp;b)</td>
<td>Retail store employees</td>
<td>475</td>
<td>Turnover</td>
<td>Negative</td>
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<tr>
<td></td>
<td>Hackman &amp; Lawler (1971)</td>
<td>Telephone operators &amp; clerks</td>
<td>208</td>
<td>Absenteeism</td>
<td>Negative</td>
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<td></td>
<td>Waters &amp; Roach (1971)</td>
<td>Clerical workers</td>
<td>160</td>
<td>Turnover</td>
<td>Negative</td>
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<tr>
<td>Role Clarity</td>
<td>Waltz (1956)</td>
<td>Insurance salesman</td>
<td>474</td>
<td>Turnover</td>
<td>Negative</td>
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<td>Macedonila (1969)</td>
<td>Military academy cadets</td>
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<td>Lyons (1971)</td>
<td>Nurses</td>
<td>156</td>
<td>Turnover</td>
<td>Negative</td>
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</tbody>
</table>

*a* Inference based on study results.
<table>
<thead>
<tr>
<th>Factor</th>
<th>Investigator(s)</th>
<th>Population</th>
<th>N</th>
<th>Type of Withdrawal Studied</th>
<th>Relation to Withdrawal</th>
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<tbody>
<tr>
<td>Age</td>
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<td>Female clerical workers</td>
<td>440</td>
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<td>Negative</td>
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<td></td>
<td>Naylor &amp; Vincent (1959)</td>
<td>Female clerical workers</td>
<td>220</td>
<td>Absenteeism</td>
<td>Zero</td>
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<td></td>
<td>Fleishman &amp; Hernandez (1960)</td>
<td>Female clerical workers</td>
<td>205</td>
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<td>Negative</td>
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<tr>
<td></td>
<td>De la Mare &amp; Sergean (1961)</td>
<td>Industrial workers</td>
<td>140</td>
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<tr>
<td></td>
<td>Shott et al. (1963)</td>
<td>Male office workers</td>
<td>561</td>
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<td>Zero</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Female office workers</td>
<td></td>
<td></td>
<td>Negative</td>
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<tr>
<td></td>
<td>Cooper &amp; Payne (1965)</td>
<td>Construction workers</td>
<td>392</td>
<td>Absenteeism</td>
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</tr>
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<td>Luy (1966)</td>
<td>Factory workers</td>
<td>100</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>Bassett (1967)</td>
<td>Technicians &amp; engineers</td>
<td>200</td>
<td>Turnover</td>
<td>Negative</td>
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<td>Downs (1967)</td>
<td>Public service organization trainees</td>
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<td></td>
<td>Public service organization employees (after training)</td>
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<td></td>
<td>Stone &amp; Athelstan (1969)</td>
<td>Clerical workers</td>
<td>453</td>
<td>Turnover</td>
<td>Negative</td>
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<tr>
<td></td>
<td>Farris (1971)</td>
<td>Scientists &amp; engineers</td>
<td>395</td>
<td>Turnover</td>
<td>Negative</td>
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<tr>
<td></td>
<td>Robinson (1972)</td>
<td>Female clerical workers</td>
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Table 5 (Cont.'d)

Studies of Relations Between Personal Factors
and Turnover and Absenteeism

<table>
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<th>Population</th>
<th>N</th>
<th>Type of Withdrawal Studied</th>
<th>Relations to Withdrawal</th>
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</thead>
<tbody>
<tr>
<td>Tenure</td>
<td>Hill &amp; Trist (1955)</td>
<td>Factory workers</td>
<td>289</td>
<td>Absenteeism</td>
<td>Zero</td>
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<td></td>
<td>Baumgartel &amp; Sobol (1959)</td>
<td>Male blue-collar workers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Female blue-collar, male &amp; female white-collar workers</td>
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<td></td>
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</tr>
<tr>
<td></td>
<td>Fleishman &amp; Berniger (1960)</td>
<td>Female clerical workers</td>
<td>205</td>
<td>Turnover</td>
<td>Negative</td>
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<tr>
<td></td>
<td>Shott et al. (1963)</td>
<td>Male &amp; female office workers</td>
<td>561</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>Knowles (1964)</td>
<td>Factory workers</td>
<td>56</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>Robinson (1972)</td>
<td>Female clerical workers</td>
<td>200</td>
<td>Turnover</td>
<td>Negative</td>
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<td>Congruence of</td>
<td>Furguson (1958)</td>
<td>Insurance salesmen</td>
<td>520</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td>Job with Vocational Interests</td>
<td>Boyd (1961)</td>
<td>Engineers</td>
<td>326</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>Mayeske (1964)</td>
<td>Foresters</td>
<td>125</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td>Extremity of</td>
<td>Hakkinen &amp; Toivainen (1960)</td>
<td>Miners</td>
<td>135</td>
<td>Turnover</td>
<td>Positive</td>
</tr>
<tr>
<td>Personality</td>
<td>Meyer &amp; Cuomo (1962)</td>
<td>Engineers</td>
<td>1,360</td>
<td>Turnover</td>
<td>Positive</td>
</tr>
<tr>
<td>Characteristics</td>
<td>Sinha (1963)</td>
<td>Industrial workers</td>
<td>110</td>
<td>Absenteeism</td>
<td>Positive</td>
</tr>
</tbody>
</table>
### Table 5 (Cont.'d)

Studies of Relations Between Personal Factors and Turnover and Absenteeism

<table>
<thead>
<tr>
<th>Factor</th>
<th>Investigator(s)</th>
<th>Population</th>
<th>N</th>
<th>Type of Withdrawal Studied</th>
<th>Relation to Withdrawal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfied</td>
<td>Ross &amp; Zander (1957)</td>
<td>Female skilled workers</td>
<td>507</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td>Achievement Type</td>
<td>Mayer &amp; Cuomo (1962)</td>
<td>Engineers</td>
<td>1,360</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td>Needs</td>
<td>Dunnette et al. (1969)</td>
<td>Lower-level managers</td>
<td>1,020</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>Taylor &amp; Weiss (1969a&amp;b)</td>
<td>Retail store employees</td>
<td>475</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>Farris (1971)</td>
<td>Scientists &amp; engineers</td>
<td>395</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>Waters &amp; Roach (1971)</td>
<td>Clerical workers</td>
<td>160</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Absenteeism</td>
<td></td>
</tr>
<tr>
<td>Family Size</td>
<td>Naylor &amp; Vincent (1959)</td>
<td>Female clerical workers</td>
<td>220</td>
<td>Absenteeism</td>
<td>Positive</td>
</tr>
<tr>
<td></td>
<td>Knowles (1964)</td>
<td>Male factory workers</td>
<td>56</td>
<td>Turnover</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>Stone &amp; Athelstan (1969)</td>
<td>Female physical therapists</td>
<td>453</td>
<td>Turnover</td>
<td>Positive</td>
</tr>
<tr>
<td>Family Pressure to</td>
<td>Guest (1955)</td>
<td>Male auto assemblyline workers</td>
<td>18</td>
<td>Turnover</td>
<td>Positive</td>
</tr>
<tr>
<td>Resign</td>
<td>Saleh et al. (1965)</td>
<td>Nurses</td>
<td>263</td>
<td>Turnover</td>
<td>Positive</td>
</tr>
</tbody>
</table>

*Includes high anxiety, aggressiveness, independence, self-confidence, extroversion and lack of emotional stability.*
(Figure Caption)

Fig. 1. Hypothetical example of expectations-rewards interaction as they relate to decision to withdraw.