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An Evaluation of Precursors of Hospital Employee Turnover

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To evaluate a heuristic model of employee turnover, survey data were collected from 203 hospital employees. The questionnaire included measures of general and facet job satisfaction, thoughts about quitting, the intention to quit, the perceived probability of finding another job, and biographical information. Turnover data were collected 47 weeks later. Zero-order correlations between job satisfaction and turnover, age–tenure and turnover, satisfaction and thinking of quitting, and intention to quit and turnover were consistent with previous research. When a simplified heuristic model of the employee withdrawal decision process was subjected to regression analysis, significant coefficients were evident from job satisfaction to thinking of quitting and intention to search, but not to actual turnover. As hypothesized, intention to quit exhibited the only significant coefficient with actual attrition. The results support the primacy of intentions in the withdrawal process and serve to further demonstrate the need for models of the turnover process more complete than the traditional dissatisfaction–turnover model.

The relationship between job satisfaction and employee withdrawal has been widely studied. Locke's (1976) review concluded that while the reported correlations have been consistent and negative, they have usually been less than .40. Further replication of the job satisfaction–withdrawal relationship would not appear to be particularly fruitful.

There is, however, a need for further research on the withdrawal decision process. Porter and Steers (1973) concluded, after their extensive review of the turnover literature, that much more emphasis should be placed on the psychology of the withdrawal process because our understanding of the manner in which the actual decision is made is far from complete. In agreement with the Porter and Steers conclusion, Mobley (1977) presented a heuristic model of the employee withdrawal (turnover) decision process that identified a variety of possible precursors of employee turnover. The primary objective of the present article is to evaluate a simplified version of the model.

Drawing on the theoretical work of March and Simon (1958) and Locke (1968, 1976), Mobley (1977) suggested that one of the primary consequences of job dissatisfaction is to stimulate thoughts of quitting, leading to an evaluation of the expected utility of search, intention to search, search, evaluation of alternatives, intention to quit, and finally the withdrawal decision and behavior.

The essence of this model is that a variety of cognitive and behavioral phenomena are occurring between the emotional experience of job dissatisfaction and the withdrawal behavior. More specifically, it is suggested that the immediate precursor of actually quitting is intention to quit. This hypothesis is consistent with Fishbein's (1967) model of attitudes, intentions and behavior, and with Locke's (Locke, 1968; Locke, Cartledge, & Knerr, 1970) task motivation model, which theorizes that the most immediate motivational determinant of choice is the individual's goal or intention. Kraut (1975), Newman

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(1974), and Waters, Roach, and Waters (1976) have presented empirical evidence of the relationship between intentions and withdrawal behavior. Those researchers dealing with organizational commitment and turnover have typically included intentions in their operational definition of commitment and have shown commitment to be a stronger correlate of turnover than satisfaction (e.g., see Steers, 1977; Porter, Crampon, & Smith, 1976; Porter, Steers, Mowday, & Boulian, 1974).

The present model further suggests that the most probable consequence of job dissatisfaction is to elicit a cognitive process of thinking of quitting. Mobley (Note 1) found fairly strong and consistent correlations between various job satisfaction measures and thinking of quitting across three organizations. Atkinson and Lefferts (1972) had earlier demonstrated that frequency of thinking of changing jobs was significantly related to turnover behavior.

In addition to thinking of quitting and intention to quit, the model suggests several variables associated with subjective probability of finding an acceptable alternative, intention to search, and search for alternatives. Although it is widely assumed that the availability of alternatives exerts a significant influence on turnover, this variable has been infrequently included in studies of individual turnover (Locke, 1976). At the aggregate level, Armknecht and Early (1972), Price (1977), and Woodward (1975–1976) have documented the relationship between voluntary terminations and economic conditions, for example, employment levels and vacancy rates. At the individual level, Schneider (1976) demonstrated that inclusion of perceived alternatives enhanced the prediction and understanding of withdrawal intentions. Dansereau, Cashman, and Graen (1974) demonstrated that perceived expectancy of finding a comparable job moderated the relationship between job attitudes and turnover. These empirical findings, taken together with the conceptual basis suggested by March and Simon (1958), Mobley (1977), Price (1977), and others, argues strongly for the inclusion of perceived alternatives in individual turnover research.

Previous research has established that age and tenure are negatively associated with turnover (e.g., see Marsh & Mannari, 1977; Porter & Steers, 1973; Porter et al., 1974; Price, 1977; Waters et al., 1976). Thus, age and tenure are included as variables in the model and analysis of the present study.

The research reported here evaluated the bivariate relationships between age, tenure, satisfaction, thinking of quitting, intention to search, probability of finding an acceptable alternative, intention to quit, and actual attrition. However, the primary objective of the research was to evaluate the manner in which these variables combine in influencing turnover. The research was designed to test the proposition that the influence of job satisfaction on turnover is indirect, through thinking of quitting, search and evaluation of alternatives, and intention to quit—and that intention to quit is the immediate precursor of actual attrition. The effect of age and tenure on turnover is thought to be indirect through job satisfaction and the probability of finding an alternative. Probability of finding an acceptable alernative is thought to contribute to intention to search and intention to quit. Figure 1 represents the simplified model of the employee withdrawal decision process evaluated in the present study.

Regression analysis was used to evaluate the efficacy of this model. Of particular interest in the present study was the utility of regression analysis in the decomposition of correlations into direct and indirect effects through examination of the relative magnitude and significance of standardized regression weights in a series of equations suggested by Figure 1. Specifically, can the well-established relationship between satisfaction and turnover be shown to decompose in the manner specified in Figure 1? The hypothesized decomposition is that job satisfaction will have a successively weaker direct effect on thinking of quitting, intention to search, and intention to quit, but no effect on turnover other than its indirect contribution to intentions. It is further hypothesized that intention to quit is a function of intention to search, probabiliy of finding an acceptable alternative, and job dissatisfaction,

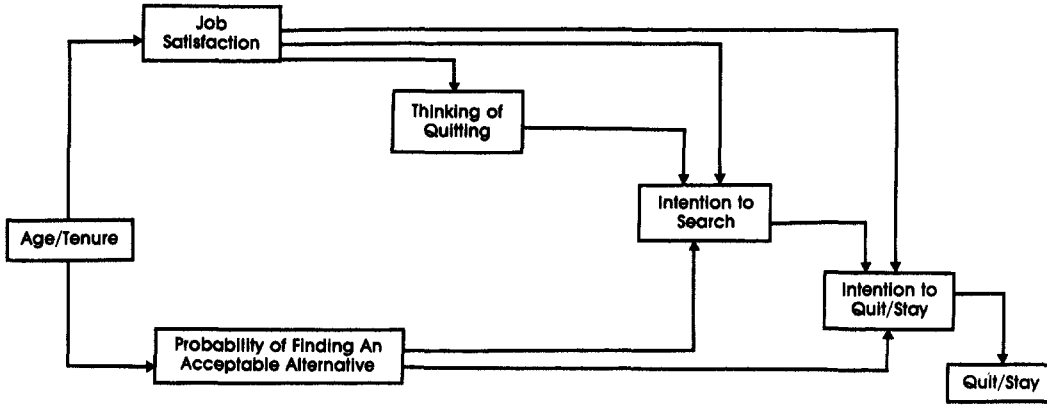

Figure 1. A simplified representation of intermediate linkages in the employee withdrawal decision process.

over and above the effect of job dissatisfaction on intention to search. Finally, the effect of age–tenure on turnover is hypothesized to be through satisfaction and probability of finding an alternative rather than direct.

Method

Subjects

Individual survey measures were collected from 203 full-time employees in a medium-sized southeastern, urban hospital. Included in the sample were employees from service, technical, clerical, and nursing services. Although participation was voluntary, over 90% of the employees in the jobs sampled participated in the study. Subjects were identified for tracking purposes, and anonymity was guaranteed. Data were collected on hospital time, with the surveys administered by the authors to small employee groups.

Measures

The measures of interest in the present study were included in a questionnaire dealing with a variety of aspects of hospital employee attitudes, perceptions, and goals. The measure of overall satisfaction was the Brayfield and Rothe (1951) Index of Job Satisfaction. Facet satisfaction was measured with Job Descriptive Index (JDI; Smith, Kendall & Hulin, 1969). Thinking of quitting was measured on a 5-point, verbally anchored scale ranging from never (1) to constantly (5). Probability of finding an acceptable alternative was measured on a 5-point verbally anchored scale ranging from very unlikely (1) to certain (5). Intention to search and intention to quit were measured on a 5-point verbally anchored scale from very unlikely (1) to certain (5).

The turnover criterion was coded 1 for voluntary termination and 0 for nontermination. Turnover data were collected 47 weeks after collection of the survey data. There were no involuntary terminations over the course of the study. Mean unemployment in the hospitals' labor market was 9.4% and 8.8% in the state during the period of the study. Voluntary turnover was 10.3% during the study.

Results

Variable means and standard deviations are presented in Table 1. Table 2 summarizes the correlations among the variables. The $-.25$ and $-.22$ correlations between tenure and turnover and age and turnover are consistent with previous research (Marsh & Mannari, 1977; Porter & Steers, 1973; Porter et al., 1974; Price, 1977; Waters et al., 1976). The $-.21$ correlation between overall satisfaction and turnover is consistent with previous research (Marsh & Mannari, 1977; Newman, 1974; Porter & Steers, 1973; Waters & Roach, 1973). The JDI Work scale was the only JDI scale showing a significant correlation with turnover. Similar correlations for this variable have previously been reported by Dansereau et al. (1974), Kraut (1975), Porter and Steers (1973), and Waters and Roach (1973).

The .49 correlation between intention to quit and actual turnover within 1 year is a significantly stronger relationship than the satisfaction–turnover relationship. Kraut (1975), Marsh and Mannari (1977), Newman (1974), Steers (1977), and Waters et

al. (1976) have recently demonstrated the relative efficacy of intentions as a predictor of turnover.

The pattern of correlations reported above is consistent with existing research. However, the primary objective of the present study was to assess how these variables combine with certain other variables to influence the turnover decision process. For parsimony and to minimize problems of collinearity, age and tenure were standardized and a composite summary variable created by summing the age and tenure z scores. For the same reasons, overall satisfaction rather than the various facet satisfactions was used in the subsequent analyses.

Table 3 summarizes the multiple regressions for actual turnover, intention to quit, intention to search, and thinking of quitting. For each successive dependent variable, the standard partial regression coefficients for all preceding variables in the model are reported in Table 3. Examination of the magnitude and significance of the standardized regression coefficients within each equation permits assessment of the direct effect on the dependent variable of each variable in the equation while holding all other variables constant. Examination of the standardized regression coefficients for a given independent variable across equations facilitates understanding the indirect effects the variable may be having (e.g., see Kerlinger & Pedhazur, 1973, for a discussion of interpretation of the coefficients). Thus, for example, can the frequently replicated negative correlation between job satisfaction and turnover be shown to be a direct link, or is the effect of job satisfaction indirect through other variables?

As can be seen in Table 3, intention to quit exhibited the only significant coefficient with actual turnover. Intention to search exhibited the strongest coefficient in the equation for intention to quit, with age–tenure exhibiting a relatively weaker negative but significant effect. The strongest coefficient for intention to search was thinking of quitting, with satisfaction and age–tenure exhibiting relative weaker negative but significant coefficients. Finally, job satisfaction exhibited the strongest coefficient for thinking of quitting, with probability of finding an acceptable alternative exhibiting a weaker but significant coefficient.

Table 1
Variable Means and Standard Deviations

Variable	*M*	*SD*
Tenure	5.7	5.9
Age	35.3	13.4
JDI Work	35.9	10.5
JDI Pay	20.5	13.8
JDI Supervision	42.2	10.3
JDI Promotion	17.3	13.0
JDI Co-Workers	42.2	11.1
Overall satisfaction	66.0	8.9
Thinking of quitting	1.4	1.1
Intention to search	1.1	1.1
Probability of finding acceptable alternative	2.8	.9
Intention to quit/stay	.8	1.1
Actual turnover	.1	.3

Note. JDI = Job Descriptive Index. $N = 203$.

The coefficient for job satisfaction, as hypothesized, becomes relatively weaker as one moves from thinking of quitting to intention to search, and exhibited no significant direct effect on turnover. It should also be noted that in each instance, the immediately preceding variable in Figure 1 exhibited, as hypothesized, the strongest coefficient with the next variable in the equation.

Discussion

The present research, drawing on Locke (1968, 1976), March and Simon (1958), and Mobley (1977), evaluated a simplified heuristic model of the withdrawal decision process. It was found that intention to quit was the immediate precursor of actual withdrawal behavior. Such a finding, consistent with the Kraut (1975), Newman (1974), and Waters et al. (1976) findings, has obvious practical implications in terms of organizational diagnosis and manpower planning. Conceptually, this finding, coupled with the finding that satisfaction had no direct effect on turnover, serves to reinforce and generalize the primacy of goals and intentions in models of specific organizational behaviors. These results also may be interpreted as supporting the Fishbein (1967) model of attitudes and behavior.

Table 2
Correlations with Intentions and Turnover

Variable	1	2	3	4	5	6
Tenure	35	−15	−30	−08	−35	−25
Age	28	−27	−36	−20	−36	−22
Age–tenure	35	−24	−37	−15	−39	−27
JDI Work	53	−40	−40	03	−37	−20
JDI Pay	37	−39	−39	−02	−37	−13
JDI Supervision	29	−26	−34	08	−25	−12
JDI Promotion	23	−35	−25	06	−25	−07
JDI Co-Workers	29	−26	−24	−01	−16	−10
1. Overall satisfaction						
2. Thinking of quitting	−54					
3. Intention to search	−54	62				
4. Probability of finding acceptable alternative	03	12	13			
5. Intention to quit/stay	−49	53	72	15		
6. Actual attrition	−21	19	29	07	49	

Note. $N = 203$. Decimals have been omitted. Age–tenure is a composite of the standardized age and tenure variables. JDI = Job Descriptive Index. $r_{.95} = .138$; $r_{.99} = .181$.

To the extent that job satisfaction deals with the cognitive and affective aspects of job attitudes, to the exclusion of the intentions aspect, one would not expect satisfaction to have a strong relation with turnover.

The fact that probability of finding an acceptable alternative exhibited a significant coefficient with thinking of quitting, but not with intention to search or intention to quit, was not predicted by the model. The present results seem to indicate that both dissatisfaction and probability of finding an acceptable alternative contribute to eliciting thoughts of quitting. Elicitation of such thoughts generates intention to search, such an intention being stronger when job satisfaction is lower and when the employee is younger and less tenured. Further, intention to search exhibited the strongest coefficient with intention to quit, with age–tenure exhibiting a weaker but still significant coefficient. Again, probability of finding an acceptable alternative did not exhibit a significant direct effect.

Several post hoc explanations are possible for the failure of probability of finding an acceptable alternative to contribute to intention to search and intention to quit. It may be that when thinking of quitting is elicited by job dissatisfaction and some probability

Table 3
Standardized Regression Coefficients and Multiple Correlations

Variable	Actual turnover	Intention to quit	Intention to search	Thinking of quitting
Intention to quit	.58**			
Intention to search	−.13	.56**		
Thinking of quitting	−.06	.10	.44**	
Probability of finding acceptable alternative	−.01	.05	.05	.13*
Overall satisfaction	.01	−.10	−.25**	−.54**
Age–tenure	−.10	−.12*	−.17**	−.03
R	.51**	.75**	.69**	.56**

Note. $N = 203$.
* $p < .05$.
** $p < .01$.

of finding an alternative, that intention to search and intention to quit become established and are somewhat impervious to the probability of finding an acceptable alternative. Another possibility is that an additional variable(s) dealing with actual search behavior and the results of searching must be included in the model. It may be that probability of finding an acceptable alternative is not a sufficiently sensitive variable, since individuals who are satisfied and with no intention to search may still perceive a high probability of finding an acceptable alternative job if they tried. Employees in this study did exhibit a relatively high mean and low variance on the question dealing with probability of finding an acceptable alternative. The present data do not allow a strong evalution of these and other alternatives.

Although intention to quit was demonstrated to have the only direct effect (among the variables studied) on turnover, the variance explained was far from unity. The fact that the model does not reflect impulsive behavior is one possible reason. Among the other possible reasons for lack of a stronger relationship are changes in attitudes, intentions, organizational conditions, and/or external alternatives between the measures and actual turnover. The closer the measurement of intention (as well as perceptions and affect) to the measurement of the specific behavior of interest, the stronger the demonstrable relationship should be. However, as Graen and Ginsburgh (1977) recently noted, the more specific and closer to the act that the intention information is collected, the more trivial prediction becomes.

The model being evaluated is an obvious oversimplification of the withdrawal decision process. This simplification was dictated, in part, by the lack of existing multivariate research on possible intermediate linkages in the withdrawal decision process previously suggested by March and Simon (1958), Mobley (1977), and Price (1977). Such research is necessary for a fuller understanding of the withdrawal process.

Another source of oversimplification in the present study was the assumption of unidirectional influence, that is, no reciprocal or feedback loops. As Mobley (1977) and others have noted, feedback loops probably do exist and need to be researched for a fuller understanding of the withdrawal decision process. For example, what is the effect of unsuccessful search on job satisfaction and intentions? Designs using repeated measures would be particularly useful in this regard.

Finally, the present study did not deal with organizational commitment (Porter et al., 1974; Steers, 1977) or with job attachment (Koch & Steers, in press). These concepts have been shown to be better predictors of turnover than traditional job satisfaction measures. These concepts have been defined by their authors to include a behavioral intentionlike component. Whether intentions are most appropriately seen as a component or a consequence of commitment and/or attachment and how the latter concepts and the role concepts of Graen and Ginsburgh (1977) apply to the model proposed here remain to be researched.

Conclusions

Twenty years ago, March and Simon (1958) outlined a detailed model of the participation–withdrawal decision process. Despite the apparent need for development and evaluation of such detailed models, much of the subsequent research has focused on the satisfaction–turnover relationship. Thus, Porter and Steers (1973) concluded, after their review of the turnover literature, that there is still much to learn about the psychology of the withdrawal decision process.

The present study evaluated a simplified model of the withdrawal decision process. It was found that the single significant regression coefficient with turnover (among the variables studied) was intention to quit and that the effect of job dissatisfaction was on thinking of quitting and intentions rather than turnover itself. Although limited by the model and design used, the results do serve to demonstrate that a fuller understanding of the psychology of the withdrawal process must consider cognitive and behavioral phenomena in addition to the affective experi-

ence of job satisfaction. Those models and research designs that incorporate search-related variables, capture the perceived availability of acceptable alternatives, capture the temporal dimension and the dynamic nature of the process, and assess the possible interrelationships among satisfaction, attachment, commitment, intentions, and turnover would appear to be particularly useful.

Reference Note

1. Mobley, W. H. *The relationship between job satisfaction and thinking of quitting* (Tech. Rep. 75-3). Columbia: University of South Carolina, Center for Management and Organizational Research, 1975.

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