AD-A055 889   ILLINOIS UNIV AT URBANA-CHAMPAIGN DEPT OF PSYCHOLOGY   F/G 5/10
                THE PREDICTION OF EMPLOYEE TURNOVER IN A PART-TIME MILITARY ORG--ETC(U)
                MAY 78   P W HOM, R KATERBERG, C L HULIN   N00014-75-C-0904
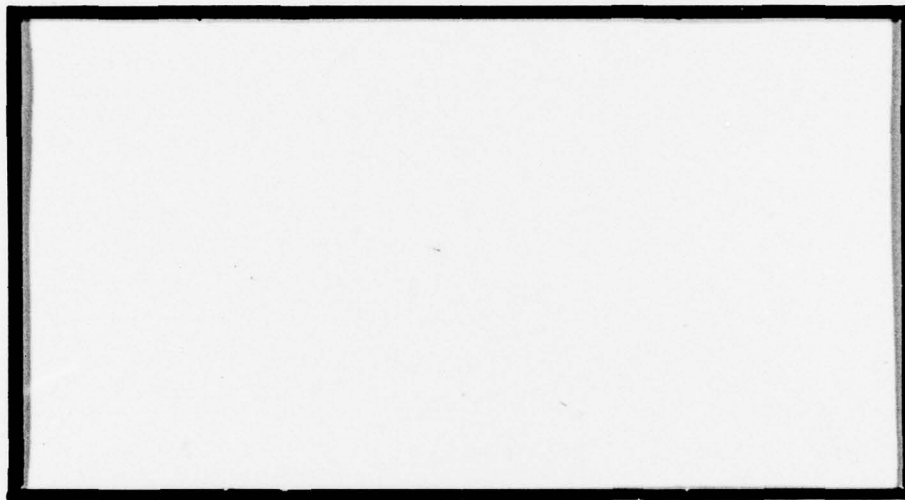UNCLASSIFIED   TR-78-2   NL

| OF |
AD-
A055889

END
DATE
FILMED
8 -78
DDC

FOR FURTHER TRAN

UNIVERSITY OF ILLINOIS

(12)

Studies of Individuals and
Groups in Complex Organizations

Department of Psychology
Urbana - Champaign

78 06 19 151

THE PREDICTION OF EMPLOYEE TURNOVER

IN A PART-TIME MILITARY ORGANIZATION.

Peter W. Hom

Ralph Katerberg, Jr.

Charles L. Hulin

University of Illinois
Technical Report 78-2
May 1978

D D C
RECEIVED
JUN 30 1978
E

35p.   TR-78-2

78 06 19 151

H00159   LB

REPORT DOCUMENTATION PAGE

READ INSTRUCTIONS
BEFORE COMPLETING FORM

1. REPORT NUMBER	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
78-2		

4. TITLE (and Subtitle)	5. TYPE OF REPORT & PERIOD COVERED
The Prediction of Employee Turnover in a Part-time Military Organization	Technical Report
	6. PERFORMING ORG. REPORT NUMBER

7. AUTHOR(s)	8. CONTRACT OR GRANT NUMBER(s)
Peter W. Hom, Ralph Katerberg, Jr., Charles L. Hulin	N000 14-75-C-0904

9. PERFORMING ORGANIZATION NAME AND ADDRESS	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
Department of Psychology University of Illinois Champaign, Illinois 61820	NR 170-802

11. CONTROLLING OFFICE NAME AND ADDRESS	12. REPORT DATE
Organizational Effectiveness Research Program Office of Naval Research (Code 452) Arlington, VA 22217	May 1978
	13. NUMBER OF PAGES
	32

14. MONITORING AGENCY NAME & ADDRESS(If different from Controlling Office)	15. SECURITY CLASS. (of this Report)
	UNCLASSIFIED
	15a. DECLASSIFICATION/DOWNGRADING SCHEDULE

16. DISTRIBUTION STATEMENT (of this Report)

Approved for public release; distribution unlimited

17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)

18. SUPPLEMENTARY NOTES

19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

Three approaches to the prediction of turnover were compared. Job satisfaction, organizational commitment, and Fishbein's model predicted reenlistment intentions and reenlistment behaviors of 484 National Guardsmen with high accuracy. Moreover, Fishbein's model and organizational commitment predicted the reenlistment criteria more accurately than did job satisfaction. The implications of these results for organizational retention and the attitude-behavior relationship are discussed.

DD FORM 1473 EDITION OF 1 NOV 65 IS OBSOLETE
1 JAN 73
S/N 0102-014-6601 |

Abstract

Three approaches to the prediction of turnover were compared.
Job satisfaction, organizational commitment, and Fishbein's model
predicted reenlistment intentions and reenlistment behaviors of
484 National Guardsmen with high accuracy. Moreover, Fishbein's
model and organizational commitment predicted the reenlistment
criteria more accurately than did job satisfaction. The implications
of these results for organizational retention and the attitude-
behavior relationship are discussed.

Substantial evidence from several reviews (Brayfield & Crockett, 1957; Porter & Steers, 1973; Vroom, 1964) has indicated consistently negative relationships between job attitudes and voluntary employee termination from an organization. The attempts to predict turnover (or other forms of organizational withdrawal) from job satisfaction are based on the general notion of consistency (Ajzen & Fishbein, 1977). It is usually assumed that it is logical or consistent for a person who holds a positive attitude toward some object to perform favorable behaviors, and not to perform unfavorable behaviors, with respect to that object. This assumption underlies most turnover studies. Resignation is widely assumed by organizational researchers to have evaluative implications for the organization or the job. In other words, leaving the job is assumed to mean that the leaver has a negative evaluation of one's job (and that job dissatisfaction influenced the decision to leave). Hence, job attitudes are expected to predict termination.[2]

However, the relationships between job attitudes and turnover are seldom strong. The prediction of job resignation may be enhanced by a consideration of two different approaches. One is a model of social behavior proposed by Fishbein, and the other is a construct (model) proposed by Porter, organizational commitment. The two approaches may demonstrate accuracy superior to that of job satisfaction in predicting turnover.

According to Fishbein's theory (Ajzen & Fishbein, 1973; Fishbein, 1967; Fishbein & Ajzen, 1975), a person's behavior (B) is assumed to be a function of his intention to perform that behavior (BI). Behavioral intention is, in turn, a function of two basic determinants: (1) his attitude toward performing the behavior (A_{act}) and (2) his subjective norm regarding the behavior (SN). Algebraically, this theory may be expressed by the following formula:

$$B \sim BI = w_1 A_{act} + w_2 SN,$$

where w_1 and w_2 are theoretical weights that are usually empirically determined by using standardized multiple regression coefficients.

The first component of Fishbein's model, attitude toward the act, may show a stronger relationship with the behavior than does attitude toward the object, which is the target toward which the action is directed. Traditional approaches have emphasized employee attitudes toward various aspects of the work environment, that is, attitudes toward objects, as primary determinants of personnel attrition. Attitude toward the act of termination itself may have greater predictive power than job attitudes (see the discussion of Ajzen & Fishbein's theory below for why this may be the case).

The second component of Fishbein's model, the subjective norm, is an individual's perception that most people who are important to him think he should or should not perform the behavior. The subjective norm is, in turn, a function of the person's beliefs about what specific important referent others think he should do (normative beliefs or NB's), weighted by his motivation to comply with these others (Mc's). This function may be algebraically represented by the following equation:

$$SN = \Sigma NBMc$$

The addition of personal normative belief to the basic Fishbein model has been proposed (Jaccard & Davidson, 1975; and Pomazal & Jaccard, 1976; have shown that the expansion of the Fishbein model by its inclusion enhanced the model's predictive power). This third component is defined as the person's moral obligation to perform the act. Personal normative belief may be an important determinant of job behaviors, especially acts of organizational withdrawal. Some researchers (e.g., Blood, 1969; Ilgen & Hollenback, 1977) have similarly noted the importance of moralistic factors (such as work values or the Protestant Work Ethic) in influencing employee behavior.

Further, behavioral intention is considered by Fishbein to act as an inter-
vening variable between the attitudinal and normative predictors of his model and
overt behavior (Fishbein & Ajzen, 1975). The single best predictor of behavior
should then be the person's intention to perform the behavior. Yet the prediction
of overt behavior by behavioral intention may not be perfect. The magnitude of
the relationship between intention and behavior depends on the degree to which
the measures of behavioral intention and behavior correspond in their level of
specificity, the stability of the intention, and the extent to which realization
of the intention is under the person's volitional control. The strength of the
intention-behavior relationship, therefore, determines how well Fishbein's model
can actually predict behavior--the stronger this association, the better the
prediction of behavior by the attitude toward the act and the subjective norm.

Finally, Fishbein hypothesized that variables external to his model can
influence behavioral intention only indirectly. That is, if extraneous variables
are related to behavioral intention, it is because of their effects on either of
the major factors of the model (attitude toward the act and/or subjective norm).
The two factors are sufficient for the prediction of intention. If the predictive
components of Fishbein's model are held constant, the correlations of the external
variables with behavioral intention should be low and insignificant. If the inten-
tion-behavior relation is strong, then the Fishbein model may also mediate the
impact of external variables on behavior.

The relative effectiveness of Fishbein's model and traditional job attitudes
as predictors of unexcused absenteeism and voluntary turnover has recently been
compared by Newman (1974). For employees of a county nursing home, traditional
job attitudinal measures (the five scales of the Job Descriptive Index (JDI)
[Smith, Kendall, & Hulin, 1969])and a measure of overall job satisfaction, Faces
(Kunin, 1955), in combination predicted absenteeism (R=.36; p<.01) better than
did Fishbein's model (R=.12; n.s.), but Fishbein's model predicted turnover more
accurately (R=.36; p<.01). (R=.26 for the job satisfaction predictors; n.s.)

Another recent approach that may improve the prediction of turnover beyond that ordinarily achieved by job satisfaction is a construct proposed by Porter, organizational commitment. Organizational commitment is an employee's identification with and involvement in his organization (Porter, Steers, Mowday, & Boulian, 1974; Porter, Crampon, & Smith, 1976). Porter considers organizational commitment to be a function of three factors: (1) a strong belief in and acceptance of the organization's goals and values; (2) a willingness to exert considerable effort on behalf of the organization; and (3) a strong desire to maintain organizational membership.

Porter further hypothesized that commitment represents a set of feelings more closely affiliated with an employee's desire to stay attached to the workplace. In other words, when an employee quits, he ends all formal ties to a particular company. Yet he may not necessarily be relinquishing a set of job duties since the same kind of job may be assumed elsewhere. In short, resignation implies rejection of the organization but not necessarily rejection of the job. Consequently, organizational commitment is regarded as being more directly related to termination than are job attitudes.

To test this hypothesis, Porter et al. (1974) compared the predictive powers of organizational commitment with job satisfaction (the five JDI scales) in differentiating stayers from leavers among psychiatric technician trainees in a longitudinal research design. Surveys were administered four times during training, and turnover occurred only after the training period concluded. Organizational commitment demonstrated greater effectiveness in forecasting voluntary resignation than job satisfaction across several time periods. Porter et al. (1974) concluded that only by measuring attitude toward a more relevant (and more global) attitudinal object, namely, the organization, can prediction of termination be improved beyond that normally obtained by assessing evaluations of specific aspects of the immediate work environment (and less relevant attitudinal objects).

This article proposes a competitive examination of three approaches to predicting turnover: Fishbein's model, organizational commitment, and job satisfaction. They will be compared in terms of their accuracy in predicting intention to reenlist and actual reenlistment in the National Guard. If the findings of Newman (1974) and Porter et al. (1974) can be generalized to a part-time (and military) work population, which the National Guardsmen represent, it is expected that both Fishbein's model and organizational commitment will display greater predictive power than will job satisfaction.[3]

Moreover, it is hypothesized that attitude toward the act (one of Fishbein's predictive components) will be a superior predictor of reenlistment intention and behavior than any of the measures of attitude toward objects: satisfaction with several aspects of National Guard duty and the National Guard itself. This hypothesis is derived from Ajzen and Fishbein's theory (1977). They showed that the relationship between attitude and behavior[4] varied as a function of the degree of correspondence between the attitudinal and behavioral measures in terms of their target, action, contextual, and time elements. Measures of job attitudes make no reference to any particular behavior (they are not action specific), although the target (i.e., the attitudinal object) is similar to that of the behavioral measure, which is the job or the organization. On the other hand, attitude toward the act of reenlisting in the National Guard corresponds more closely to the behavioral intention and the behavior because their target and action elements are identical, and hence it should be a stronger predictor.

Further, it was noted earlier that Porter asserted that measuring attitude toward a more relevant object, the organization, is superior (in predictive power) to evaluative measures of specific aspects of the job. This assertion will be more conclusively tested in this study than it was in Porter et al.'s study (1974). Instead of organizational commitment, a different (and more precise) measure of satisfaction with the organization will be compared with satisfaction

with five aspects of the job (work, supervision, pay, co-workers, and promotional opportunities) in terms of their effectiveness in forecasting intention to reenlist and reenlistment. A comparison between job satisfaction and organizational commitment may be inappropriate since Porter's scale contains both affective and conative items. Besides affect toward the organization, intention or desire to leave the organization is apparently assessed in Porter's measure. Because stated intention to remain is more strongly related to employee retention than is job satisfaction (Kraut, 1975), it is not surprising to find that organizational commitment as operationalized by Porter is a better predictor than is job satisfaction. It is in this sense that Porter's approach may be more direct than approaches based on job attitudes and not becauses he measures a more relevant employee attitude.

This alternative explanation of commitment's superiority raises doubt about the validity of Porter et al.'s results (1974). Rather than differences in relevancy, specificity, and stability between job satisfaction and organizational commitment that Porter reasoned as being responsible for their differential predictive validities, the superior predictive accuracy of commitment to the organization may reside in its measurement of withdrawal intention. In order to determine the spuriousness of Porter et al.'s findings, reenlistment intention will be partialled from the attitudinal predictors and not from the reenlistment measure in this study. If Porter et al.'s results are valid, the part correlation between organizational commitment and reenlistment should be stronger than (and statistically different from) the part correlation between job satisfaction and reenlistment in the National Guard.

Method

Subjects

Data were collected from 484 National Guardsmen from a Midwestern State during their annual summer training. Guardsmen were selected for the survey if the decision to reenlist in the National Guard was pending for them since the researchers were interested in collecting information regarding their reenlistment decisions. Social Security numbers were thus obtained for this reason, and the confidentiality of individual responses was guaranteed. The average tenure in the National Guard was 5.3 years (i.e., 88% were first-term enlistees; the first-term enlistment is a fixed six-year period), and the average number of months remaining in the present enlistment was 5.6 months for the sample.

The median educational level of the National Guardsmen was "some college or business school." Eighty-four percent of the sample were nonstudents. The average age of the subjects was 27 years. Males constituted 97 percent of the sample, and whites represented 85 percent of the participants.

Measures

Job Satisfaction

Satisfaction with five aspects of the job (work, promotional opportunities, pay, supervision, and co-workers) and satisfaction with the organization were measured.

Satisfaction with work and promotional opportunities were measured by the Job Descriptive Index (Smith, Kendall, & Hulin, 1969).

The pay scale measure consisted of two items from the Index of Organizational Reactions (IOR) (Dunham, Smith & Blackburn, 1977): (a) For what I do in the National Guard, I feel the amount of money I make is very good; and (b) How satisfied are you with the pay and benefits you receive from the National Guard?

The reliability of the pay satisfaction scale was .82 (coefficient alpha).

Satisfaction with co-workers was measured by the following items from the IOR: (a) How do you generally feel about the Guardsmen you attend drill with? (b) How satisfied are you with the other Guardsmen in your unit?

The reliability of the measure of co-worker satisfaction was .71.

The satisfaction with supervision items from the IOR were (a) How do you feel about the supervision you receive in the National Guard? and (b) Do you ever have the feeling you would be better off working under different supervision?

This scale's internal consistency reliability was .73.

The measure of satisfaction with the organization (i.e., the National Guard) was measured by Kunin's Faces Scale (1955).

Organizational Commitment

The National Guardsmen's identification with and involvement in the National Guard were assessed by Porter's   commitment scale (Porter & Smith, 1970).

The reliability of Porter's instrument in this sample was .89.

Fishbein predictors

Attitude toward the act was measured by having the Guardsmen rate "reenlisting in the National Guard at the next opportunity" on three 7-point semantic differential evaluative scales (awful-nice, bad-good, unfavorable-favorable). Summing the three evaluative scales formed the measure (A_{act}).

The reliability of the attitude toward the act scale was .97.

A measure of subjective norm was obtained by asking subjects to rate "people who are important to me and whose opinions I value think I should reenlist in the Guard at the next opportunity" on a 7-point unlikely-likely scale.

To measure the normative beliefs (NB), subjects were asked to indicate on a 7-point scale the falsity-truthfulness of whether each of four referents (friends, family, superiors in National Guard, employer) "thinks he should reenlist in the Guard at the next opportunity." These four normative beliefs were summed for an overall measure of normative expectation (ΣNB).

Motivations to comply (Mc) were measured on a 7-point scale by requiring the subjects to report how much they wanted to do what the referent thinks they should do. Then $\Sigma NBMc$ was obtained by multiplying the score on each normative belief by the score of the corresponding motivation to comply and summing these products for all normative beliefs.

In addition to measuring the basic components of Fishbein's model, a measure of perceived moral obligation was obtained by having subjects rate "I have a moral obligation not to reenlist at the next opportunity" on a 7-point scale (also known as personal normative belief or PNB).

Criteria

Intention to reenlist in the National Guard was measured by a bipolar questionnaire item that ranged in score from -3 (very unlikely that one will reenlist in the National Guard when one's present enlistment expires) to +3 (very likely that one will reenlist).

Information about the actual reenlistment decisions by the Guardsmen was gathered from personnel records six months after the survey. The term of enlistment for 252 subjects expired within that six-month period. Fifty percent of these subjects decided to reenlist; i.e., the base rate was 50%. The decision was coded: 1 = terminate; 2 = reenlist.

RESULTS

The intercorrelations among the variables are presented in Table 1.

Insert Table 1 here

Competitive Test of Three Approaches

Table 2 presents the accuracy of the various approaches in predicting
reenlistment intention and behavior. Each approach was strongly and signifi-
cantly predictive of these criteria, although the intention was more strongly
predicted than the act was.

Insert Table 2 here

--_---------------------

The multiple correlation (R) between intention and satisfaction with
five aspects of the job (work, promotional opportunities, pay, supervision,
and co-workers) was .57 (p < .05). Each satisfaction variable was individ-
ually correlated with the reenlistment intention (p < .05), but only work
and supervision satisfaction possessed significant standardized regression
weights in the multiple regression equation. When satisfaction with the or-
ganization was included in this prediction equation, the R was raised signif-
icantly (R=.63; p < .05).

Similarly, the regression equation based on the five satisfaction measures
predicted reenlistment (R=.49; p < .05). However, only three satisfaction
predictors were significantly correlated with reenlistment (work, pay, and
supervision), and only work satisfaction had a significant regression weight.
Further, when organizational satisfaction was added to this equation, it improved
the prediction of reenlistment significantly (R=.55, p < .05).

Organizational commitment also predicted reenlistment intention and behavior. It correlated .68 (p < .05) with the intention and .58 (p < .05) with the act. Moreover, organizational commitment was a superior predictor of these criteria than were the linear combinations of job satisfaction measures. Also, commitment to the organization was more strongly related to intention and behavior than was each of the five measures of job satisfaction; all comparisons between organizational commitment and measures of job satisfaction were statistically reliable (p < .05; two-tailed test). (See McNemar, 1969, for a description of a procedure to test the difference between correlations from the same sample.) (Commitment was also a stronger correlate of the criteria than was satisfaction with the organization; p < .05, two-tailed test).

The Fishbein Model predicted reenlistment intention with a R of .81 (p < .05). Both components of the model were highly related to behavioral intention (r=.79 for A_{act}, p < .05; r=.69 for SN, p < .05), and both received significant standardized regression weights. Hence, both the attitudinal and normative components made independent contributions to the prediction of intention. When moral obligation was combined with the Fishbein Model, the predictive power of the model was not enhanced (although the moral obligation was significantly correlated with intention; r=-.34, p < .05).

When the criterion was the reenlistment act, the Fishbein Model predicted it with a R of .65 (p < .05). Although the attitude toward the act (r=.65, p < .05) and the subjective norm (r=.49, p <.05) were both strongly correlated with the behavior, only the attitudinal component carried a significant regression weight. Thus, the normative component did not account for any variance in reenlistment that was not already accounted for by the attitudinal component. Further, when moral obligation was included in this prediction

equation, it again did not add any explanatory power, but it was significantly correlated with the act (r=-.26, p <.05). Further, it is noteworthy that the Fishbein Model predicted the two criteria better than did organizational commitment or job satisfaction.

Finally, it is worth noting that intention to reenlist was highly related to the reenlistment act (r=.67, p <.05). If an optimum cutoff score was used, the reenlistment intention correctly classified 80% of the cases (the base rate of reenlistment was 50%). Moreover, if subjects who were uncertain about their intention to reenlist were eliminated from the analysis, then the hit rate of expressed intent to reenlist in the National Guard was 84%.

Further Tests of Fishbein's Model

Attitude toward the act was a stronger predictor of behavioral intention (r=.79, p<.05) and behavior (r=.65, p <.05) than was the subjective norm (r=.69 for behavioral intention; r=.49 for the behavior). These differences in predictive strength were statistically significant (p <.01; two-tailed test). In addition, the attitudinal component had larger semipartial correlation coefficients (sr=.42, p <.05, for intention; sr=.43, p <.05, for behavior) than the normative component (sr=.17, p <.05, for intention; sr=.01, n.s., for the act). These results suggest that attitude toward the act was a more important determinant of the decision to reenlist than was the subjective norm. Other people's opinions about whether one should or should not reenlist mattered less than one's personal evaluation of the reenlistment behavior.

Earlier it was noted that Fishbein argued that a general measure of social influence, the subjective norm (SN), should be significantly related to a person's beliefs about what specific others think he should do, weighted by his motivation to comply with these others ($\Sigma NBMc$). Consistent with this prediction, the correlation between SN and $\Sigma NBMc$ was .52 (p <.05). However, weighting the

normative beliefs by motivation to comply degraded the correlation with SN since the correlation between SN and ΣNB was .60 (p < .05).

An examination of the correlations between the normative beliefs and the subjective norm, behavioral intention, and behavior indicated the friends and family of the National Guardsmen as being the most influential referents concerning the decision to reenlist. The correlations between the normative beliefs of friends and family and the subjective norm was .53 (p < .05) and .65 (p < .05), respectively. The intention to reenlist was correlated .52 (p < .05) with the normative expectation of friends and .60 (p < .05) with the normative expectation of family members, while reenlistment was correlated .44 (p < .05) with the expectation of friends and .53 (p < .05) with the expectation of family. On the other hand, the perceived expectations of the superiors in the National Guard and the Guardsman's civilian employer were less strongly related to the subjective norm, the behavioral intention, and the behavior. The normative belief of the National Guard superiors was correlated .12 (p < .05) with SN, .15 (p < .05) with intention, and .16 (p < .05) with the behavior. The normative belief of the civilian employer was correlated .40 (p < .05) with SN, .36 (p < .05) with reenlistment intention, and .37 (p < .05) with reenlistment. Consequently, the superiors in the National Guard and the civilian employer exerted less influence on the Guardsman's decision to reenlist than did his friends and family.

Although personal normative belief was significantly related to the reenlistment intention (r=-.34, p < .05) and behavior (r=-.26, p < .05), it correlated with the criteria weaker than did the attitudinal and normative predictors of Fishbein's model. These differences in magnitude were also statistically significant (p <.01; two-tailed test). More importantly, this perceived moral obligation to perform the behavior did not improve the predictive power of the Fishbein model. The increments in explained criterion variance were not significant, and this third predictor never received a significant regression weight in the regression equations.

Fishbein has also hypothesized that variables other than the two components of the model can only influence behavioral intention and behavior indirectly. That is, the model mediates the effects of extraneous variables on the criteria. This prediction was substantiated in Table 3. Most of the zero-order correlations between the external variables and the reenlistment intention were statistically significant ($p < .05$), and the attitudinal measures showed moderately strong correlations with the intention. Once the Fishbein predictors were partialed out of these relationships, the correlations became small, and most of them were no longer significant. Similarly, most of the external variables were significantly correlated with the reenlistment act. After holding the Fishbein model constant, most of the correlations shrunk in size (the correlations with the attitudinal external variables were reduced substantially given they originally had moderately strong relationships with the act), and few of these partial correlations were significant.

Insert Table 3 here

Test of Ajzen and Fishbein's Theory (1977)

According to Ajzen and Fishbein (1977), attitude toward the act of reenlisting should predict the criteria better than do attitudes toward various aspects of National Guard duty and the National Guard because this attitude corresponds more closely with the behavioral criteria (i.e., their target and action elements are common). Consistent with their theory, attitude toward the behavior was more strongly correlated with the reenlistment intention ($r=.79$, $p < .05$) than were the five job attitudes ($r=.55$, work; $r=.20$, promotional opportunities; $r=.29$, pay; $r=.37$, supervision; $r=.18$, co-worker relations) and attitude toward the organization ($r=.54$). The differences between the correlation of reenlistment

intention with attitude toward the act and the correlations of intention with the other attitudinal measures were all statistically significant (p < .05; two-tailed test). Similarly, attitude toward reenlistment was more strongly predictive of reenlistment (r=.65; p < .05) than were the measures of job and organizational satisfaction. These differences were also statistically reliable (p < .05; two-tailed test).

Test of Porter's Hypothesis and Test of Alternative Explanation for Porter et al.'s Results (1974)

Porter claimed that satisfaction with the organization should be a better predictor than is satisfaction with specific and immediate aspects of the job. Although attitude toward the National Guard was a stronger correlate of the intention to reenlist than was satisfaction with pay, promotional prospects, supervision, and co-workers (all these differences were significant at p < .05: two-tailed test), it was slightly inferior to satisfaction with the work (this difference was not statistically reliable). Further, evaluation of the organization was more predictive of the reenlistment act than were the five job attitudes. All but one of these differences in correlation with the behavior were significant (p < .05; two -tailed test); work satisfaction did not differ significantly from organizational satisfaction in predictive power. Therefore, Porter's hypothesis was not substantiated, and job attitudes (in specific, one aspect of the job: the work itself) may be as predictive of reenlistment intention and behavior as the organizational attitude.

In order to determine the spuriousness of Porter et al.'s (1974) results, part correlations between the attitudinal measures and reenlistment were computed with the effect of the reenlistment intention removed frcm the attitudinal predictors.[5] These part correlations are shown in Table 4. Only supervision satisfaction and organizational commitment were significantly related to reenlistment once the intention was partialed out of them. Although organizational commitment was more

strongly related to the act than were the satisfaction variables, only the comparison with promotional satisfaction demonstrated significant differential predictive validity in favor of commitment ($p < .05$; one-tailed test). The other comparisons yielded no evidence of significantly different predictive powers between commitment and job satisfaction. Therefore, it may be concluded that the explanation offered by Porter for the superiority of commitment is groundless. Rather, the predictive power of commitment lies in its being an attitudinal measure confounded with withdrawal questions.

Insert Table 4 here

DISCUSSION

The three approaches examined in this study predicted with high accuracy the propensity of National Guardsmen to stay in their organization. Such impressive predictions are atypical of turnover research, and the unique characteristics of the withdrawal process in the National Guard may be responsible for the successful application of these approaches. First, in the National Guard, as in other military organizations, every member must make an explicit decision to remain or leave at some point during his tenure; civilian employees are not expected to make such a clear and specific decision (especially if they decide to stay). Moreover, in the National Guard, the decision to resign comes at a single and predictable point in time, while in civilian organizations, the decision to discontinue organizational membership can occur at any time. That is, the decision date is set for each Guardsman, and he can anticipate when he can leave. In the civilian sector, an employee may intend to quit but he may be uncertain about when he will leave. Further, reenlistment in the National Guard means an obligation to maintain membership for a definite and fixed term (i.e., one year); consequently, the decision to reenlist carries greater commitment than does the same decision by a civilian. Such characteristics of the withdrawal process in the National Guard

may mean that the reenlistment decision takes on added significance and is more thoughtfully and carefully considered than the analogous decision by civilians. In addition to these advantages for research on organizational withdrawal, National Guardsmen may feel less threatened in revealing their veridical job attitudes and intention to reenlist, but collecting similar information in other organizations (civilian or military) where membership is full-time may appear more dangerous. Thus, the same approaches applied to organizations, including the full-time military ones, lacking the advantages offered by the National Guard for turnover research, may yield poorer prediction of turnover.

Despite the highly accurate predictions of turnover, there remains differences in the predictive efficiency of the different approaches. Consistent with the findings of Newman (1974) and Porter et al. (1974), the Fishbein model and organizational commitment predicted reenlistment intention and behavior more accurately than did measures of satisfaction with the job. Such generalizability is encouraging because some researchers have discovered dissimilarities in how part-time (which is what National Guardsmen are) and full-time workers respond to their jobs (Logan, O'Reilly, & Roberts, 1973; Terborg & Miller, 1977). This finding is also noteworthy when one considers that even though the traditional satisfaction approach relied on more predictors than the other two approaches, it still predicted the withdrawal criteria worse than the Fishbein model and organizational commitment. This also means that the job satisfaction approach is more susceptible to greater shrinkage upon cross-validation. Further, the Fishbein model had greater predictive power than organizational commitment.

Support for other aspects of the Fishbein model and for its generalizability was also provided in this article. The impressive strength of Fishbein's model for predicting reenlistment intention (it explained 65 percent of the criterion variance) supports Fishbein's contention that behavioral intention is primarily

a function of attitude toward the act and subjective norm; moreover, the separate relations of the two components with intention were high and significant. Although the attitudinal and normative components of the model were correlated significantly, they continued to explain different, though overlapping, portions of the variance in intention. Also, Fishbein's hypothesis that the subjective norm is a function of the person's perception of what important others expect him to do, weighted by his desire to comply with their expectations was confirmed. Weighting by motivation to comply, however, attenuated this relationship.

The central concern of the model is how well the attitudinal and normative predictors account for behavioral intention (Fishbein & Ajzen, 1976). Because behavioral intention was strongly related to behavior in this study ($r=.67$, $p < .05$), it was expected that the Fishbein model should predict the act accurately. This expectation was borne out, and the Fishbein model predicted behavior with great accuracy ($R=.68$, $p < .05$).

There are several reasons for the strong prediction of behavior by Fishbein's model. Several of the conditions for a high intention-behavior relationship (Fishbein & Ajzen, 1975) were present in the National Guard. As noted earlier, since the reenlistment decision is more deliberate and considered more carefully in the National Guard, the intention to reenlist is more stable and reliable over time. Moreover, the researchers were able to identify from personnel records subjects for whom the reenlistment act was not under volitional control. There were only a few subjects who could not reenlist (e.g., death or injury since the survey) even though they intended to, and they were eliminated from the analyses.

Finally, assessing behavioral intention is more specific and precise in the National Guard. Following Ajzen and Fishbein's theory, the measure of reenlistment intention corresponds more closely to reenlistment than (time element is common across the two measures) does stated withdrawal intention with turnover in civilian

organizations, thereby permitting a strong intention-behavior relationship in the National Guard. For example, asking the employee if he intends to resign is a poorer predictor of termination than asking him if he intends to resign on a given date. In a civilian setting, the researcher and frequently the subject does not know apriori when the subject may decide to quit. On the other hand, the date of the withdrawal decision is specified for the National Guardsmen, and the measure of the intention to withdraw can correspond more closely to the withdrawal act in specificity.

Further, Fishbein hypothesized that variables external to his model should affect the behavioral intention and behavior only indirectly. The test of the sufficiency of Fishbein's model strongly supported this hypothesis. Once the attitudinal and normative predictors of the model were held constant, the relationships between the extraneous variables and the withdrawal criteria declined drastically in magnitude. Most of the partial correlations were statistically nonsignificant.

Besides affirming the applicability of Fishbein's model to a new sample, some results in the study were peculiar to the National Guard. Specifically, since the attitudinal component of Fishbein's model was a stronger correlate of the criteria and had larger regression weights than the normative component, attitude toward the act was a more important determinant of the decision to reenlist than were social pressures. The opinions of referent others concerning reenlistment was not as influential a factor in the reenlistment decision as the Guardsmen's subjective evaluation of reenlistment (and its consequences for him). Yet it should be noted that the greater importance of the attitudinal component is not generally true. The relative weighting of the normative and attitudinal factors depends on the type of person, behavior, situation, and occasion under consideration (Fishbein & Ajzen, 1975).

Another finding that is unique to the National Guard is the failure of personal normative belief to add to the explanatory power of the basic Fishbein model. Again, this is not generally true. The moral obligation to reenlist in the National Guard was not an important determinant of reenlistment; but when altruistic behaviors were criteria, the moral obligation to perform the behavior raised the predictability of Fishbein's model (Schwartz & Tessler, 1972; Pomazal & Jaccard, 1976).

This investigation also indicated that friends and family of the National Guardsmen were the most influential referents regarding their reenlistment in the National Guard. The superiors in the National Guard and the civilian employer exerted less influence on the reenlistment decision. This information should alert the National Guard as to the futility of the current retention campaigns that overemphasized the influence the civilian employer and the National Guard superior have in persuading National Guardsmen to remain. It should be recalled that the major determinant of reenlistment was attitude toward reenlistment. Regardless which of the referents may be targets of advertising appeals by the National Guard, all referents seem to have little impact on the reenlistment of National Guardsmen.

Ajzen and Fishbein's theory was also examined in this article. They proposed that the relationship between attitude and behavior decreases as the correspondence between them (in specific, similarity in their target, action, contextual, and occasion elements) becomes more discrepant. The target and action elements of attitude toward the act and of the act (with respect to the object) are identical, whereas only the target is common between attitude toward the object and the action. Since attitude toward the act corresponds more closely with behavioral intention and behavior than does attitude toward the object, it should be a superior predictor of the behavioral criteria. Ajzen and Fishbein's theory was clearly supported.

The evaluation of reenlistment was a stronger correlate of reenlistment intention and behavior than was satisfaction with various aspects of National Guard duty and the National Guard.

However, the "intention" approaches represented by Fishbein's model and organizational commitment (as operationalized by Porter) assume that the prediction of turnover becomes stronger the closer in time to the act the subject is questioned. Nevertheless, these approaches may predict poorly if the turnover is too distantly removed in time from the assessment of the subject. On the other hand, job satisfaction may better predict this temporally remote criterion. That is, job satisfaction may demonstrate a more stable relationship with resignation than do the approaches by Fishbein and Porter. Herman (1973), too, suggested "that attitudes may be more stable predictors of behavior than expressed intent in the union representation election situation." Also, job satisfaction may predict with greater accuracy spontaneous acts of withdrawal such as tardiness and absenteeism than would organizational commitment and the Fishbein model. For example, Newman (1974) showed that Fishbein's model predicted employee attendance worse than did job satisfaction. This result may be caused by the weak relationship found between intention and absenteeism (r=.10, n.s.). Hence, when the withdrawal behaviors are impulsive and less deliberate, behavioral intention and approaches based on intention may be poorer predictors of them than is job satisfaction.

Porter's hypothesis that attitude toward the organization is a superior predictor of withdrawal from the organization than is attitude toward various aspects of the job was also subjected to an empirical test. Although satisfaction with the National Guard was a stronger correlate of the reenlistment criteria than was satisfaction with pay, supervision, co-workers, and promotional opportunities, satisfaction with the work was equal to satisfaction

with the organization in predictive accuracy. This finding suggests that the explanation advanced by Porter for the superiority of organizational commitment over job satisfaction in predicting organizational retention is false.

Another result similarly controverts Porter's explanation and invalidates Porter et al.'s findings (1974). After removing the effect of reenlistment intention from the attitudinal measures, the part correlation between organizational commitment and reenlistment was not clearly stronger than the part correlation between job satisfaction and reenlistment. Thus, the predictive efficiency of Porter's approach resides not in its assessing a more relevant employee attitude but rather in commitment being an attitudinal scale that is confounded with items measuring intention to withdraw from the organization.

A final comment should be made. Porter's reasoning may be casted within Ajzen and Fishbein's theory. Obviously, Porter disagrees with other organizational researchers as to the appropriate target of the act of turnover.[6] This behavior is performed with respect to which object, the job or organization? Is an unfavorable opinion of the job or the organization implied by employee resignation? (This may be less of a problem when the criterion is the intention to leave since the target of the action can be specified in this behavioroid measure). Because Porter believes the employee always resigns from the organization and not necessarily from the job, the target of resignation is the organization and not the job. If this is the case, then the target will be the same in both the behavioral criterion and the attitudinal predictor suggested by Porter (i.e., organizational commitment or attitude toward the company). Therefore, the relationship between turnover and satisfaction with the organization should be high because of their high correspondence in measurement. On the other hand, since different targets are involved, job satisfaction corresponds less closely to turnover, and a weaker relationship is expected.

As noted earlier, Porter's reasoning received no empirical support.

Apparently, both the organization and the job, or more accurately, the

work itself, may represent targets of the act of termination. Although a

particular employee may quit because of dissatisfaction with his pay or

supervision (see Graen and Ginsburgh, 1976, for evidence that the quality

of the leader-subordinate exchange binds an employee to his job), generally,

employees leave the organization because of their dissatisfaction with

the organization and/or the nature of the work. Dissatisfaction with

the organization was not _the_ predominant motivating factor for turnover.

REFERENCES

Ajzen, I., and Fishbein, M. Attitudinal and normative variables as predictors of specific behaviors. _Journal of Personality and Social Psychology_, 1973, _21_, 41-57.

Ajzen, I., and Fishbein, M. Attitude-behavior relations: A theoretical analysis and review of empirical research. _Psychological Bulletin_, 1977, _84_, 888-918.

Blood, M. Work values and job satisfaction. _Journal of Applied Psychology_, 1969, _53_, 456-459.

Brayfield, A. and Crockett, W. Employee attitudes and employee performance. _Psychological Bulletin_, 1955, _52_, 396-424.

Dunham, R., Smith, F., and Blackburn, R. Validation of the index of organizational reactions with the JDI, the MSQ, and faces scales. _Academy of Management Journal_, 1977, _20_, 420-432.

Fishbein, M. Attitude and the prediction of behavior. In M. Fishbein (ed.), _Readings in attitude theory and measurement_. New York: Wiley, 1967.

Fishbein, M. and Ajzen, I. Attitudes towards objects as predictors of single and multiple behavioral criteria. _Psychological Review_, 1974, _81_, 59-74.

Fishbein, M. and Ajzen, I. _Belief, Attitude, Intention, and Behavior_. Reading, Mass.: Addison-Wesley, 1975.

Fishbein, M. and Ajzen, I. Misconceptions about the Fishbein Model: Reflections on a study by Songer-Nocks. _Journal of Experimental Social Psychology_, 1976, _12_, 579-584.

Graen, G. and Ginsburgh, S. Job resignation as a function of role orientation and leader acceptance: A longitudinal investigation of organizational assimilation. _Organizational Behavior and Human Performance_, 1977, _19_, 1-17.

Herman, J. Are situational contingencies limiting job attitude-job performance relationships. _Organizational Behavior and Human Performance_, 1973, _10_, 208-224.

Ilgen, D. and Hollenback, J. The role of job satisfaction in absence behavior. _Organizational Behavior and Human Performance_, 1977, _19_, 148-161.

Jaccard, J., and Davidson, A. A comparison of two models of social behavior: Results of a survey sample. _Sociometry_, 1975, _38_, 497-517.

Kraut, A. Predicting turnover of employees from measured job attitudes. _Organizational Behavior and Human Performance_, 1975, _13_, 233-243.

Kunin, T. The construction of a new type of attitude measure. _Personnel Psychology_, 1955, _8_, 65-77.

Logan, N., O'Reilly, C., and Roberts, K. The job satisfaction among part-time and full-time employees. Journal of Vocational Behavior, 1973, 3, 33-41.

McNemar, Q. Psychological Statistics. New York: John Wiley & Sons, 1969.

Newman, J. Predicting absenteeism and turnover: A field comparison of Fishbein's model and traditional job attitude measures. Journal of Applied Psychology, 1974, 59, 610-615.

Pomazal, R., and Jaccard, J. An informational approach to altruistic behavior. Journal of Personality and Social Psychology, 1976, 33, 317-326.

Porter, L., Crampon, W., and Smith, F. Organizational commitment and managerial turnover: A longitudinal study. Organizational Behavior and Human Performance, 1976, 15, 87-98.

Porter,L., and Smith, F. The etiology of organizational commitment: A longitudinal study of the initial stages of employee-organization reactions. Unpublished manuscript, University of California, Irvine, 1970.

Porter, L., and Steers, R. Organizational, work, and personal factors in employee turnover and absenteeism. Psychological Bulletin, 1973, 80, 151-176.

Porter, L., Steers, R., Mowday, R., and Boulian, P. Organizational commitment, job satisfaction and turnover among psychiatric technicians. Journal of Applied Psychology, 1974, 59, 603-609.

Schwartz, S., and Tessler, R. A test of a model for reducing measured attitude-behavior discrepancies. Journal of Personality and Social Psychology, 1972, 24, 225-236.

Smith, P., Kendall, S., and Hulin, C. The measurement of satisfaction in work and retirement. Chicago: Rand McNally, 1969.

Terborg, J., and Miller, H. An investigation of part-time vs. full-time employees. Technical Report No. 1. Department of Psychology, University of Illinois, Nov., 1977.

Vroom, V. Work and motivation. New York: Wiley, 1964.

Footnotes

1. This research was supported in part by Office of Naval Research, grant number
N000-14-75-C-0904, Charles Hulin principal investigator, in part by the Department
of Psychology, University of Illinois, and in part by the Illinois National Guard.
The authors thank Col. Robert Adams for his enthusiastic support and assistance.

2. Of course, an employee may leave the organization because a better job is
offered elsewhere. The leaver may be as satisfied with his present job as the
stayers, but more attractive job alternatives are available for him. More im-
portantly, if there are many leavers from an organization (because local labor
market conditions are excellent), that is, when the base rate for turnover in the
organization is extremely high, then turnover will be poorly predicted by job
satisfaction. Such extreme behavioral base rate restricts the range (or variance),
thereby attenuating the correlation.

Further, even if turnover is a valid indicant of or valid criterion for
job satisfaction, it may not be linearly related to satisfaction with the job
(Fishbein & Ajzen, 1974). In other words, turnover may have a systematic relation-
ship with job satisfaction, but it may not be highly correlated with job satisfaction
if it has a nonlinear trace line (e.g., meets Guttman or Thurstone criteria of
validity). In addition to validity, turnover must have a linear trace line
(i.e., meets Likert scaling criteria) in order for it to be predicted from measures
of job attitude.

3. At this point, one cannot predict confidently whether Fishbein's approach
or Porter's approach will prove superior. Fishbein's model contains an attitudinal
measure that corresponds very closely to the behavioral criterion (and his model
has one more predictor) than organizational commitment, but Porter's scale has
items that represent a general intention to leave the organization.

4. Many of the studies reviewed by Ajzen and Fishbein (1977) relied on "behavioroid" measures as criteria, such as the person's intention or commitment to perform the behavior or verbal self-reports of past performance of the behavior.

5. Porter et al. (1974) controlled for the influence of age by partialing it from commitment and job satisfaction before comparing their predictive powers. In this study, removing the effect of age did not affect the results. In fact, when age and reenlistment intention were held constant, organizational commitment was a weaker predictor of reenlistment than were work and supervision satisfaction.

6. Ajzen and Fishbein (1977) also noted the difficulty in determining correspondence between attitudinal and behavioral measures in a given instance. For example, what is the target of donating money to the Heart Fund if the money is collected by a neighbor? Is it the Heart Fund, the neighbor, or both?

TABLE 1

Intercorrelations Among Variables

Variables	1	2	3	4	5	6	7	8	9	10	11	12
1. JDI Work	---											
2. JDI Promotions	.27	---										
3. Pay Satisfaction	.35	.23	---									
4. Supervision Satisfaction	.46	.17	.37	---								
5. Co-Worker Satisfaction	.30	.12	.30	.29	---							
6. Organizational Commitment	.64	.29	.42	.48	.26	---						
7. Personal Normative Belief	-.29	-.12	-.13	-.21	-.13	-.39	---					
8. Subjective Norm	.44	.15	.29	.26	.21	.59	-.30	---				
9. Intention to Reenlist	.55	.20	.29	.37	.18	.68	-.34	.69	---			
10. Company Satisfaction	.53	.21	.33	.42	.21	.69	-.27	.49	.54	---		
11. Attitude toward the Act	.57	.20	.35	.39	.23	.74	-.35	.73	.79	.63	---	
12. Reenlistment Behavior	.46	.12*	.26	.33	.11*	.58	-.26	.49	.67	.49	.65	---

Note: N=373 for variables 1 to 11; N=228 for variable 12.

*Except for these correlations, all correlations are significant at .05 level.

Table 2

Predictive Accuracy of Different Models

Models	Intention to Reenlist[a]			Reenlistment[b]		
	β	r	R	β	r	R
Job Satisfaction			.57*			.49*
JDI Work	.46*	.55*		.42*	.46*	
JDI Promotions	.04	.20*		-.08	.12	
IOR Pay	.08	.29*		.12	.26*	
IOR Supervision	.12*	.37*		.11	.33*	
IOR Co-Workers	-.03	.18*		-.08	.11	
Job Satisfaction + Organizational Satisfaction			.63*			.55*
Organizational Satisfaction	.32*	.54*		.32*	.49*	
Fishbein Model			.81*			.65*
Attitude toward the Act	.62*	.79*		.63*	.65*	
Subjective Norm	.24*	.69*		.03	.49*	
Fishbein Model + Moral Obligation			.81*			.65*
Moral Obligation	-.06	-.34*		.06	-.26*	
Organizational Commitment		.68*			.58*	

*p < .05

a N=373

b N=228

Table 3

Sufficiency Test of the Fishbein Model

External Variable	Intention to Reenlist		Reenlistment	
	zero-order r	partial r[a]	zero-order r	partial r[a]
Work Satisfaction	.55*	.19*	.46*	.17*
Promotion Satisfaction	.20*	.07	.12	.00
Pay Satisfaction	.29*	.00	.26*	.05
Supervision Satisfaction	.37*	.12*	.33*	.12
Co-Worker Satisfaction	.18*	-.02	.11	-.01
Organizational Satisfaction	.54*	.07	.49*	.11
Organizational Commitment	.68*	.20*	.58*	.18*
Age	.27*	.05	.31*	.19*
Sex[b]	.10*	.00	.08	.01
Marital Status[c]	-.05	-.04	-.08	.00
Race[d]	-.17*	-.05	-.22*	-.19*
Student Status[e]	-.11*	-.04	-.14*	-.06
Education	-.23*	-.11*	-.19*	-.06
Number of Dependents	.20*	.08	.20*	.05
Tenure	-.01	-.08	-.17*	-.14*

*$p < .05$

[a] Partial correlations of each external variable with criterion with Fishbein predictors controlled for.

[b] Sex is coded: 2=female, 1=male

[c] Marital status is coded: 2=single, 1=married

[d] Race is coded: 2=white, 1=nonwhite

[e] Student status is coded: 2=nonstudent, 1=student

Table 4

Part Correlation between Predictor and Reenlistment
with Influence of Intention Removed from the Predictor

Predictor	part correlation
Work Satisfaction	.11
Promotion Satisfaction	-.01
Pay Satisfaction	.08
Supervision Satisfaction	.13*
Co-Worker Satisfaction	.03
Organizational Satisfaction	.12
Organizational Commitment	.14*

*p <.05
 N=228