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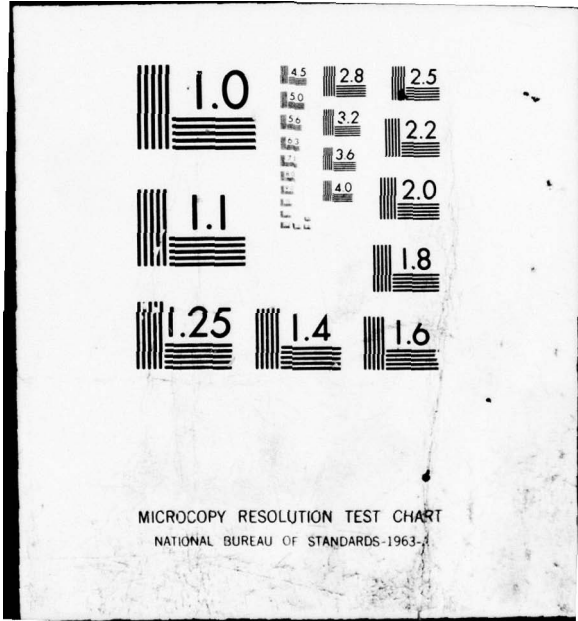
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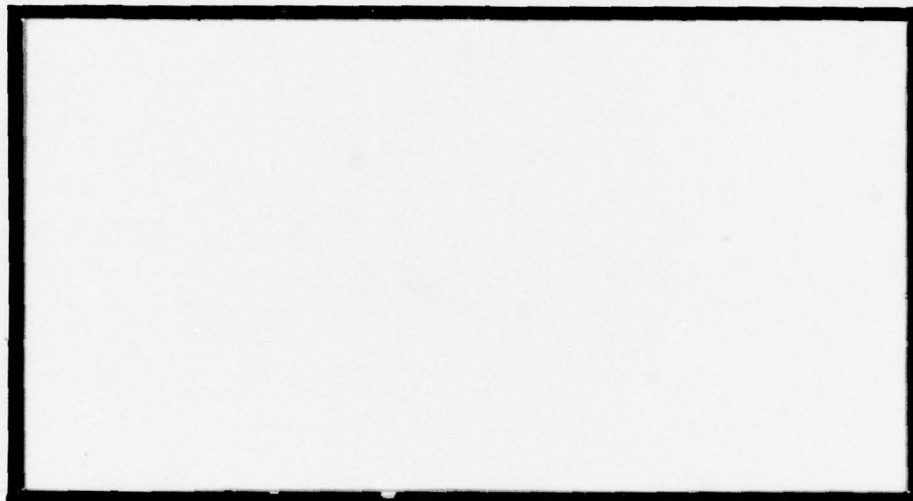
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A COMPARATIVE EXAMINATION  
OF FOUR DIFFERENT APPROACHES TO THE PREDICTION  
OF ORGANIZATIONAL WITHDRAWAL

Peter W. Hom

Charles L. Hulin

University of Illinois  
Technical Report 78-5  
December 1978

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The effectiveness of the Fishbein and Triandis models, Porter's organizational commitment, and the Job Descriptive Index in predicting reenlistment intention and behavior in the National Guard were compared. Surveys were administered to 1169 Guardsmen in 29 National Guard units. During the six months after the survey, 255 respondents made reenlistment decisions. Reenlistment intention was highly related to reenlistment ( $r = .70$ ). Both reenlistment criteria were strongly predicted by Fishbein's and Triandis'.			

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models ( $R_s = .70$ 's) but moderately predicted by commitment ( $r = .47$ ) and job satisfaction ( $R = .51$ ). The alternative descriptive version of Fishbein's model fared poorly. Moral obligation to perform the act did not enhance the predictability of Fishbein's model. Fishbein's and Triandis' models mediated the effects of exogenous variables on the criteria. Except for components of Fishbein's and Triandis' models, influences on behavior were mediated through behavioral intention.



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Although the relations between job attitudes and turnover have been consistently significant (Brayfield & Crockett, 1957; Porter & Steers, 1973; Vroom, 1964), they are seldom strong (Locke, 1976; Newman, 1974). Reported correlations between job satisfaction and turnover have usually been less than .40 (Locke, 1976). This study proposes several alternative approaches that may enhance the prediction of employee termination. Specifically, two theoretical models of social behavior, one developed by Fishbein (1967) and one by Triandis (1977), and organizational commitment (Porter, Steers, Mowday, & Boulian, 1974) will be compared with a model of job satisfaction (Smith, Kendall, & Hulin, 1969) in terms of their accuracy in predicting employee resignation.

#### The Fishbein Model

Traditional approaches have emphasized employee attitudes toward various aspects of the work environment, attitudes toward objects or concepts, as the primary determinants of withdrawal behaviors. A different approach that assesses employee attitudes toward the withdrawal behaviors themselves may yield greater predictive power.

Rather than view attitude toward an object as the major determining factor of behavior with respect to that object, Fishbein and Ajzen (Ajzen & Fishbein, 1973; Fishbein, 1967; Fishbein & Ajzen, 1975) identified two kinds of variables that serve as basic determinants: (a) attitude toward performing the behavior and (b) the subjective norm regarding the behavior. This theory may be algebraically expressed by the following formula:

$$\begin{aligned} \text{Behavior} &= f(\text{BI}) \\ &\text{and} \\ \text{BI} &= w_1 \text{Aact} + w_2 \text{SN} \end{aligned}$$

where BI = behavioral intention; Aact = attitude toward the act; SN = subjective norm; and  $w_1$  and  $w_2$  = theoretical weights that are usually empirically determined by using standardized multiple regression coefficients.



Moreover, attitude toward the act is proposed to be a function of the individual's beliefs about the consequences of performing the behavior, weighted by the individual's evaluation of those consequences. It is represented as

$$A_{act} = \sum_{i=1}^n b_i e_i,$$

where  $b_i$  = the person's subjective probability that performing the behavior will result in outcome  $i$ ;  $e_i$  = the person's evaluation of outcome  $i$ ; and  $n$  = the number of salient beliefs that the person holds.

The subjective norm is the individual's perception that most people who are important to the individual think the individual should or should not perform the behavior. Further, the subjective norm is considered a function of the person's beliefs about what specific important others think the person should do, weighted by the person's motivation to comply with these others. Algebraically,

$$SN = \sum_{r=1}^m NB_r Mc_r,$$

where  $NB_r$  = the normative belief that a given referent other  $r$  thinks the individual should or should not perform the act;  $Mc_r$  = the person's motivation to comply with referent  $r$ ; and  $m$  = the number of relevant referent others.

The central concern of the Fishbein model is the prediction of behavioral intention from its two major factors, but intention is considered an intervening variable between the model and overt behavior (Fishbein & Ajzen, 1975). The single best predictor of behavior should be the intention to engage in the behavior, although the prediction of overt behavior by behavioral intention will seldom be perfect.

A common misconception of the model is that it assumes a strong empirical relation between intention and behavior. It does not (Fishbein & Ajzen, 1976). The magnitude of the relationship between intention and behavior

depends on the degree to which the measures of intention and behavior correspond in their levels of specificity, the stability of the intention, and the extent to which realization of the intention is under the individual'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 Aact and SN. But it must be kept in mind that "the validity of the model rests not on its ability to predict behavior, but only on its ability to predict intentions" (Fishbein & Ajzen, 1976, p. 584).

Finally, Fishbein hypothesized that variables external to his model can influence behavioral intention only indirectly. That is, if extraneous variables are related to intention, it is because of their effects on either of the two major factors of the model. Intention is sufficiently explained and predicted by Aact and SN. If the Fishbein model is statistically held constant, the correlations of exogenous variables with intention should be greatly attenuated and nonsignificant. If the intention-behavior relation is empirically strong, then the Fishbein model may similarly mediate the impact of exogenous variables on behavior (Fishbein & Ajzen, 1976). In addition, the effects of extraneous variables on behavior are mediated through behavioral intention but only if a strong correlation between intention and behavior exists (Fishbein & Ajzen, 1976). When the intention-behavior relation is weak, the external variables may have effects on behavior which are not mediated by intention.

Several studies (Jaccard & Davidson, 1975; Pomazal & Jaccard, 1976; Schwartz & Tessler, 1972) have improved the predictability of Fishbein's model by adding the personal normative belief (Fishbein, 1967), which is the person's belief about his or her moral obligation to perform the act. Belief

about the wrongfulness of absenteeism from work has been related to absence behavior (Ilgen & Hollenback, 1977), and the perceived moral obligation to participate in an organization may likewise enhance the ability of the Fishbein model to predict turnover.

#### The Triandis Model

Another model of social behavior, which is potentially of value in predicting withdrawal behaviors and differs from the traditional job satisfaction approach, has been proposed by Triandis (1971, 1975, 1976, 1977). According to Triandis' theory, behavior (B) is determined by (1) the intention to engage in the behavior (BI), (2) the "habit" (H) of the individual to perform this action (indexed by the frequency of past emissions of the response), and (3) the facilitating condition (F) (the person's ability to perform the act relative to the difficulty of the act). Behavioral intention depends on (1) the affect toward performing the act, (2) the beliefs about the consequences of performing that behavior and the evaluations of those consequences, and (3) the perceived appropriateness of the particular behavior for (a) members of specific reference groups (norms), (b) occupants in specific positions in the social structure (roles), and (c) the person's self-concept (the consistency of the behavior with the self-concept). This theory is algebraically represented as

$$B = (w_0 H + w_1 BI)F \quad (\text{Equation 1})$$

$$BI = w_2 A_{act} + w_3 \left( \sum_{i=1}^m P_{c_i} V_{c_i} \right) + w_4 (\sum R NA_r + \sum RA_q + SA) \quad (\text{Equation 2})$$

where  $A_{act}$  = affect toward the act;  $P_{c_i}$  = subjective probability that performing the behavior will lead to consequence  $c_i$ ;  $V_{c_i}$  = evaluation of  $c_i$ ;  $NA_r$  = perceived appropriateness of performing the behavior for a member of reference group  $r$ ;  $RA_q$  = perceived appropriateness of performing the behavior for a person occupying position  $q$  in the social structure;  $SA$  = perceived



appropriateness of the behavior for the person's self-concept; and  $w_0$  to  $w_4$  are empirically determined standardized regression weights.

Although similar in form, there are major distinctions between the Fishbein and Triandis models. Their social components are conceptualized differently. Fishbein's normative component deals with the behavioral expectations of specific, significant others, whereas Triandis measures the perceived appropriateness of the behavior for reference groups (norms) or positions in the social structure (roles). Motivation-to-comply is not assessed in Triandis' model, nor is the subject's conception of the consistency of the action with the subject's self-image measured by Fishbein's model. Moreover, Fishbein's  $\sum b_i e_i$  measure is the same as Triandis'  $\sum PcVc$  measure. Instead of regarding them as alternative measures of the same construct as Fishbein does,  $A_{act}$  and  $\sum PcVc$  (or  $\sum b_i e_i$ ) are considered different by Triandis. According to Triandis,  $A_{act}$  represents the emotion that the subject feels for the act, which arises from classical conditioning. An activity such as sin may be intrinsically enjoyable, but its perceived consequences may be negative. Conversely, there is no rational basis for acts of phobia, but the avoidance behaviors are highly charged emotionally.

Like Fishbein's theory, Triandis specifies that variables other than those included in his model (equation 2) can only influence behavioral intention indirectly by affecting one or more components of the model directly. The Triandis model mediates the effects of exogenous variables on intention (and behavior given a high intention-behavior relationship). Unlike the Fishbein model, the Triandis model has not been extensively investigated. Davidson, Jaccard, Triandis, Morales, and Diaz-Guerrero (1976) found that the Triandis model accurately predicted intentions to engage in a number of family planning activities among Mexican women. In a comparative study, Jaccard and Davidson

(1975) found both the Triandis and Fishbein models provided highly accurate predictions of several family planning intentions of American women.

The Triandis and Fishbein models may be generalized to examine the intermediate steps between job dissatisfaction and resignation in the withdrawal process (Mobley, 1977). That is, the models can be used to explain and to assess a closer and more direct antecedent of turnover than is job dissatisfaction, the intention to withdraw from the organization. Numerous studies have shown that expressed intention concerning future participation in an organization can predict employee termination better than does job satisfaction (Atchison & Lefferts, 1972; Bruni, Jones, & James, 1975; Gould, 1974; Kraut, 1975; Waters, Roach, & Waters, 1976). Further, Porter and Steers (1973) concluded that "expressed intent to leave may represent the next logical step after expressed dissatisfaction in the withdrawal process" (p. 153). In an updated survey of turnover research since Porter and Steers' review, Mobley, Griffeth, Hand, and Meglino (1977) similarly suggested, "without analyses of the precursors of intentions, little knowledge of the psychology of the turnover behavior is generated" (p. 19).

#### Organizational Commitment

The concept of organizational commitment has increasingly attracted the attention of organizational scientists because it indicates the success of an employee's socialization and assimilation in an organization (Buchanan, 1974; Van Maanen, 1975) and predicts withdrawal actions (Porter et al., 1974; Porter, Crampon, & Smith, 1976; Steers, 1977). Although most researchers conceive of commitment as some form of psychological bond between the worker and his or her organization, there is little consensus as to a definition and an operational index of the construct (Buchanan, 1974). The most popular definition and operationalization of the commitment construct and one that

has received the most empirical research is Porter's (Dubin, Champoux, & Porter, 1975; Mowday, Porter, & Dubin, 1974; Porter et al., 1974, 1976; Steers, 1977; Van Maanen, 1975). Porter defined commitment as the strength of an employee's identification with and involvement in a particular organization. An employee who is committed to his organization strongly believes in and accepts the organization's goals and values, willingly exerts considerable effort on behalf of the organization, and strongly desires to maintain organizational membership.

Porter proposed that organizational commitment is a more global and stable evaluative linkage between the employee and the organization than is job satisfaction, which is included as a component as well as the intention to remain in the organization (Porter et al., 1974). Further, commitment is hypothesized to represent a set of feelings more closely affiliated with the employee's desire to stay attached to his or her workplace (Porter et al., 1976). When an employee quits, all formal ties to a particular organization are severed, but the set of job duties may not necessarily be given up since the same type of job may be assumed elsewhere. In short, resignation implies rejection of the organization but not necessarily rejection of the job. Consequently, organizational commitment should be more directly related to employee termination than should job satisfaction or attitudes toward specific characteristics of the work environment.

Porter et al. (1974) tested this hypothesis in a longitudinal design. They compared the effectiveness of job satisfaction (JDI) and commitment in predicting turnover. Surveys were administered several times during the training of psychiatric technicians. Organizational commitment more effectively predicted resignation than did job satisfaction across several time periods. Porter et al. (1974) concluded that a general attitude toward the organization is a superior predictor of turnover than are more specific attitudes toward the particular job.



Rather than measuring attitude toward a more relevant object per se, namely the organization, the explanation for the superiority of Porter's commitment scale may be the result of the inclusion of withdrawal intention in the scale. Porter et al. (1974) considered stated intention to leave as one component of commitment. Also, Steers (1977) stated, "highly committed employees should have a strong desire and intention to remain with the organization. Such an outcome is implicit in the definition of commitment" (p. 48). Since expressed intention to remain is more strongly related to employee retention than is job satisfaction (see studies cited above), it is not surprising to find that organizational commitment as operationalized by Porter is a stronger predictor than job satisfaction. Thus, it may be in this sense that Porter's approach is more direct than approaches relying on job attitudes for predicting turnover and not because a more relevant employee attitude is measured.

Porter's hypothesis that attitude toward the organization itself is superior in predictive ability to attitudes toward specific characteristics of the job will be tested in the present study. Instead of organizational commitment, a different measure of satisfaction with the organization will be compared with satisfaction with several aspects of the job in terms of their strength in predicting turnover. Comparing job satisfaction with commitment is inappropriate since both affective and conative (intention) components are apparently contained in Porter's commitment measure.

It should be noted that the designation of commitment by Porter as an attitude may be disputed by attitudinal researchers. Although many definitions of attitude have been proposed, most researchers agree that an individual's attitude represents the individual's evaluation of the entity in question (Ajzen & Fishbein, 1977; Schuman & Johnson, 1976). Consistent with this more restricted, Thurstonian definition, attitude is most directly measured by a procedure that places the subject on an affective dimension vis-a-vis the object (Fishbein & Ajzen, 1975). Mobley et al. (1977) also noted that commitment as presently defined by Porter is a complex construct. They asked, "Is the inclusion of intentions

in the operational definition of commitment...that accounts for its relatively better prediction of turnover?" (p. 21). The conative component of commitment may be responsible for its greater predictive power rather than the affective component (i.e., affect toward the organization), which is emphasized as being the reason for its superiority. In order to consider this alternative interpretation of Porter et al.'s (1974) results, a measure of expressed intention to leave will be partialled from the attitudinal predictors in the present study. If the explanation given by Porter et al. (1974) for their results is valid, then the part correlation between organizational commitment and resignation should be stronger (and statistically different from) the part correlation between job satisfaction and turnover.

The primary objective of this study is the comparison of the Fishbein and Triandis models, organizational commitment, and job satisfaction in terms of their effectiveness in predicting reenlistment intention and behavior in the National Guard. In addition to this objective, other aspects of each approach discussed earlier will be examined.

## METHOD

### Procedure

In a longitudinal research design, survey data were collected during the regular drill periods (weekends) of the National Guard on location. The survey was carried out over a three-month period. Twenty-nine units from the National Guard in the same Midwestern state were sampled. The criteria by which Guard units were selected were the unit's past reenlistment rate, the number of Guardsmen in that unit eligible for reenlistment in the near future, and the geographic location of the unit.

Of the approximately 1610 Guardsmen in attendance during the drills when the survey team was present, 1210 Guardsmen participated in the survey

(response rate = 75 percent). There were few outright refusals to participate in the survey. Interviews with officials and others indicated that the majority of those who did not participate were not available. They could not be released from their duties or were training at another location. Of the 1210 questionnaires collected by the researchers, 41 were eliminated from further consideration because of excessive missing data, leaving 1169 usable questionnaire forms. Social security numbers were requested because the prediction of actual reenlistment from respondents' answers to the questionnaire was desired. Ninety-two (7.9 percent) of the 1169 respondents omitted their social security numbers.

#### Subject Characteristics

The average age of the National Guardsmen in the sample was 28 years. Males represented 96 percent of the sample and whites constituted 86 percent of the participants in the study. Eighty-seven percent were high school graduates, and 14 percent were students. Sixty-eight percent of the respondents were currently married, and the average number of dependents (including the respondent) was 2.78. The average tenure in the National Guard was 5.51 years.

#### Predictor Measures

Satisfaction. Satisfaction with the work, promotional opportunities, co-workers, immediate supervisor, and first sergeant were assessed by the Job Descriptive Index (JDI) (Smith, Kendall, & Hulin, 1969).

Pay satisfaction was measured by the pay satisfaction scale from the Index of Organizational Reactions (IOR) (Dunham, Smith, & Blackburn, 1977).

Satisfaction with the respondent's National Guard unit was measured by the Faces scale (Kunin, 1955).

Organizational Commitment. The National Guardsmen's identification with and involvement in their particular National Guard unit were measured by the commitment scale developed by Porter (Porter & Smith, 1970).



Fishbein Components. Attitude toward the act of reenlisting in the National Guard (Aact) was measured by having the respondents evaluate "reenlisting in this unit at the next opportunity" on three 7-point bipolar (-3 to +3) semantic differential scales (awful-nice, bad-good, unfavorable-favorable). Summing the three evaluative scales formed the Aact measure. The measure of subjective norm (SN) was obtained by asking the subjects to rate "people who are important to me and whose opinions I value think I should reenlist in this unit at the next opportunity" on a 7-point bipolar (-3 to +3) unlikely-likely scale.

To measure the normative beliefs (NB's), the respondents indicated on a 7-point bipolar (-3 to +3) scale the likelihood that each of four referents (friends, family, superiors in the National Guard, and civilian employer) "thinks I should reenlist in this unit at the next opportunity." These referents were the most frequently mentioned ones by a pilot sample. Motivation to comply (Mc) with each referent was assessed on a 7-point bipolar (-3 to +3) scale by requiring the subject to indicate how much the subject wanted to do what the referent thinks the subject should do.  $\Sigma NBMc$  was obtained by multiplying each normative belief by its corresponding motivation-to-comply score and then summing these products for the four beliefs. The sum of the four unweighted normative beliefs,  $\Sigma NB$ , was also obtained.

The subjects indicated the likelihood ( $b_1$ 's) that "reenlisting in this unit at the next opportunity would lead to" each of 12 outcomes (e.g., "less time for my civilian job") on a 7-point bipolar (-3 to +3) unlikely-likely scale. These consequences were the 12 most frequently mentioned by the pilot sample. Also, subjective evaluations ( $e_1$ 's) of the consequences were measured on a 7-point bipolar (-3 to +3) bad-good scale.  $\Sigma b_1 e_1$  was obtained by multiplying each belief statement by the corresponding evaluation and adding

these products for all beliefs. The beliefs were also assigned a unit-weight of +1, 0, or -1 depending on the desirability of each consequence for the respondent (positive, indifferent, negative), and the beliefs were summed. Thus, a unit-weighted sum of the beliefs (appropriately signed) about reenlistment's consequences,  $\Sigma b_i$ , was computed as well.

The perceived moral obligation was measured by the subject's answer to the question: "Do you feel a moral obligation to reenlist in this unit of the National Guard at the next opportunity? That is, do you think it is something you ought to do or something you should not do?" On a 7-point scale, a strong moral obligation to reenlist was +1 and a strong obligation not to reenlist was +7.

Triandis Components. Attitude toward reenlistment was measured by a set of (three 7-point bipolar) semantic differential scales (ridiculous-reasonable, stupid-intelligent, unpleasant-pleasant) different from Fishbein's Aact. These evaluative scales attempted to reflect Triandis' concept of attitude toward the act as an emotion engendered by classical conditioning (a "gut feeling"). The sum of the three scales constituted Triandis' Aact measure.

The social component of the Triandis model was assessed by having the subjects indicate their agreement (on a 7-point disagree-agree scale) with statements of the appropriateness of reenlisting in the Guard for a reference group, role, or one's self (e.g., "A student should reenlist in the National Guard at the next opportunity"; "I am the kind of person who should be a National Guardsman"). The sum of six such beliefs represented the second factor of Triandis' model. The belief statements regarding the appropriateness of reenlistment for members of particular reference groups and of various positions in the social structure were also weighted by the demographic

characteristics of the respondent. The demographic measures indexed the subject's occupancy in various role and norm positions. For example, the belief that "a student should reenlist in the National Guard at the next opportunity" was weighted by 1 if the respondent was a student and 0 otherwise. The weighted beliefs were then summed. Jaccard and Davidson (1975) also weighted Triandis' role and normative beliefs in this manner. Triandis (1977) is uncertain about how the constituents of the social factor are weighted and combined; he suggested more research on this problem.

The third factor of Triandis model,  $\Sigma P_c V_c$ , is the same as Fishbein's  $\Sigma b_i e_i$  and was measured using the same operations.

#### Criterion Measures

Behavioral Intention. Intention to reenlist in one's unit at the next opportunity was measured on a 7-point unlikely-likely scale.

Behavior. Information about the actual reenlistment decisions made by the National Guardsmen in the sample was gathered from the personnel records of the State Headquarters six months after the last survey. The term of enlistment expired for 255 respondents during this period. The reenlistment act was coded: reenlisted = 2; resigned = 1. Fifty-five percent of the 255 respondents who made reenlistment decisions reenlisted.

#### Other Measures

Leadership. The perception of the leadership behaviors of the commanding officer and the first sergeant in each unit was assessed by the Leadership Behavior Description Questionnaire (LBDQ) (Stogdill and Coons, 1957).

Organizational Climate. The perception of the unit's climate was assessed by the Military Company Environment Inventory (Moos, 1973).

#### Analytic Procedures

Each reenlistment criterion was regressed on each model.



In order to maximize the sample size, subjects were eliminated from a regression analysis if they missed data on the pertinent variables (those involved in that particular regression), but they were not necessarily eliminated from another regression analysis involving different variables. For example, if a respondent omitted data from one or more of the Fishbein measures, he or she was removed from the regression of the criteria on the Fishbein model. However, he or she was not automatically removed from the test of the Triandis model if he or she had complete data on the Triandis measures. Although subject loss (which would be substantial given the number of models being tested) was kept to a minimum by this procedure, the sample size varied according to particular analysis. There were substantially overlapping but not consistent samples of respondents across the different tests of the different models. The basic results, however, were not changed by this maximum-sample procedure. The predictive accuracies of the different approaches were uniformly higher in the consistent-sample (usual) procedure, but the rank order of the different models in predictive strength was the same as the rank order provided by the maximum-sample procedure.

## RESULTS

### Prediction of Reenlistment Intention

The accuracies of the different approaches in predicting intention to reenlist are presented in Table 1.

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Insert Table 1 here  
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The multiple correlation (R) between reenlistment intention and satisfaction with six aspects of National Guard duty was .55 ( $p < .05$ ). Each satisfaction measure significantly predicted intention, but only JDI Work

and IOR Pay made significant independent contributions to prediction. When satisfaction with the National Guard unit was added to this regression equation,  $R$  became .58 ( $p < .05$ ).

Organizational commitment significantly predicted reenlistment intention ( $r = .57$ ,  $p < .05$ ).

The Fishbein model (Aact and SN) significantly and strongly predicted intention,  $R = .79$  ( $p < .05$ ). Both Aact and SN significantly predicted intention to reenlist and made significant independent contributions to the prediction of intention. When the perceived moral obligation was added to this equation,  $R$  became .80 ( $p < .05$ ). The descriptive versions of the model's components ( $\Sigma b_1 e_1$  and  $\Sigma NBMc$ ) significantly predicted intention ( $R = .51$ ,  $p < .05$ ). When the normative beliefs were not weighted by motivation's-to-comply ( $\Sigma NB$ ) and the beliefs about reenlistment's consequences were weighted equally (and appropriately signed) ( $\Sigma b_1$ ), the prediction of intention by these two components was .62 ( $p < .05$ ).

The Triandis model (version I) significantly predicted reenlistment intention with a  $R = .77$  ( $p < .05$ ). All three components were significantly related to intention, but only the attitudinal components had significant independent effects on the intention to reenlist. The second version of the Triandis model (which weighted the social component by demographic indices) predicted intention with a  $R = .78$  ( $p < .05$ ). The three components were significant correlates of the reenlistment intention, but only Aact and  $\Sigma PcVc$  made significant independent contributions to prediction.

#### Prediction of Reenlistment

The predictions of turnover by the different approaches are presented in Table 2. It is worth noting that the intention to reenlist was highly related to actual reenlistment ( $r = .70$ ,  $p < .05$ ).

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The composite of the six job satisfaction measures significantly predicted reenlistment,  $R = .51$  ( $p < .05$ ). Each satisfaction measure was significantly related to reenlistment, but only pay and work satisfaction had significant independent effects on the behavior. When satisfaction with the National Guard unit was included in this equation, predictability was not changed ( $R = .51$ ,  $p < .05$ ).

Organizational commitment predicted reenlistment significantly ( $r = .47$ ,  $p < .05$ ).

Fishbein's model (Aact and SN) significantly and accurately predicted reenlistment,  $R = .70$  ( $p < .05$ ). Aact and SN were significantly correlated with the behavior, and only Aact made a significant independent contribution to its prediction. The perceived moral obligation did not add appreciable power to the Fishbein model ( $R = .71$ ,  $p < .05$ ). The descriptive versions of Fishbein's components (version II) significantly predicted reenlistment with a  $R = .42$  ( $p < .05$ ). The unweighted descriptive versions ( $\Sigma b_1$  and  $\Sigma NB$ ) significantly predicted reenlistment with a  $R$  of  $.56$  ( $p < .05$ ).

The Triandis model (version I) significantly and accurately predicted behavior with a  $R = .71$  ( $p < .05$ ). The three components of this model were significantly related to reenlistment, but only Aact made a significant unique contribution to the prediction of behavior. The Triandis model (version II) that weighted the social component by demographic measures also strongly predicted reenlistment ( $R = .72$ ,  $p < .05$ ). Again, only Aact had a significant independent effect on behavior.

#### Percent Correct Predictions of Reenlistment by Various Predictors

Besides the validity coefficient, another measure of the accuracy in predicting reenlistment is the percent correct classifications of subjects



made by a predictor. When an optimum cutting score was used, the reenlistment intention correctly classified 84 percent of the 255 cases (the base rate of reenlistment was 55 percent). If the respondents who were uncertain about their intentions to reenlist were eliminated ( $N = 14$ ), the rate of accurate predictions made by intention to reenlist was also 84 percent.

The Triandis' Aact made correct predictions in 85 percent of the cases, and Fishbein's Aact made 82 percent correct classifications. These hit rates were not statistically different.

JDI Work made the highest (73) percent correct classifications among the individual job satisfaction scales. The hit rates were 69 percent for IOR Pay, 68 percent for JDI Promotions, 62 percent for JDI Co-Workers, and 64 percent for both JDI First Sergeant and JDI Immediate Supervisor. A unit-weighted combination of the six job satisfaction measures (summed after standardizing each scale) provided 72 percent correct predictions, while the multiple regression composite derived from the six satisfaction scales had a hit rate of 75 percent. Further, unit satisfaction provided 69 percent correct classifications, which was not significantly different from the hit rates of the job satisfaction scales. A unit-weighted sum of job and unit satisfaction variables had a hit rate of 73 percent, and the regression equation based on job and unit satisfaction measures had a rate of correct classifications in 77 percent of the cases.

Organizational commitment made accurate predictions in 71 percent of the cases, which was not significantly different from the hit rates of the two composites of the six job satisfaction measures as work satisfaction by itself.

#### Sufficiency Tests of the Fishbein and Triandis Models

The results of the sufficiency tests of both models are shown in Tables 3 and 4. All 27 exogenous variables were significantly related to intention to

reenlist. After the Fishbein model (Aact and SN) was held constant, seven of the 27 partial correlations were significant. After the Triandis model (Aact, S, PcVc) was partialled from the external variables and reenlistment intention, 10 external variables were significantly correlated with intention. The average (after r-to-z transformation and weighting z's by the sample size) of the absolute values of the 27 partial correlations, which resulted from partialing the Fishbein model, was .05 ( $p < .05$ ). See McNemar (1969) for the description of a procedure for averaging correlations and for a test of the significance of that average. The mean partial correlation when the Triandis model was statistically held constant was also .05 ( $p < .05$ ).

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Insert Tables 3 and 4 here  
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Twenty-three exogenous variables were significant correlates of reenlistment. Since the intention-behavior correlation was strong, the Fishbein and Triandis models should also mediate the influence of external variables on reenlistment. After the effect of the Fishbein model was statistically removed from the external variables and reenlistment, four external variables significantly predicted reenlistment. After the Triandis model was held constant, one exogenous variable significantly predicted reenlistment. The average partial correlation that resulted from partialing out the Fishbein model was .07 ( $p < .05$ ). Partialing out the Triandis model resulted in an average partial correlation of .06 ( $p < .05$ ). Thus, the partial correlations in the sufficiency tests of both models represented sizable reductions of the zero-order correlations.

#### Mediational Role of Behavioral Intention

Because of the strong intention-behavior relationship ( $r = .70$ ) in this study, Fishbein's theory predicts that the effects of variables on behavior

should be mediated through behavioral intention. The results of partialing reenlistment intention from reenlistment and 32 other variables are presented in Table 5. Twenty-eight of the 32 variables were significantly related to reenlistment. Once the effect of reenlistment intention was statistically removed from the 32 variables and reenlistment, ten variables significantly predicted reenlistment. Fishbein's ( $r = .30$ ) and Triandis' ( $r = .25$ ) Aact measures provided the strongest partial correlations. The average of the absolute values of the 32 partial correlations was .11 ( $p < .05$ ).

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 Insert Table 5 here  
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#### Further Tests of Fishbein's Theory

Fishbein's theory proposes that the attitude toward performing a behavior (Aact) is a function of the beliefs about the consequences of performing the act and the evaluations of those consequences ( $\sum b_i e_i$ ). The correlation between Aact and  $\sum b_i e_i$  was significant ( $r = .57, p < .05$ ). The sum of the beliefs not weighted by the evaluations of the consequences ( $\sum b_i$ ) had the same correlation with Aact.

Another prediction by Fishbein's theory is that a general measure of social expectation, the subjective norm (SN), should be significantly related to an individual's beliefs about the normative expectations of significant others, weighted by the individual's motivation to comply with these others ( $\sum NBMc$ ). The correlation between SN and  $\sum NBMc$  was .47 ( $p < .05$ ). However, the correlation between SN and the sum of the normative beliefs not weighted by the motivation's-to-comply ( $\sum NB$ ) was .72 ( $p < .05$ ).

Since Fishbein's theory equates  $\sum b_i e_i$  and  $\sum NBMc$  with Aact and SN, respectively, they should predict intention as accurately as the latter variables (and behavior because of the high intention-behavior correlation



observed in this study). As noted earlier, the descriptive versions of the Fishbein model's components ( $\Sigma b_i e_i$  and  $\Sigma NBMc$ ) significantly predicted the reenlistment criteria. The weighted descriptive components yielded multiple Rs of .51 with reenlistment intention and .42 with reenlistment. These multiple Rs were substantially lower than the multiple Rs generated by Aact and SN ( $R = .79$  for intention;  $R = .70$  for behavior). Further, the unweighted descriptive components ( $\Sigma b_i$  and  $\Sigma NB$ ) predicted the two reenlistment criteria ( $R = .62$  for intention to reenlist;  $R = .56$  for reenlistment) more accurately than did their weighted counterparts.

#### Statistical Comparison between Organizational Commitment and Job Satisfaction

Using Humphrey's t-test (1976, 1978), organizational commitment<sup>1</sup> predicted reenlistment intention ( $r = .56$ ) significantly better than did a unit-weighted combination of the six standardized job satisfaction scales ( $r = .50$ ), but commitment and satisfaction predicted reenlistment equally ( $r = .46$ ).

#### Empirical Test of Porter's Hypothesis

Porter proposed that satisfaction with the organization itself is a superior predictor of withdrawal than is satisfaction with specific aspects of the job. Although the attitude toward the unit of the National Guard was a stronger correlate ( $r = .52$ ) of the intention to reenlist than was satisfaction with pay ( $r = .33$ ), promotional opportunities ( $r = .30$ ), co-workers ( $r = .29$ ), immediate supervisor ( $r = .26$ ), and first sergeant ( $r = .29$ ), (all differences were significant,  $p < .05$ ), it was slightly inferior to satisfaction with work ( $r = .53$ ) (this difference was not statistically

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<sup>1</sup>Validity coefficients of commitment reported earlier differed slightly from those used in Humphreys' t-test since this procedure requires that the sample have data available on both commitment and satisfaction measures.

reliable). Similarly, the evaluation of the National Guard unit predicted reenlistment better ( $r = .39$ ) than did five job attitudes ( $r = .31$ , pay;  $r = .30$ , promotional prospects;  $r = .24$ , co-workers;  $r = .26$ , immediate supervisor;  $r = .29$ , first sergeant). However, only the difference in correlation with reenlistment between unit satisfaction and co-worker satisfaction was significant ( $p < .05$ ). Work satisfaction ( $r = .47$ ) also did not differ significantly from unit satisfaction in predictive strength, although it was slightly superior.

#### An Alternative Explanation for Commitment's Superiority

In order to consider an alternative explanation for the superiority of organizational commitment, correlations between the attitudinal predictors and reenlistment were computed with the effect of the reenlistment intention removed from the predictors. The partial correlations are presented in Table 6. No attitude significantly predicted reenlistment once the intention was partialled from it. Further, organizational commitment was a weaker predictor than some job satisfaction measures, but none of the differences in predictive strength were significant.

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Insert Table 6 here  
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#### DISCUSSION

The different approaches examined in this study predicted with moderate to high accuracy the propensity of National Guardsmen to leave their organization. This level of predictive accuracy is uncommon in turnover research, and special features of the withdrawal process in the National Guard

may be responsible for their success. First, in the Guard, as in other military organizations, every member must make an explicit decision to remain or leave at some time during his or her tenure (in the National Guard, this happens after six years tenure for first-term enlistees and annually after that opportunity); civilian employees are not expected to make such a clear and specific decision particularly if they decide to stay. Moreover, in the Guard, the decision to resign comes at a single and predictable point in time. That is, the decision date is set for each Guardsman and can be anticipated. In civilian organizations, the decision to discontinue organizational membership can occur at any time. Also, in the civilian sector, an employee may intend to quit but may be uncertain about when. Further, reenlistment in the 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 "decision" not to quit by a civilian. Such characteristics of the withdrawal process in the Guard may mean that the reenlistment decision takes on added significance and is considered more thoughtfully and carefully than the analogous decision by civilians. Thus, the same approaches applied in organizations lacking the research advantages offered by the National Guard may yield poorer prediction of turnover.

The moderate to strong predictability of behavior from various attitudes in the present study comes at a time when attitude-behavior research is undergoing a renaissance. Recent reviews of the attitude-behavior relation have optimistically concluded that adequate prediction of behavior from attitudes can usually be obtained once certain methodological and measurement problems are addressed (Ajzen & Fishbein, 1977; Eagly & Himmelfarb, 1978; Schuman & Johnson, 1976). Eagly and Himmelfarb (1978) concluded,



"pronouncements about the death of the attitude concept and the impending death of attitude research were premature and grossly exaggerated" (p. 543).

The same conditions that are responsible for a high behavior-intention correlation (Fishbein & Ajzen, 1975) that was observed in this study may similarly explain the superior ability of the Triandis and Fishbein models in predicting behavior. First, the two models contained an attitudinal predictor (Aact) that corresponds closely in specificity to the single-act criterion. Attitude toward the act and the specific behavior in question have target, action, situation, and time elements in common (Jaccard, King, & Pomazal, 1977; Weigel, Vernon, & Tognacci, 1974). Second, the attitudinal measures of the two models apparently showed high stability over time (as did the reenlistment intention, perhaps because the reenlistment decision is carefully and deliberately considered by the respondent). Third, the reenlistment decision was under the willful control of the subject; personal constraints and situational forces that undermine the translation of attitude into action were minimal in the National Guard (all Guardsmen were strongly encouraged to reenlist). Another factor is the addition of nonattitudinal factors in the Fishbein and Triandis models to predict behavior, the normative expectations of significant others. Normative pressures are among the more popular and consistently useful nonattitudinal predictors that supplement the prediction of behavior (Schuman & Johnson, 1976). Lastly, the behavioral base rate was nearly optimal in the National Guard and variance in the criterion was nearly maximal (Fishbein & Ajzen, 1975). Fifty-five percent of the National Guardsmen who made reenlistment decisions actually reenlisted.

This study also provides methodologically sound evidence that the Triandis and Fishbein models can explain behavior. Schuman and Johnson (1976) pointed out that, ideally, attitude (or intention) and behavior need to be measured in ways that disassociate the two completely in the subject's mind or else the need to present a consistent picture to the experimenter may result in spuriously high attitude-behavior relationships. This is a methodological weakness of laboratory tests of the Fishbein model. The use of behavioral intention as the criterion in field surveys that test the Triandis and Fishbein models (where the models' components and intention are measured simultaneously) raises the criticism that the two models are able to explain only consistencies in verbal reports and observed relationships are inflated by common method variance. These criticisms can be laid to rest. This study showed that the Triandis and Fishbein models can, indeed, explain behavior that is objectively assessed and under conditions of minimal implicit demands on the respondent to behave consistently with his or her own verbal reports.

The moderately strong prediction of turnover by job satisfaction is consistent with other recent studies that have demonstrated that employee behaviors such as unionization activity (Hamner & Smith, 1978; Herman, 1973) and work attendance (Smith, 1977) can be predicted from job attitudes once the behavior is under the volitional control of the worker, psychometrically sound attitudinal scales are used, and the attitudes are stable. While job satisfaction is not as strong a predictor of single-act criteria (e.g., reenlistment) as are the Fishbein and Triandis models, satisfaction with the job should highly predict a multiple-act criterion--an index derived from observations of numerous different behaviors with respect to the job. The action element is unspecified in this behavioral criterion based on many diverse employee

behaviors as it is in a measure of attitude toward the job, which makes no reference to any particular job behavior. Since the job attitude and multiple-act index both specify a common target (the job or organization) and both do not specify any action (both are general on the action dimension), they correspond closely in measurement (Ajzen & Fishbein, 1977; Fishbein & Ajzen, 1974; Weigel & Newman, 1976).

Schwartz and Tessler (1972) noted that attitude toward the act is limited to the prediction of only very specific behaviors in particular situations, but researchers often desire to use attitudes toward objects to predict a range of presumably related behaviors across a variety of settings. While not contesting the power of attitude-toward-act measures for predicting specific acts, Weigel and Newman (1976) showed that the traditional attitude-toward-object measure, which represents a broad and stable underlying disposition, is capable of mediating a variety of object-related behaviors. The attitude-toward-object measure in their study correlated .62 with a comprehensive behavioral index (composite of several diverse behaviors) but modestly with the single, constituent behaviors (mean  $r = .29$ ). Because job satisfaction is a superior (and appropriate) attitudinal predictor of the general behavioral tendency to perform favorable or unfavorable employee acts (e.g., withdrawal behaviors, union activity), then managerial interventions aimed at reducing the level of job dissatisfaction would have wide and diverse (and possibly more enduring) behavioral consequences for the organization. A whole syndrome of organizationally dysfunctional behaviors is treated rather than a symptom by this approach. On the other hand, if only a particular job behavior is targeted for change, then the Triandis or Fishbein model would be more effective for this more narrow purpose. These models recommend that the contingencies for the behavior or the attitudes of



significant others toward performing the act be changed if the behavior is to be influenced (Fishbein & Ajzen, 1975).

Partial support was found for Fishbein's theory. Attitude toward the act and the subjective norm together explained 62 percent of the variance in intention. Both had significant independent effects on intention, which supports Fishbein's contention that both are important determinants of behavioral intention. Moreover, the strong intention-behavior correlation obtained in the present study suggests that Aact and SN in combination would also predict behavior accurately, which they did. Moral obligation to perform the behavior did not add any appreciable predictive power to the model. Aact was significantly related to the sum of the beliefs about the behavior's consequences, weighted by the evaluations of these consequences as Fishbein theorized, but Aact was equally related to the sum of the appropriately signed, unit-weighted beliefs. SN was significantly related to the sum of the specific normative expectations of significant others, weighted by the motivation's-to-comply as Fishbein hypothesized, but SN was more strongly correlated with the sum of the unweighted normative beliefs. Although the alternative representations of the attitudinal and normative factors in Fishbein's model,  $\Sigma b_i e_i$  and  $\Sigma N B M c$ , significantly predicted the reenlistment criteria, their predictive accuracies were substantially poorer than the levels of prediction achieved by the composite of Aact and SN. More seriously, the unweighted descriptive versions of the model's components,  $\Sigma b_i$  and  $\Sigma N B$ , predicted reenlistment intention and behavior more accurately than did the weighted descriptive components.

One may argue that the weighted descriptive components predicted their respective, more general, measures (Aact & SN) and the behavioral criteria with only moderate accuracy because they were incomplete. For any given respondent,



his or her beliefs about the act's consequences and about referents' expectations may not be represented fully in the  $\sum b_i e_i$  and  $\sum NBMc$  measures. This is true whenever a short, standard set of behavior-outcome beliefs and normative expectations is used for all respondents. This argument cannot explain, however, the equivalent or stronger predictability of the unweighted descriptive components. Fishbein's theory needs revision in this respect. Measuring  $Mc$ 's<sup>2</sup> and using them as weights for the normative beliefs should be eliminated from the model. Instead of weighting the beliefs of the behavior's consequences by  $e_i$ 's, the beliefs should be multiplied by -1, 0, or +1 depending on the desirability of the consequence for the respondent (negative, indifferent, or positive). The predictability of Fishbein's descriptive components may be further enhanced by using idiosyncratic beliefs about the outcomes of the behavior and behavioral expectations of idiosyncratic referents (Matsui & Ikeda, 1976; Parker & Dyer, 1976).

Fishbein also theorized that variables other than the ones included in his model have effects on behavioral intention that are mediated through Aact and SN. If the intention-behavior correlation is strong, the Fishbein model should similarly mediate the impact of exogenous variables on behavior. After Aact and SN were statistically held constant, the relationships between the exogenous variables and the two reenlistment criteria were attenuated greatly, and most relationships were no longer significant. These findings support Fishbein's claim that Aact and SN are sufficient determinants of the intention to engage in the behavior and that the exogenous variables add little to the ability of the model to predict behavior.

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<sup>2</sup>In this study,  $Mc$  was defined as the respondent's general motivation to comply with a specific referent regardless of the referent's particular demands. Alternatively,  $Mc$  may be defined as the subject's motivation to comply with a particular behavioral request of a referent. On both theoretical and empirical grounds, Fishbein and Ajzen (1975) suggest that  $Mc$  is best conceived as the respondent's general tendency to accept the directives of a referent.

One final comment should be made about Fishbein's theory. The correlations between the extraneous variables and reenlistment were substantially reduced and lost statistical significance once the effect of reenlistment intention was removed from the external variables and reenlistment. This finding supports the mediational role played by behavioral intention. Ironically, the Fishbein model still had a significant and sizable effect on reenlistment ( $R = .25, p < .05$ ) when intention was statistically controlled. Regardless of whether the intention-behavior relationship is weak or strong, Fishbein's theory suggests that behavioral intention (measured at the same time as the model) should always mediate the model's influence on behavior, the size of that influence varying with the magnitude of the intention-behavior correlation. This result suggests that intention does not entirely mediate the effects of Aact and SN on behavior. Although the intention to reenlist was assessed by a single-item scale, the validity of this measure should not be questioned since this measure predicted reenlistment as well as the model. Thus, the ability of Fishbein's model to predict behavior does not depend completely on intention's relationship to behavior.

Consistent with Triandis' theory, the affective, social, and cognitive components of his model predicted reenlistment intention very accurately. The Triandis model that weighted the social component by demographic indices also highly predicted intention to reenlist. Because of the high intention-behavior relation obtained in this study, both versions of the Triandis model also strongly predicted reenlistment.

The Triandis theory, however, states that behavior is a function not only of behavioral intention (or its equivalent, equation 2) but also of habit and the facilitating conditions for the act (equation 1). The present investigation did not test this prediction explicitly. If the tenure of

National Guardsmen who are past their first-term of enlistment is used as an index of habit strength (after the first six years of enlistment, Guardsmen can reenlist annually)--reflecting the number of times they reenlisted in the past, and if the facilitating conditions for reenlistment are assumed to be very favorable (a realistic assumption), then the regression of reenlistment on the tenure and reenlistment intention of National Guardsmen who have more than six years of tenure in the National Guard ( $N = 43$ ) may be a test of equation one of Triandis' theory.

The multiple R generated from this regression analysis was .26 (n.s.). Tenure correlated .19 (n.s.) and intention to reenlist correlated .22 (n.s.) with turnover. The restriction in variance in intention and reenlistment may have substantially attenuated prediction by equation one and precluded this regression from being an adequate test of this part of Triandis' theory. On a seven-point scale, average reenlistment intention for this sample was 6.05, and on a two-point turnover scale, average reenlistment was 1.93.

Finally, the sufficiency tests of the Triandis model indicated that it effectively mediated the influence of exogenous variables on the reenlistment criteria. This model played the mediational role as effectively as did Fishbein's model. However, reenlistment intention did not successfully mediate the effect of the Triandis model on reenlistment. The multiple R between the model and reenlistment was .30 ( $p < .05$ ) when intention was statistically controlled. The habit factor may have mediated some of the model's effect on behavior.

Porter's hypothesis that attitude toward the organization is a better predictor of withdrawal from the organization than are attitudes toward various aspects of the job was rejected in the present study. Job satisfaction, especially work satisfaction, predicted the reenlistment criteria as well as



the satisfaction with the National Guard unit. Thus, the explanation advanced by Porter for the superiority of commitment over job satisfaction in predicting turnover needs revision. An alternative explanation for commitment's superiority is suggested by another finding. After removing the effect of reenlistment intention from the attitudinal predictors, the part correlation between commitment and reenlistment was not stronger than the part correlation between job satisfaction and reenlistment. In fact, none of the part correlations between attitudinal measures and behavior were statistically significant. The predictive strength of Porter's approach resides not in its assessing a more relevant employee attitude but rather in commitment being an attitudinal scale confounded with items measuring intention to leave the organization.

Future research should explore the generalizability of the findings of this study across diverse settings, persons, and behaviors. The relative order in predictive strength of the approaches considered in the present study and their levels of prediction may vary with different organizations, populations, and behaviors (other forms of withdrawal, union activity, etc.). Besides extending the external validity of these results, further studies should determine whether the observed relationships in the present investigation generalize across different operational exemplifications of Fishbein's Triandis', and the commitment constructs. Alternative measurements and manipulations of these constructs (multiple operationalism) would ascertain whether the results obtained in this study were method-bound. Experimental manipulation of the attitudinal constructs and assessing their behavioral effects would establish confidence in empirical representations of the construct (construct validity) and in the interpretation of causality (internal validity).



Table 1

## Prediction of Intention to Reenlist by Models

<u>Models</u>	<u><math>\beta</math></u>	<u><math>r</math></u>	<u><math>R</math></u>	<u><math>N</math></u>
Job Satisfaction			.55*	1046
IOR Pay	.14*	.33*		
JDI Promotion	.06	.30*		
JDI Work	.41*	.53*		
JDI Co-Workers	.02	.30*		
JDI Immediate Supervisor	.02	.27*		
JDI First Sergeant	.04	.29*		
Job and Unit Satisfaction			.58*	1028
IOR Pay	.08*	.33*		
JDI Promotion	.03	.30*		
JDI Work	.32*	.53*		
JDI Co-Workers	-.02	.29*		
JDI Immediate Supervisor	-.01	.26*		
JDI First Sergeant	.02	.29*		
Unit Satisfaction	.27*	.52*		
Organizational Commitment		.57*		1119
Fishbein Model I			.79*	1009
Attitude Toward the Act	.70*	.79*		
Subjective Norm	.13*	.63*		
Fishbein Model I + Moral Obligation			.80*	998
Attitude Toward the Act	.67*	.79*		
Subjective Norm	.12*	.63*		
Moral Obligation	-.06*	-.55*		
Fishbein Model II			.51*	956
$Eb_1e_1$	.32*	.43*		
ENBMc	.29*	.41*		
Modified Fishbein II			.62*	966
$Eb_1$	.25*	.44*		
ENB	.48*	.58*		
Triandis Model I			.77*	937
Aact	.73*	.769*		
Social Component (S)	.00	.56*		
$EPcVc$	.07*	.44*		
Triandis Model II			.78*	852
Aact	.74*	.776*		
S (Weight by Demographic)	.00	.58*		
$EPcVc$	.07*	.44*		

\*p &lt; .05

Table 2

## Prediction of Reenlistment by the Models

<u>Models</u>	<u><math>\beta</math></u>	<u><math>r</math></u>	<u><math>R</math></u>	<u><math>N</math></u>
Job Satisfaction			.51*	242
IOR Pay	.15*	.32*		
JDI Promotions	.11	.31*		
JDI Work	.35*	.47*		
JDI Co-Workers	.03	.25*		
JDI Immediate Supervisor	.00	.26*		
JDI First Sergeant	.02	.29*		
Job and Unit Satisfaction			.51*	238
IOR Pay	.11	.31*		
JDI Promotions	.09	.30*		
JDI Work	.32*	.47*		
JDI Co-Workers	.01	.24*		
JDI Immediate Supervisor	-.01	.26*		
JDI First Sergeant	.02	.29*		
Unit Satisfaction	.10	.39*		
Organizational Commitment		.47*		253
Intention to Reenlist		.70*		249
Fishbein Model I			.70*	236
Attitude Toward the Act	.68*	.70*		
Subjective Norm	.03	.52*		
Fishbein Model I + Moral Obligation			.71*	235
Attitude Toward the Act	.59*	.70*		
Subjective Norm	.01	.52*		
Moral Obligation	-.16*	-.54*		
Fishbein Model II			.42*	222
$Eb_1$	.28*	.36*		
ENEMc	.23*	.33*		
Modified Fishbein II			.56*	223
$Eb_1$	.16*	.36*		
ENB	.47*	.54*		
Triandis Model I			.71*	220
Attitude Toward the Act	.74*	.71*		
Social Component	-.06	.49*		
EPcVc	.02	.38*		
Triandis Model II			.72*	202
Attitude Toward the Act	.70*	.72*		
Social Component (Wt. by Demo.)	.00	.53*		
EPcVc	.04	.44*		

\*p &lt; .05

Table 3

Sufficiency Test of Fishbein and Triandis Models  
Prediction of Intention to Reenlist by External Variables

<u>External Variable</u>	<u>Zero-Order r</u>	<u>Partial Fishbein</u>	<u>Partial Triandis</u>
<u>Demographic Variables<sup>a</sup></u>			
Age	.37*	.13*	.09*
Sex	.08*	.05	.02
Marital Status	-.10*	-.06*	-.03
Race	-.08*	.00	-.01
Student Status	-.06*	-.05	-.07*
Educational Level	-.07*	.04	.07*
No. of Dependents	.25*	.10*	.04
Tenure in Organization	.09*	.03	.00
<u>Leadership<sup>b</sup></u>			
LBDQ Consideration-C.O.	.31*	-.03	-.03
LBDQ Structure-C.O.	.25*	-.04	-.04
LBDQ Consideration-First Sgt.	.29*	-.03	-.05
LBDQ Structure-First Sgt.	.17*	-.08*	-.08*
<u>Organizational Climate (Moos)<sup>b</sup></u>			
Involvement	.35*	-.04	-.03
Peer Cohesion	.11*	-.06	-.05
Officer Support	.31*	-.11*	-.09*
Personal Status	.33*	-.04	-.07*
Order and Organization	.23*	-.09*	-.07*
Clarity	.25*	-.09*	-.09*
Officer Control	-.22*	.05	.08*
<u>Other Models<sup>c</sup></u>			
IOR Pay	.36*	-.03	-.03
JDI Promotions	.32*	-.03	-.03
JDI Work	.56*	.05	.09*
JDI Co-Workers	.30*	-.03	-.03
JDI Immediate Supervisor	.28*	-.02	.03
JDI First Sgt.	.31*	-.03	.04
Company Satisfaction	.57*	.01	-.01
Organizational Commitment	.59*	.01	.03

\*p < .05

<sup>a</sup>N = 978 for zero-order & partial (Fishbein) r's; N = 908 for partial (Triandis) r's.

<sup>b</sup>N = 841 for zero-order & partial (Fishbein) r's; N = 797 for partial (Triandis) r's.

<sup>c</sup>N = 770 for zero-order & partial (Fishbein) r's; N = 743 for partial (Triandis) r's.

Table 4

Sufficiency Test of Fishbein and Triandis Models:  
Prediction of Reenlistment by External Variables

<u>External Variable</u>	<u>Zero-Order r</u>	<u>Partial Fishbein</u>	<u>Partial Triandis</u>
<u>Demographic Variables<sup>a</sup></u>			
Age	.42*	.21*	.20*
Sex	.09	.16*	.11
Marital Status	-.11	-.06	-.07
Race	-.23*	-.05	-.13
Student Status	-.12	-.10	-.10
Educational Level	-.19*	-.11	-.04
No. of Dependents	.32*	.12	.10
Tenure in Organization	.05	.04	.01
<u>Leadership<sup>b</sup></u>			
LBDQ Consideration-C.O.	.34*	-.01	.04
LBDQ Structure-C.O.	.37*	.16*	.11
LBDQ Consideration-First Sgt.	.28*	.01	-.02
LBDQ Structure-First Sgt.	.25*	.04	.03
<u>Organizational Climate (Moos)<sup>b</sup></u>			
Involvement	.33*	.04	.04
Peer Cohesion	.18*	.14*	.10
Officer Support	.28*	.00	.02
Personal Status	.29*	.07	.04
Order and Organization	.25*	.00	.06
Clarity	.35*	.07	.09
Officer Control	-.18*	.07	.03
<u>Other Models<sup>c</sup></u>			
IOR Pay	.38*	.07	.10
JDI Promotions	.32*	.06	.05
JDI Work	.54*	.05	.06
JDI Co-Workers	.28*	.01	.03
JDI Immediate Supervisor	.34*	.05	.00
JDI First Sergeant	.37*	.04	.03
Unit Satisfaction	.47*	-.04	-.05
Organizational Commitment	.52*	.00	.04

\*p < .05

<sup>a</sup>N = 232 for zero-order & partial (Fishbein) r's; N = 215 for partial (Triandis) r's.

<sup>b</sup>N = 215 for zero-order & partial (Fishbein) r's; N = 201 for partial (Triandis) r's.

<sup>c</sup>N = 186 for zero-order & partial (Fishbein) r's; N = 179 for partial (Triandis) r's.



Table 5

Mediational Role of Intention: Zero-Order and  
Partial Correlations Between Reenlistment and Other Variables

	Zero-Order <u>r</u>	Partial <u>r</u>	<sup>a</sup> <u>R</u>	<u>N</u>
<u>Demographic Variables</u>				
Age	.41*	.14*		244
Sex	.11	.11		
Marital Status	-.11	-.08		
Race	-.22*	-.10		
Student Status	-.11	-.09		
Educational Level	-.18*	-.20*		
No. of Dependents	.31*	.14*		
Tenure in Guard	.04	-.03		
<u>Leadership Behavior</u>				
LBDQ Consideration-C.O.	.32*	.12		230
LBDQ Structure-C.O.	.34*	.19*		
LBDQ Consideration-First Sgt.	.26*	.01		
LBDQ Structure-First Sgt.	.22*	.10		
<u>Organizational Climate (Moos)</u>				
Involvement	.32*	.18*		230
Peer Cohesion	.15*	.13*		
Officer Support	.27*	.08		
Personal Status	.26*	.12		
Order and Organization	.24*	.09		
Clarity	.32*	.16*		
Officer Control	-.20*	-.05		
<u>Models</u>				
Job and Unit Satisfaction			.15	234
IOR Pay	.30*	.10		
JDI Promotions	.29*	.08		
JDI Work	.46*	.11		
JDI Co-Workers	.23*	.06		
JDI Immediate Supervisor	.24*	.04		
JDI First Sergeant	.28*	.05		
Unit Satisfaction	.39*	.04		
Fishbein Model			.25*	231
Attitude Toward the Act	.70*	.25*		
Subjective Norm	.51*	.13*		
Triandis Model			.30*	216
Attitude Toward the Act	.71*	.30*		
EPcVc	.40*	.10		
Social Component	.48*	.11		
Organizational Commitment	.46*	.09		248

\*p &lt; .05

<sup>a</sup>Reenlistment intention is statistically controlled.

Table 6

Part Correlations between Attitudes and Reenlistment with  
Effect of Reenlistment Intention Removed from the Attitudes

<u>Attitudes</u>	<u>Part Correlation</u>
IOR Pay	.06
JDI Promotions	.06
JDI Work	.08
JDI Co-Workers	.04
JDI Immediate Supervisor	.02
JDI First Sergeant	.03
Unit Satisfaction	.03
Organizational Commitment	.05

N = 233

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