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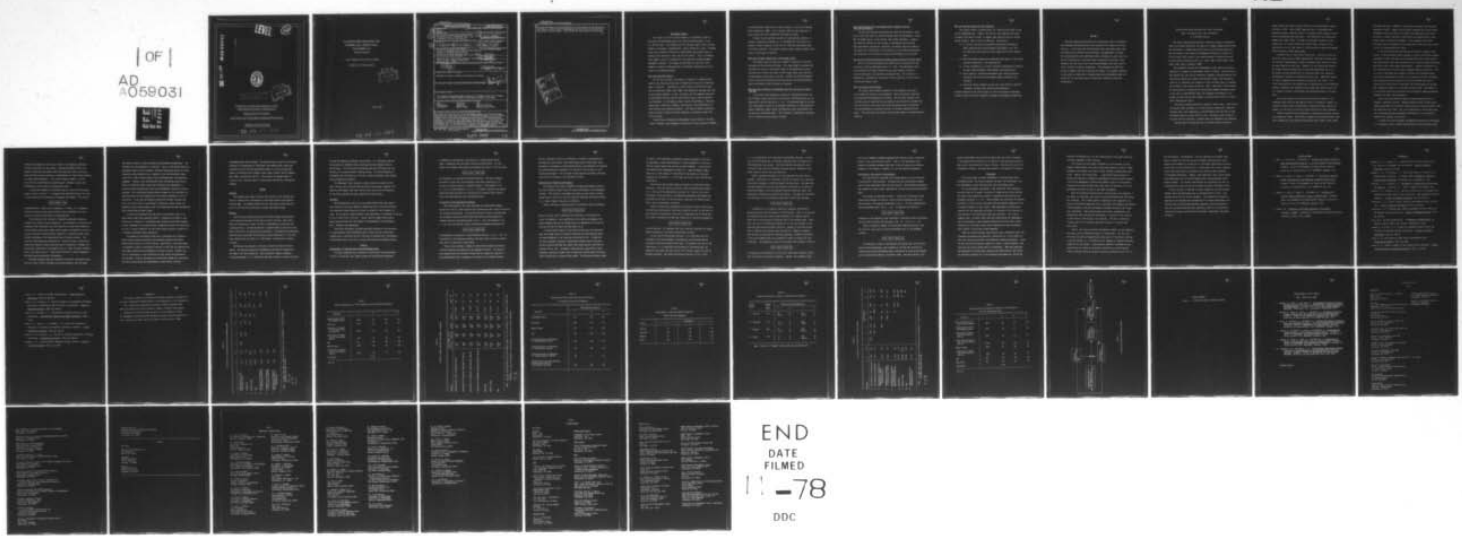

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RELATIONSHIPS AMONG ORGANIZATIONAL ENTRY PERFORMANCE GOALS, SUBSEQUENT GOALS, AND PERFORMANCE IN A MILITARY SETTING

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Correlates of organizational entry performance goals; the relation between organizational entry goals and recruit training performance; and the relation between recruit training performance and post-recruit training goals were analyzed in a sample of over 1500 Marine Corps enlistees. It was found that: expectancy of being an outstanding Marine was the best single correlate of performance goal at the beginning of recruit training; organizational entry performance goal was the best single predictor of subsequent recruit →over

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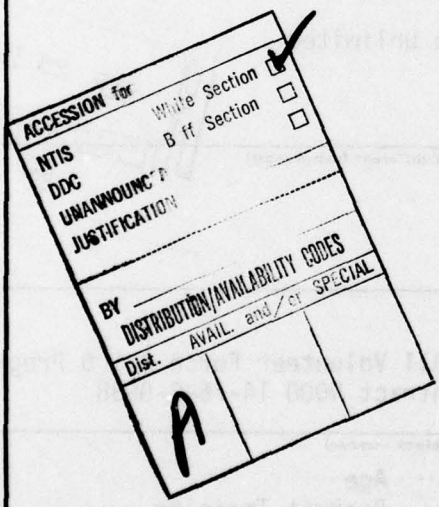
training performance but accounted for only four percent of the variance in performance; recruit training performance was the best single predictor of post-recruit training goals. Implications for goal theory are discussed.



Management Summary

This report is one of a series based on a longitudinal study of attrition and performance among first term enlisted personnel in the U.S. Marine Corps. The continuing series includes reports with a primary emphasis on manpower, methodological, and/or theoretical issues. Although these three categories clearly are interrelated, the present report is somewhat more theoretical than some earlier reports. Thus, this Management Summary section is provided for the reader with primary manpower management interests. An attempt has been made to focus this brief summary on results, interpretations, and possible implications of relevance to the manpower manager.

Why Study Individual Goals?

For the last 10 years, the research literature in organizational behavior has focused a great deal of attention on the role of individual goals in behavior. Stimulated to a great extent by the work of Locke and his associates (1966, 1967, 1968), the theoretical and empirical work on goal theory suggests, in part, that goals are the immediate precursor of performance and that specific and difficult goals, when accepted by the individual, are followed by higher levels of performance. Relations among goals, incentives, feedback, participation, and performance also have received some research attention. With several notable exceptions, much of the goal research has been conducted in laboratory rather than field settings.

Paralleling the theoretical development of goal theory in the behavioral literature, the management literature has given extensive treatment

to organizational applications of goal processes in the form of Management by Objectives (MBO). Until recently, MBO has been based more on prescription than sound theoretical and empirical bases.

If goals are an important variable in organizational behavior, as research increasingly indicates, it is advisable for the military to develop a body of research on the role of individual performance goals in military settings. The present research seeks to make a modest contribution to that body of research.

What were the major objectives of the present study?

The present study was based on a sample of 1520 male, first-term, non-reservist Marine Corps enlistees. The study sought to evaluate the correlates of recruits' performance goals at the beginning of recruit training and to assess the extent to which these goals were predictive of performance during recruit training. Further, the relation between recruit training performance and the post-recruit training performance goals articulated by the enlistees was assessed.

What were the correlates of performance goals at the start of recruit training?

It was found that expectancy of being an "outstanding Marine" was the strongest single correlate of the recruits' performance goal at the beginning of recruit training ($r = .31$). In decreasing order of correlation, expectancy of being "a satisfactory" Marine or an "unsatisfactory" Marine (negative), mental grade, and education, were significantly correlated with performance goals. The variables, in combination, accounted for 12.5 percent of the variance in goals.

Were organizational entry performance goals related to recruit training performance?

For both self-reported performance and objective performance, there was a significant positive relation between goals and performance. Those who set higher goals, on the average, were higher performers. However, only some four percent of the variance in performance was explained. When performance expectancies, education, and mental grade were added to the prediction, nine percent of the variance in self-reported performance and 16 percent of the variance in objective performance was explained.

Was recruit training performance related to end-of-recruit training goals?

Recruit training performance was significantly correlated with end-of-recruit training performance goals ($r = .29$). The performance expectancy questions and mental grade also were significantly related to post-training goals, but education and age were not. The variables, in combination, accounted for 19 percent of the variability in post recruit training performance goals.

What conclusions can be drawn?

The results offer moderate support for the hypothesis that goals are an important precursor of performance. Goals were better predictors of performance than demographic variables. The fact that stronger relationships were not observed may be related to the possibility (probability) that new recruits do not have sufficient information about the organization and performance to develop realistic or reliable expectations and goals. This would have implications for both goal theory and organizational practice.

What are the implications of this research?

The present results, standing alone, are insufficient to make strong action recommendations. However, the results, when combined with other conceptual and empirical work, do suggest some possibilities for further action research, some of which is under way. Specifically:

a) If recruits are given more detailed and accurate information about organizational and performance requirements, will they set individual goals which are more predictive of their performance?

b) Does performance become more predictable from goals as individuals gain more experience in the organization?

c) If goal acceptance is, in part, related to expectancy of reaching the goal, what procedures would enhance such expectancies?

d) Would specific, individual performance goal setting processes throughout the first-term enlistment enhance individual performance?

e) How would various feedback and extrinsic and intrinsic incentive strategies influence goal setting and performance?

Further research on the role of goals in enlisted personnel performance would be useful from both conceptual and manpower management perspectives.

ABSTRACT

Relations among organizational entry performance goals, performance, and subsequent performance goals were assessed with a sample of military recruits. It was found that organizational entry performance goals were only moderately predictable from expectancy and demographic variables; that organizational entry performance goals, although the best single correlate, accounted for a relatively small proportion of variance in performance; and that post-recruit training performance goals were significantly related to previous performance. The conceptual and empirical analysis suggests that goal theory may be subject to a boundary condition to the extent an individual's organizational entry performance goals are unrealistic or unreliable due to insufficient information about the organization.

Relationships Among Organizational Entry Performance Goals, Subsequent Goals, and Performance in a Military Setting

The recent organizational behavior literature reflects a substantial effort to evaluate theoretical and empirical linkages between goal-setting and performance. Although the formal basis for goal-setting theory has been attributed to the scientific management philosophy of Frederick W. Taylor (Locke, 1975), much of the current research is based on the work of Locke and his associates (see e.g., Locke, 1967; Locke & Bryan, 1966, 1969; Locke, Bryan, & Kendall, 1968).

The conceptual and empirical development of goal theory has focused attention on a number of interrelated issues, including: goal difficulty; goal specificity; the role of incentives, feedback, and participation; the relationship between goal theory and expectancy theory; and the generalizability of laboratory goal research to field settings (see e.g. Campbell and Pritchard, 1976; Steers and Porter, 1974). Relatively little research has been devoted to evaluating the relationship between performance goals at the time of organizational entry and subsequent performance; or to changes in goals and possible changes in the predictive efficacy of goals, after organizational entry.

The present research evaluates a subset of these issues. Specifically, the present study evaluated, in a field setting, relationships among performance goals, goal expectancies, and performance from the time of organizational entry to a later point in time. Following a brief review of the most salient literature, a general model and hypotheses are presented.

The most heavily researched area in the goal-setting literature

centers around the impact of goal difficulty on task performance (Steers and Porter, 1974). Locke (1968) suggested that, if performance was regulated by goals, then hard goals, if accepted, should produce a higher level of performance than easy goals. This hypothesis was supported by Campbell and Ilgen (1976) in a study of individuals involved in chess competition. As cited by Steers and Porter (1974), evidence of this relationship also has been found in a field setting by Zander and Newcomb (1967) and Battle (1966) among others.

A related issue is that of goal specificity. Studies by Locke and Bryan (as cited by Locke, 1968) suggested that individuals seeking specific hard goals demonstrated a higher performance level relative to those who were asked to do their best. Support for this finding was provided by Terborg (1976) who found that, by providing unambiguous goals, an individual can then determine how to translate effort into successful performance by selecting an appropriate action plan. Additional support for Locke's hypothesis was provided by Latham and Yukl (1976). In a field investigation of the productivity of female typists in an industrial setting, Latham and Yukl hypothesized and found that specific goals led to a greater increase in performance than generalized goals of "do your best."

The research seems to provide fairly consistent support for the hypothesis that difficult and specific goals, if accepted or sought, are related to higher levels of performance. Requiring further exploration, however, is the issue of the role of goal difficulty in goal acceptance.

Several researchers have attempted to integrate goal-setting concepts with expectancy theory. Specifically, Campbell and Pritchard (1976) noted that a composite of the theories developed by Vroom (1964), Graen (1969),

and Porter and Lawler (1968) will yield some consistency with the model suggested by Locke. Campbell and Pritchard suggested that Locke's model attempted to make more explicit how goals and intentions govern effort and choice. Dachler and Mobley (1973) dealt with determinants of goal choice within an expectancy framework. They suggested that within-individual force or expected utility comparisons across goals may provide a basis for understanding goal choice.

A significant difference between the two theories, noted by Locke (1975), is that expectancy theory suggests a positive correlation between expectancy of goal attainment and performance while goal theory reports that harder goals (with lower expectancies) will lead to higher performance than easier goals (with higher expectancies). Possible explanations for this difference are related to goal acceptance and goal attraction. That is, once an individual has accepted a difficult task (perhaps because its relative attractiveness offsets a low expectancy of goal attainment), the individual may seek that goal until he/she decides that goal is impossible to attain and/or re-evaluates the attractiveness of the goal and, therefore, ceases to try for that particular goal. One objective of the present study was to evaluate the relationships among performance expectancies, goals, and performance.

Much of the goal-setting research has been conducted within an academic, laboratory setting. Notable exceptions would include recent studies conducted in an industrial field setting by Ivancevich (1976, 1977) and Latham and Yukl (1976). One of the objectives of the present study was to evaluate the goal-performance relationship in an infrequently studied field setting, the military.

If goals are to be considered the immediate precursor of performance, it is important to gain a better understanding of how performance goals

develop and change over time and to identify such boundary conditions as may be applicable to goal theory. Dachler and Mobley (1973), for example, found that performance goals and expectancy theory constructs were relatively poorer predictors of performance for lower tenure compared to higher tenure employees. The present research sought to further evaluate this relationship by assessing goals, changes in goals, and performance from the time of organizational entry.

A simplified schematic of the model used as a basis for the present study is given in Figure 1. It suggests that performance goals will have a direct and positive influence on subsequent performance. The research

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INSERT FIGURE 1 HERE

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reviewed earlier supports such a hypothesis. Further, it is suggested that goal expectancy (perceived chances of goal attainment) will be a primary and positive determinant of expressed goal.

The individual level variables of education and mental grade are thought to be related to goal expectancy. This hypothesis is based on the assumption that individuals with more education (a high school education in the present study) and a higher mental grade, will generalize from this previous experience regarding their capability of attaining higher levels of goal attainment in the organization they are about to enter. Thus they will have higher goal expectancies. Previous military research has shown that education, mental grade and age are consistent, although relatively weak, predictors of performance (see e.g. Hand, Griffeth, & Mobley, Note 1, and Sands, Note 4). Theoretical correlates of these demographic variables have been analyzed infrequently.

The model suggests that goal expectancy, education, and mental grade also will have a direct influence on early performance, over and above

the indirect effect of these variables on performance through goals. The rationale for this hypothesis is two-fold. First, to the extent education and mental grade are task relevant, they make performance easier for those possessing these characteristics, whether or not the individuals recognized this in their organizational entry performance goal and expectancy judgments. Second, since organizational entry performance goals may be based on incomplete and/or inaccurate information and perceptions, a relatively weak organizational entry goal-performance relationship may be expected. This relationship should become stronger as the individual has more experience with the organization and his/her performance in the organization. As the goal-performance relationship becomes stronger over time, the direct effect on performance of education, mental grade, and expectancy should become weaker since, with experience and past performance, goals should capture these effects.

It should be recognized that the focus of the present study is on goal theory rather than expectancy theory. Although the concept of goal difficulty is treated as a performance goal expectancy (perceived chances of goal attainment), the present study incorporates neither the attraction, utility, or force constructs nor the within-subject analysis essential to a complete expectancy theory evaluation.

The purpose of the present study was to investigate the linkage between the goal-setting processes and performance among United States Marine Corps recruits in a field setting. Specifically, the study sought to determine if goals articulated by recruits at the time of organizational entry were predictive of performance in recruit training. Further, the role of expectancies or goal difficulty in goal choice and performance was analyzed. Finally, the process by which goals change over the course of recruit training and the determinants of post-recruit training

performance goals were analyzed. The present study is part of an on-going longitudinal investigation of individual and organizational causes and correlates of attrition and performance among first term enlisted personnel in the Marine Corps (Mobley, Hand, Logan, & Baker, Note 2; Mobley, Hand, Baker, and Meglino, Note 3). The scope of the present paper is limited to pre- and post-recruit training goals and recruit training performance.

Method

Subjects

The subjects were newly-enlisted, non-reservist, male, Marine Corps recruits sampled from a Southeastern United States Marine Corps Recruit Training base. The maximum sample size was 1520 recruits with some variation in size due to missing data or survey consistency checks.

Measures

Goal and goal expectancy data were collected through surveys given at the beginning and again at the end of recruit training. Goal statements were expressed in terms of levels of performance including, an outstanding Marine, a satisfactory Marine, a marginal Marine, and leaving the Marine Corps prior to completing the enlistment. Performance goal-expectancy questions were associated with each goal and were measured on a five point scale ranging from "no chance" to "100% chance" of being able to attain the goal.

Performance was measured in two ways, objective indices and self-report. The objective measure of performance consisted of categorizing the sample into four categories: honor graduates; regular graduates; re-cycled graduates, i.e., individuals who were set back in recruit training

but who did eventually graduate; and attrites, i.e. individuals who did not successfully complete recruit training and were dropped from the Marine Corps. The self-report performance data were collected from non-attrites on the end-of-recruit training survey. The self-evaluation of performance was collected on a five point verbally anchored scale ranging from outstanding to marginal.

The demographic data, education, mental grade as assessed by the AFQT, and age, were collected from the Marine Corps master computer file. Objective performance data came from the same source with the exception of the honor graduates who were identified by base records.

Procedure

The organizational entry survey was administered after the recruits had arrived at the recruit depot but before the start of recruit training. The researchers administered the surveys to groups of four platoons at a time. The survey was readministered, in the same manner, to graduates at the end of the 13 week recruit training. Social security numbers were used to match the two surveys and the computer file demographic and performance data. Anonymity was guaranteed.

Statistical procedures included regression analyses of the precursors of organizational entry performance goals, end-of-recruit training performance goals, and end-of-recruit training self-evaluation of performance. Discriminant analysis was used to assess the objective performance groups.

Results

Determinants of Organizational Entry Performance Goals

The model suggested that pre-recruit training goals were determined, in part, by education, age, mental grade, and the perceived expectancy

of becoming an outstanding, satisfactory, or unsatisfactory Marine. Table 1 summarizes the zero-order correlation coefficients. As indicated, the strongest relationship was between the recruits' self-set goals

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Insert Table 1 About Here
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and expectancy of becoming an outstanding Marine. The next strongest correlates of goal were the expectancy items which pertained to the recruits' perceived chances of becoming either a "satisfactory" (.18, $p < .01$) or "unsatisfactory" (-.21, $p < .01$) Marine. Education and mental grade exhibited statistically significant but relatively weak correlations with organizational entry performance goals.

Correlates of Self-Reported Performance

The second phase of the study evaluated the relationship between the Marine recruits' organizational entry performance goals and post-training, self-reported performance. The results provided in Table 2 indicate that the strongest bivariate relationships were those existing between performance and entry performance goals (.20, $p < .01$), and education (.17, $p < .01$), and the expected inverse relationship between performance and

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Insert Table 2 About Here
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the expectancy of becoming an "unsatisfactory" Marine (-.19, $p < .01$). Of the balance of the selected variables, only age failed to reach an acceptable level of statistical significance.

Table 2 also provides a summary of the multiple regression analysis with self-reported performance as the dependent variable. The analysis was conducted with the variables forced into the regression equation in the predetermined order suggested by the model and in stepwise fashion.

Results indicated virtually no difference. In order of contribution to the equation, the recruits' entry performance goals, educational level, expectancy of becoming an unsatisfactory Marine, and expectancy of becoming an outstanding Marine accounted for 9 percent of the variance in self-reported performance. The inclusion of the remaining variables reflected only miniscule increase in the explained variance.

Determinants of Objective Performance

This phase of the study re-examined the goals-performance relationship with objective rather than self-report performance as the dependent variable. The recruits' performance was based on post-recruit training categorization into one of the four specific subgroups previously defined (i.e., Honor, Regular, Recycled, or Attrite).

Table 3 provides an average profile of the Marine recruit subgroups.

Insert Table 3 About Here

Analysis of goal levels indicated that the group as a whole had set a goal of becoming a "very good Marine" (4.2) while, by subgroup, the Honor graduates had set the highest goals for themselves (4.4) with the attrites setting the lowest personal goals (3.7).

A second notable aspect of the recruit profile was the indication that the average level of education completed was significantly higher for Honor graduates (11.9) relative to attrites (11.4). In addition, the Honor graduates reported a significantly higher score on the pre-recruit training aptitude test (AFQT) than those recruits classified as attrites (67 vs. 58). In general, those recruits classified as Honor graduates reflected a higher level of education, mental grade, and expectancy of being able to achieve their goals. Of the seven variables noted

in Table 3, five reflected a consistent increase (decrease in the case of expectancy of being unsatisfactory) in mean responses as the classification scheme ranged from Attrite to Honor graduates. In the case of the remaining two independent variables (i.e., age and mental grade), there was a slight degree of fluctuation in the ordering of the mean responses of the recruits. In all cases the overall F was statistically significant.

The multiple discriminant analysis resulted in three discriminant functions. The total variance existing in the discriminating variables (i.e., the sum of the eigenvalues) was only .16. That is, only some 16 percent of the variability in objectively-determined performance was explained on the basis of self-set goals, expectancy of reaching these goals, and the demographic variables.

Table 4 presents the standardized discriminant function coefficients for the three statistically significant functions as well as the ratio of each function's eigenvalues to the sum of eigenvalues for all functions. This latter information provides the proportion of variance accounted for

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Insert Table 4 About Here

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by each function. As indicated, the first function accounted for approximately 84 percent of the total discriminable variance.

In the initial discriminant function, it is noted that only the variables of age and expectancy of becoming an unsatisfactory Marine exhibited a positively signed coefficient. Disregarding the sign of the coefficients, it is noted that the variables of performance goal and education contributed the most to the first function relative to the remaining variables. The second discriminant function, $X^2(5) = 15.67$,

$p < .01$, accounted for 9% of the total discriminable variance. In addition, the Wilks Lambda was .99 thereby indicating that a minimum of discriminating power was present. The third function accounted for only 7 percent of the total discriminable variance and was, therefore, less useful relative to the first two functions.

Table 5 provides the means on all the functions for each recruit subgroup. These means, or centroids, provide the location of a case from a particular subgroup in the discriminant function space. The separation of groups along the first axis was primarily a function of (in order of decreasing potency in the discriminant function) education, goals, and expectancy of becoming an unsatisfactory Marine. The means for the second and third axes of the discriminant space have likewise been provided.

Insert Table 5 About Here

In addition to its usage for analytical purposes, discriminant analysis was used for the purpose of classification. That is, it was used in identifying the most likely group membership for a Marine recruit based only on the particular variables used in the proposed model. Moreover, the use of classification enables one to test the adequacy of the previously derived discriminant functions. Because of the gross difference in subgroup size between those classified as "Regular" graduates from recruit training and the remaining subgroups, a Bayesian adjustment of the prior probabilities was introduced in order to account for this difference. The prediction results for the model are presented in Table 6.

Insert Table 6 About Here

As indicated, over two-thirds of the recruit cases were correctly classified into their post-training subgroups. However, the extremely large

size of the "Regular" graduate subgroup would obviously have a distorting effect on the classification results. That is, any uncertainty with respect to subgroup placement would most likely be resolved by placing a graduate in the "Regular" subgroup vis a vis the remaining subgroups.

Correlates of Post Recruit Training Goals

The final analysis consisted of an investigation into the correlates of post-recruit training goals. Analyzed were the relationships between post-training performance goals and the recruits' self-reported performance, age, education, mental grade, expectancies, and the pre-training performance goals.

The results are provided in Table 7. There was a relatively strong relationship between the recruits' post-training performance goals and post-training, self-reported performance (.29, $p < .01$) and organizational entry performance goals (.27, $p < .01$). In addition, the recruits'

Insert Table 7 About Here
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responses to the expectancy items indicated a relatively strong relationship with the post-training, self-set goals (.28, .12, -.19, all $p < .01$).

Table 8 provides a summary of the multiple regression analysis with the recruits' post-recruit training performance goal as the dependent variable.

Insert Table 8 About Here

As indicated in Table 8, the multiple correlation was .29 using only post-training performance, and increased to .44 with the inclusion of organizational entry performance goals, expectancy of being an outstanding and an unsatisfactory Marine, and mental grade. The post-training, self

reported performance and pre-training goals were the initial variables in the equation and accounted for 14 percent of the explained variance in goals set at the conclusion of basic training. With the inclusion of all independent variables, the explained variance is increased to 19 percent.

Discussion

This study sought to assess antecedents of organizational entry performance goals, the relation between such goals and performance, and the antecedents of post-organizational entry performance goals.

Of the antecedents considered, it was found that three expectancy questions were the strongest correlates of organizational entry performance goals with expectancy of being an "outstanding" Marine being the strongest correlate ($r = .31$). These findings are consistent with Dachler and Mobley's (1973) results indicating that performance expectancies are a relevant component of goal choice. When demographic variables were combined with the expectancy variables, 12.5 percent of the variance in organizational entry performance goals was explained. This clearly suggests that: variables other than goal expectancies and demographics must be considered in understanding organizational entry goals; and/or relations are non-linear; and/or that organizational entry performance goals contain a significant random component.

When the relation between organizational entry performance goals and subsequent performance was examined, a correlation of .20 was found for both self-reported performance and objectively indexed performance. These .04 R^2s provide only moderate support for Locke's (1968) hypothesis that goals are the primary determinants of performance. When the expectancy and demographic variables were combined with organizational entry goals, the variance accounted for in self-reported performance was .09 and for

objective performance was .16, with organizational entry goals being the strongest component in both analyses.

The finding that the highest performers, on the average, set the highest organizational entry goals offers some support to Locke's (1968) hypothesis and Campbell and Ilgen's (1976) findings regarding goal difficulty. However, the finding that significantly more variance in either self-reported or objective performance was explained when expectancies and the demographic variables were added to goals in the equation, indicates that organizational entry goals were not capturing all of the performance relevant variance in the other antecedents.

When the correlates of post-recruit training goals were examined, it was found, as predicted, that recruit training performance was the strongest correlate. This finding serves to demonstrate the responsivity of goals to performance experience and is consistent with Cummings and Schwab's (1973) hypothesis that goal achievement increases the desire for future goal achievement. When organizational entry goals, expectancies, and demographics were combined with performance, 19 percent of the variance in post-recruit training goals was explained. This was a significant increase over the 12.5 percent explained variance in organizational entry goals.

Overall, the results provide only moderate support for the hypothesis that goals are the immediate precursor of performance. The fact that this study focused on organizational entry goals of individuals entering a new environment (i.e., the Marine Corps) suggests an important boundary condition for goal theory. Organizational entrants' knowledge and perceptions may be limited to recruiting, advertising, or dated perceptions of veterans which may present a possibly distorted view of life in

the organization. Consequently, a lack of experience or accurate information, coupled with the new recruit's personal characteristics, could generate the formation of unrealistic or unreliable expectations and goals at the time of organizational entry. To the extent this occurs, organizational entry goals would be expected to be relatively poor predictors of subsequent performance. However, with experience, goals should become more predictable and the relation between goals and performance should become stronger. The results reported here are consistent with such an interpretation as were the earlier findings of Dachler and Mobley (1973).

Further research is required to assess changes in, and the relation between, goals and performance over an extended period of time. Such research would serve to further document: the responsivity of goals to experience; the hypothesized strengthening of the goals-performance relationship with increased organizational experience; and the hypothesis that with increased organizational experience, goals will increasingly capture the variance associated with expectancy, demographic, and other variables.

Reference Notes

1. Hand, H., Griffeth, R., and Mobley, W. Military Enlistment, Re-enlistments and Withdrawal Research: A Critical Review of the Literature. Columbia: Center for Management and Organizational Research, University of South Carolina, TR-3, ADA048955, November, 1977.

2. Mobley, W., Hand, H., Logan, J., and Baker, R. Pre-Recruit Training Values, Expectations, and Intentions of Marine Corps Recruits. Columbia: Center for Management and Organizational Research, University of South Carolina, TR-2, ADA041194, May, 1977.

3. Mobley, W., Hand, H., Baker, R., and Meglino, B. An Analysis of Recruit Training Attrition in the U.S. Marine Corps. Columbia: Center for Management and Organizational Research, University o South Carolina, TR-5, ADA053333, February, 1978.

4. Sands, W.A. Prediction of enlisted attrition - (two years): The POET - 2 model. Conference of the Military Testing Associating Pensacola, October, 1976, (NPRDC).

References

Campbell, D. J., & Ilgen, D. R. Additive effects of task difficulty and goal-setting on subsequent task performance. Journal of Applied Psychology, 1976, 61, 319-324.

Campbell, J. B., & Pritchard, R. D. Motivation theory in industrial and organizational psychology. In Chapter three, Handbook of industrial-organizational psychology, M. Dunnette, ed., Rand-McNally, 1976.

Cummings, L. L., & Schwab, D. P. Performance in organizations-determinants and appraisal. Glenview, Ill.: Scott, Foresman, and Company, 1973.

Dachler, H. P., & Mobley, W. H. Construct validation of an instrumentality-expectancy-task-goal model of work motivation: Some theoretical boundary conditions. Journal of Applied Psychology, 1973, 58, 397-418.

Ivancevich, J. M. Effects of goal setting on performance and job satisfaction. Journal of Applied Psychology, 1976, 61, 605-612.

Ivancevich, J. M. Different goal setting treatments and their effects on performance and job satisfaction. Academy of Management Journal, 1977, 20, 406-419.

Lang, Kurt. Military organizations. In Handbook of Organizations, pp. 838-878, James C. March, ed. Chicago: Rand-McNally, 1965.

Latham, G. P. & Yukl, G. A. Effects of assigned and participative goal setting on performance and job satisfaction. Journal of Applied Psychology, 1976, 61, 166-171.

Locke, E. A. Relationship of goal level to performance level. Psychological Reports, 1967, 20, 1068.

Locke, E. A. Towards a theory of task motivation and incentives. Organizational Behavior and Human Performance, 1968, 3, 157-189.

Locke, E. A. Personal attitudes and motivation. Annual Review of Psychology, 1975, 26, 457-480.

Locke, E. A., & Bryan, J. F. Cognitive aspects of psychomator performance: The effects of performance goals on level of performance. Journal of Applied Psychology, 1966, 50, 286-291.

Locke, E. A., & Bryan, J. F. The directing function of goals in task performance. Organizational Behavior and Human Performance, 1969, 4, 35-42.

Locke, E. A., Bryan, J. F. & Kendall, L. M. Goals and intentions as mediators of the effects of monetary incentives on behavior. Journal of Applied Psychology, 1968, 52, 104-121.

Steers, R. M., & Porter, L. W. The role of task-goal attributes in employee performance. Psychological Bulletin, 1974, 81, 434-452.

Terborg, J. R. The motivational components of goal setting. Journal of Applied Psychology, 1976, 61, 613-621.

Footnotes

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Table 1

Correlates of Organization Entry Performance Goals

	$\bar{X}$	S.D.	2	3	4	5	6	7
1. Organizational Entry Performance Goals	4.23	1.00	06**	09**	- 03	31**	18**	- 21**
2. Education	11.70	.79		08**	21**	03	05*	- 05*
3. Mental grade	61.68	19.15			01	02	19**	- 17**
4. Age	18.85	1.51				02	- 04	02
5. Expectancy of Becoming an "Outstanding" Marine	3.88	1.04					37**	- 19**
6. Expectancy of Becoming a "Satisfactory" Marine	4.38	1.03						- 17**
7. Expectancy of Being an Unsatisfactory Marine (Separation)	1.94	1.08						

Note: N ranged from 1506 to 1520 with variance due to incomplete or invalid responses. Decimals have been omitted.

$R^2 = .125$

*p <.05

**p <.01

Table 2

Multiple Regression of Self-Reported, Post-Training Performance

Variable	r	B	R	R^2
Organizational Entry Performance Goals	.20**	.22	.20	.04
Education	.17**	.35	.25	.06
Expectancy of becoming an Unsatisfactory Marine	-.19**	-.20	.29	.08
Expectancy of becoming an Outstanding Marine	.14**	.13	.30	.09
Age	-.03	-.07	.30	.09
Mental Grade	.08**	.00	.30	.09
Expectancy of becoming a Satisfactory Marine	.09**	-.01	.31	.09
(constant)		-1.25		

**p<.01

Table 3

Profile of Mean Recruit Performance Subgroups

Variable	Group Means and N				F	eta^2	R^2
	Attrite	Recycled	Regular	Honor			
Organizational Entry Performance Goals	3.71 173	4.06 136	4.31 971	4.44 171	23.2**	.05	.04
Expectancy of becoming "Outstanding" Marine	3.60 172	3.85 133	3.94 969	3.95 172	5.62**	.01	.01
Expectancy of becoming "Satisfactory" Marine	4.20 175	4.23 135	4.39 969	4.68 172	7.76**	.02	.01
Expectancy of becoming "Unsatisfactory" Marine	2.40 173	2.17 134	1.86 973	1.66 172	19.11**	.04	.04
Education	11.37 175	11.49 137	11.75 974	11.95 172	21.3**	.04	.04
Mental Grade	58.51 175	56.43 137	62.44 974	67.06 172	10.21**	.02	.02
Age	19.04 175	19.11 137	18.79 974	18.85 172	2.71*	.01	.00

Note: For the organizational entry performance goals and the expectancy items, responses ranged from 1 to 5.
Variation in size of subgroups is attributed to missing or invalid responses.

** p <.01
* p <.05

Table 4

Standardized Discriminant Function Coefficients

for Objective Recruit Performance

Variable	Discriminant Function		
	1	2	3
Performance Goal	- .43	.02	- .42
Education	- .58	- .16	- .01
Mental Grade	- .22	- .13	.48
Age	.23	- .84	- .38
Perceived Chance of Becoming an "Outstanding" Marine	- .04	.24	- .50
Perceived Chance of Becoming a "Satisfactory" Marine	- .10	- .46	.50
Perceived Chance of Becoming an "Unsatisfactory" Marine	.39	- .17	- .02
Proportion of the Discriminable Variance Explained By Discriminant Function	.84	.09	.07

Table 5

Group Means in the Discriminant Space For

Marine Recruit Subgroups

Group	Functions		
	1	2	3
Attrite	.77	-.05	.15
Recycled	.42	-.05	-.20
Regular	-.12	.04	-.03
Honor	-.45	-.16	.16

Table 6

Prediction Results of Recruit Subgroup Classification

Actual Group	Number of Cases	Predicted Group Membership			
		1	2	3	4
1 - Attrite	175	25 14.3%	0 0	150 85.7%	0 0
2 - Recycled	137	9 6.6%	0 0	128 93.4%	0 0
3 - Regular	974	21 2.2%	0 0	952 97.7%	1 .1%
4 - Honor	172	0 0	0 0	172 100.0%	0 0

Note: Percent of "Grouped" cases correctly classified: 67%.

Table 7

Correlates of Post-Recruit Training Goals

Variable	$\bar{X}$	S.D.	Correlations 2	3	4	5	6	7	8	9
1. Post-Recruit Training goals	4.40	.86	29**	28**	12**	- 19**	02	09**	- 02	27**
2. Self-Reported Performance	3.57	.85		27**	08**	- 11	08**	01	01	15**
3. Expectancy of becoming an "Outstanding" Marine (Post-Training)	4.18	.93			28**	- 14**	-01	04	03	14**
4. Expectancy of becoming a "Satisfactory" Marine	4.62	.87				- 09**	00	12**	- 03	00
5. Expectancy of becoming an "Unsatisfactory" Marine (Post-Training)	1.61	.95					01	-12**	03	-07*
6. Education	11.77	.73						09**	20**	04*
7. Mental Grade	62.89	19.14							03	05*
8. Age	18.82	1.47								00
9. Organizational Entry Performance Goals	4.32	.93								

Note: N ranged from 1098 to 1118 with variance due to imcomplete or invalid responses. Decimals have been omitted.

* p <.05
** p <.01

Table 8

Stepwise Multiple Regression Analysis of Post-Recruit Training Performance Goals

Variable	r	B	R	R^2
Post-Training, Self-Reported Peformance	.29**	.20	.29	.08
Organizational Entry Performance Goals	.27**	.19	.37	.14
Expectancy of becoming "Outstanding" Marine	.28**	.16	.41	.17
Expectancy of becoming "Unsatisfactory" Marine	-.19**	-.10	.43	.19
Mental Grade	.09**	.01	.44	.19
Expectancy of becoming "Satisfactory" Marine	12**	.04	.44	.19
Age	-.02	-.01	.44	.19
Education	.02	-.01	.44	.19
(constant)		2.35		

**p<.01

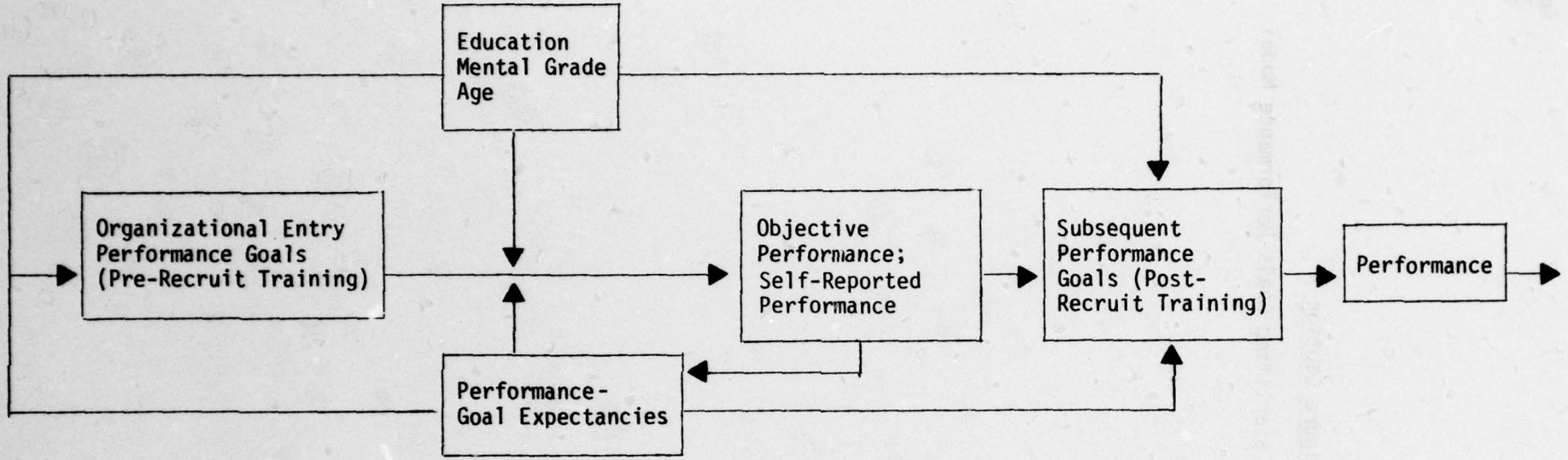

Figure 1

A Simplified Goals-Performance Model

Figure Caption

Figure 1. A Simplified Goals-Performance Model

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2. Mobley, W., Hand, H., Logan, J., and Baker, R. Pre-Recruit Training Values, Expectations, and Intentions of Marine Corps Recruits. Columbia: Center for Management and Organizational Research, University of South Carolina, TR-2, ADA041194, May, 1977.

3. Hand, H., Griffeth, R., and Mobley, W. Military Enlistment, Re-enlistments and Withdrawal Research: A Critical Review of the Literature. Columbia: Center for Management and Organizational Research, University of South Carolina, TR-3, ADA048955, November, 1977.

4. Mobley, W., Griffeth, R., Hand, H. and Meglino, B. Review and Conceptual Analysis of the Employee Turnover Process. Columbia: Center for Management and Organizational Research, University of South Carolina, TR-4, ADA049307, December, 1977.

5. Mobley, W., Hand, H., Baker, R., and Meglino, B. An Analysis of Recruit Training Attrition in the U.S. Marine Corps. Columbia: Center for Management and Organizational Research, University of South Carolina, TR-5, ADA053333, February, 1978.

*6. Ashworth, D. N. and Mobley, W. H. Relationships Among Organizational Entry Goals, Subsequent Goals, and Performance in a Military Setting. Columbia: Center for Management and Organizational Research, University of South Carolina, TR-6, July, 1978.

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