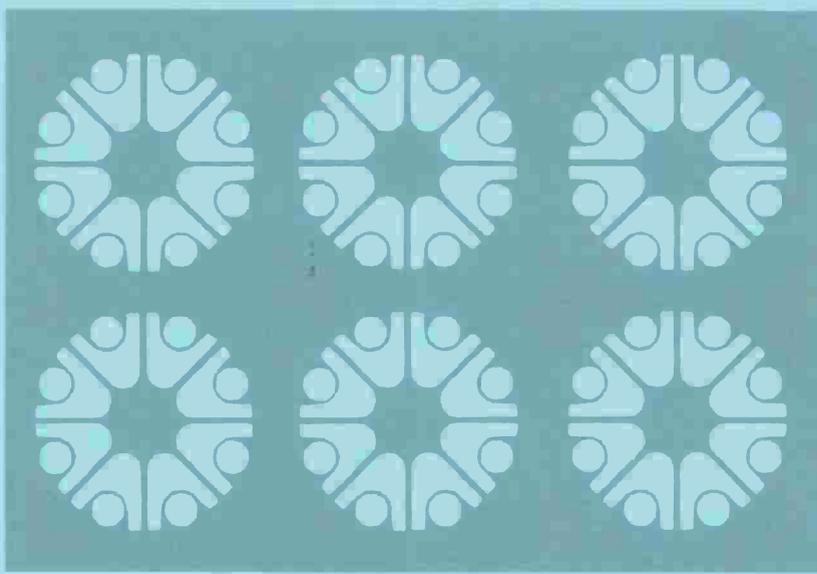


A005 772



Human Affairs Research Centers
4000 N.E. 41st Street / Seattle, Washington 98105

Research Report



BATTELLE MEMORIAL INSTITUTE
HUMAN AFFAIRS RESEARCH CENTERS
SEATTLE, WASHINGTON 98105

Technical Report #5
October 1974

Effective Leadership:
Perceptions of Newcomers and
Old Timers in the Navy

Stanley M. Nealey
George C. Thornton, III

Report of Work Accomplished Under Contract
N00014-73-C-0259

at

Battelle
Human Affairs Research Centers

Sponsored by

Organizational Effectiveness Research Programs
Psychological Sciences Division
Office of Naval Research

Stanley M. Nealey
Principal Investigator

Reproduction in whole or in part is permitted for any purpose
of the United States Government.

Approved for public release; distribution unlimited.

Abstract

which has explored perceptions of five leadership climate dimensions and the frequency of use of five modes of interpersonal power.

Organizational climates considered optimal for eliciting effort and satisfaction differed as a function of amount of organizational experience. "Old timers" in the Navy preferred more positive climates than did "new comers." Experienced enlisted men also indicated that leadership power based on threats and rank were ineffective in eliciting high levels of work effort from them. They indicated that power based on knowledge and mutual respect were much more effective. By contrast, new recruits and basic trainees indicated that all five modes of leadership power would be effective in eliciting effort from them. In general more experienced enlisted men appeared able to resist leadership power attempts if the approach taken was one they disliked. The differences across groups were interpreted within an organizational socialization framework.

The key issue explored in this study was the discrepancy between leadership seen as optimal for work effort and satisfaction vs. the actual leadership experienced at boot camp and on Navy duty. This discrepancy was more severe at boot camp but still serious for enlisted men with two years of service. Based on the data in this report, leading targets for improvement in Navy leadership are (1) less hierarchical and more democratic decision making; (2) less formal authority structure; (3) more considerate leadership climate; (4) decreased use of leadership power based on rank and coercive threats; and (5) increased use of leadership power based on mutual respect between superior and subordinates. According to Navy enlisted men, discrepancies between "what is" and "what should be" are minor in the areas of performance evaluation and the dimension of close vs. general supervision. Navy leaders were also given good marks for their frequent use of leadership power based on expert knowledge of the job to be done.

INTRODUCTION

Nearly everyone who works in our society has a "boss" and nearly everyone with a boss has some ideas about how the boss should do his job of supervising and providing leadership. Football coaches are not the only targets of Monday morning quarterbacking by any means. While managers, supervisors and military officers seldom come right out and ask subordinates how they think they (the bosses) should do their jobs, they are nonetheless aware that subordinates do have expectations of them, and they often subscribe to the notion that they will get better results if their way of dealing with subordinates is congruent with subordinate expectations.

The current study compares the perceptions of three groups of Navy enlisted men with differing amounts of experience in the Navy regarding effective leadership. In other words, "This is how the boss should do his job to get the most out of me." It is, therefore, a study of subordinate expectations and how they may change as a result of experience in the Navy.

This research is relevant to a number of theoretical issues in the general area of work motivation and job satisfaction. These will be briefly explored below as background for the presentation of research results.

A first issue of concern is the relation, if any, between what subordinates may see as the optimal way for their superiors

to act and what is "really" the best way for superiors to act. Since the current study was carried out in the Navy, the question can be rephrased as follows: If Navy leadership adopted the approaches recommended by enlisted men, what would happen to the Navy? Some might think it would become a more effective organization, others that it would be destroyed. Since we have no empirical answer to this question it is beyond the scope of the current study, but it is important to note that a given leader behavior may be considered positive or negative, effective or ineffective, benevolently stern or arbitrarily coercive depending on the perspective of the viewer. This point has been made nicely by Korman (1966) in his review of the relations between the Ohio State University Leadership Dimensions of Consideration and Initiating Structure as independent variables and subordinate performance and satisfaction as the dependent variable criteria. Korman divides his results according to the source of the criteria of leader effectiveness, i.e., objective data, ratings by superiors, ratings by peers, self-ratings, or ratings by subordinates.

The current study focuses on how subordinates believe leadership climate should be to elicit hard work and satisfaction from them and on how much effort and satisfaction would be elicited by various leadership attempts to influence them. No criterion judgments as such are included. This study thus falls outside that vast body of studies designed to discover

how various extant leadership practices or leadership styles are related to various criteria of individual, work group or organizational performance. Stogdill (1974) has provided the most recent and complete review of this large literature. In broad brush it can safely be said that leadership behavior is indeed related to performance criteria, but the strength and direction of the relations depend on a host of situational factors. It would thus be naive for us to recommend that the Navy take steps to bring about changes in its leadership system to make it more congruent with the wishes of enlisted men. However, we would argue on both empirical and theoretical grounds that the Navy should give careful consideration to what enlisted men state would make them more productive and satisfied.

In order to gain perspective on why the Navy should take seriously the leadership recommendations of enlisted men, it is useful to ask the question, "What are the consequences of discrepancies between what subordinates say is optimal and what they experience as actual leadership climate and behavior?" This question has been approached in the context of two related but distinguishably different concepts. One is the "ideal vs. real" discrepancy and the other is the more general concept of discrepancies between what subordinates expect vs. what they actually experience. The point is that what subordinates expect leadership to be like is probably different from what they would ideally like it to be. In a companion report in

the current series, Nix, Thornton and Nealey (1974) present the expectations of Navy recruits vis-à-vis leadership during basic training and on Navy duty. These differ markedly from the ideal leadership described by the same respondents in the current report. In general, people would not be expected to join an organization if their expectancies of the organization were highly incongruent with their judgments about what the organization should be. However, Navy volunteers who are under draft pressure, as some of the current respondents were (see Thornton, Hamilton and Nealey, 1973), constitute an exception to this generalization.

Several theorists have postulated that leaders and subordinates should have shared expectations if performance and satisfaction are to be high (see for instance, Levinson, Charlton, Munden, Mandl, and Solley, 1962; Homans, 1950; Davis, 1962; Sarbin and Jones, 1955; and Tannenbaum, Wechsler and Massarik, 1961). A related notion--that subordinates' expectations of leaders should be congruent with their actual experiences with leaders--has been the subject of several studies. Hemphill, Seigel and Westie (1951) measured both member expectation of and member observation of leader behaviors using the "ideal" form of the Leader Behavior Description Questionnaire developed at Ohio State University. Group performance measures were negatively related to discrepancies between real and ideal leader behavior more strongly than to either real or ideal scores alone. Foa (1956, 1957) in both industrial and military settings has demonstrated that subor-

dinate satisfaction is related to the perception that leaders act in terms of subordinate expectations. Porter and Steers (1973) conceptualize job satisfaction as ". . . the sum total of an individual's met expectations on the job." (p. 169). Their extensive review of the literature leads them to comment, "The major turnover findings of this review, when taken together, point to the centrality of the concept of met expectations in the withdrawal decision." (p. 170).

The above cited studies point to the importance of congruent expectations and experience, but, in another study designed to test this notion, Patton (1954) failed to demonstrate the expected relation with ratings of leader performance. Lawrie (1966) found that convergence of foreman and general foreman expectations was significantly related to foreman performance as rated by the general foreman in one, but not the other, of two departments. However, convergence of foreman and subordinate expectations was not related in either department to subordinate evaluations of foremen. With these exceptions, past studies have generally reinforced the proposition that employee expectations should be carefully considered because they affect job-related attitudes and behavior.

Shifting focus to the reactions of leaders to real-ideal discrepancies, Anikeeff (1957) found a relation between manager job satisfaction and the discrepancy between manager and worker attitudes. Anyone who has had the experience of being in charge of a group with markedly different attitudes and values won't find this hard to believe.

The importance of congruent leader-follower expectations for both leader and follower satisfaction comes as no surprise. A vast literature on determinants of interpersonal attraction shows the importance of perceived similarity (of both real and ideal self with other) as a basis for liking, promoting, following, reinforcing, etc. (see for instance, Byrne, 1961; Miles, 1964; Secord and Backman, 1964; Whisler, 1960; Nealey and Fiedler, 1968).

There would seem to be sound theoretical as well as empirical justification for paying close attention to what enlisted men say will elicit work effort. For one thing, effort to perform is a basic variable in models of work motivation. Literally hundreds of studies have been performed in which various leadership and situational variables have been used to predict employee work performance (see Stogdill, 1974). No doubt the empirical picture that has emerged from these studies would be clearer if effort to perform rather than performance had been the dependent variable. Lawler (1971, pp. 107-114), drawing on Porter and Lawler (1968), makes an overwhelmingly persuasive case for a work motivation model in which effort to perform is the direct outcome of perceptions that (a) effort will lead to performance and (b) performance, if achieved, will lead to desired outcomes. Whether in fact effort to perform well on the job really will lead to the desired job performance depends in part on other factors, most notably ability and

knowledge of how to do the job. This theoretical formulation is the best developed of the theories of work motivation based on the general notion of expectancy. Moreover, each of the key terms and linkages in the model is buttressed by a good deal of empirical evidence. In short, there is both good empirical and theoretical justification for the argument that effort to perform is the key dependent variable in work motivation and that the beliefs employees have about the type of leadership climate and behavior which will elicit effort from them should not be taken lightly.

Quite obviously, ideas held about leadership and what constitutes ideal leadership are subject to change over time just as the recommendations teenagers have for parents often change as they, themselves, later become parents. The current study measures beliefs about effective and satisfying leadership held by three groups of enlisted men with virtually no Navy experience, seven or eight weeks of Navy experience, and two to three years of Navy experience. This is not a longitudinal study so one cannot, strictly speaking, talk of change in ideal leadership beliefs. However, the groups have similar characteristics except for amount of experience (and age), and we are going to discuss the results from them in terms of the effects of Navy experience on their leadership beliefs.

"Socialization" has been described as a continual process of social learning as a function of an individual's interactions with his social environment (Brim, 1966; Goslin, 1969; Zigler and Child, 1969). Studies of organizational socializa-

tion have dealt with social learning of norms, values, and required work role behaviors. The well-socialized member of an organization "knows what the score is." He knows what is expected, who runs the show and how to get things done. He also knows how hard he is expected to work and what he can get away with. Most organizations have orientation programs for newcomers in hopes of molding and setting employee expectations in line with organizational objectives. In addition, there is the less structured, but often more powerful, communications from other employees and especially old hands. One way or another newcomers get "the word," and it's quite common for the formal word as revealed in the orientation program to vary from the informal word as transmitted by fellow employees. We would not argue that changes in attitudes and beliefs as a function of organizational experience are solely the result of social learning; no doubt direct experience as well as aging and maturation also are factors.

Studies of organizational socialization have documented changes over time in the meaning of work, the importance of various rewards for work, expectations of need satisfactions and perceptions of what work behaviors are acceptable (Moore, 1969; Van Maanen, 1972). Studies of military personnel have found positive changes in Marine recruits' attitudes toward the Marine Corps (Booth and Hoiberg, 1973) and Navy recruits' perceptions of various aspects of training and other job related factors (Schneider and Katz, 1973). However, there

appears to be little research directed at the central issue of the current study, "How do subordinate perceptions of effective leadership change as a function of organizational experience?"

METHOD

A total of 1,267 men from the United States Navy participated in this project. Three groups were defined in terms of respondents' position in the Navy and were composed as follows: 303 inductees at the Armed Forces Entrance and Examining Station (new recruits) at Los Angeles (N=165) and Denver (N=138), 365 trainees at the Navy Training Center (basic trainees) in San Diego, and 599 enlisted men with eighteen months experience on various duty stations throughout the world (experienced enlisted men). This latter group had 20-24 months of Navy experience including training periods. The new recruits had just joined the Navy and were being processed prior to departure for basic training. The basic trainees had completed seven or eight weeks of a nine-week basic training program.

Demographic characteristics, such as mean age, high school class ranking, and size of home town were found to be similar for all three groups of men with the exception of age comparisons as presented in Table 1. Age was not obtained from the experienced enlisted men but it can be assumed they were approximately eighteen months older than the trainees.

The experienced enlisted men came from slightly smaller home towns.

The questionnaires were administered to the new recruits and basic trainees in groups and returned anonymously. The sample with eighteen months of duty experience was identified from the master enlisted file of Navy personnel and surveyed by mail sent directly to each individual at his duty station. The respondents completed the questionnaires anonymously and mailed them directly back to the researchers. Of the 1,700 questionnaires mailed out, 78 were returned unopened and 22 were returned after analyses began. From past experience in conducting mail surveys of Navy personnel under similar conditions it was estimated that approximately 1/4 to 1/3 of the questionnaires did not reach the intended subjects. Thus, the estimated effective response rate was approximately 50-60 percent. The new recruits and basic trainee samples were surveyed in the summer of 1972; the experienced enlisted men received their questionnaires in the spring of 1973.

The questionnaires given to the three groups were similar in form and content. They were designed to assess attitudes toward five organizational climate dimensions and five modes of expression of interpersonal influence or leadership power.

The five organizational climate dimensions were (1) hierarchical vs. equalitarian decision making, (2) formal vs. informal superior-subordinate relations, (3) supportive vs. punitive handling of mistakes by subordinates, (4) close vs.

general supervision, and (5) considerate vs. inconsiderate supervision. These five organizational climate dimensions were described by five pairs of contrasting situations. On each dimension the respondent used a five-point scale to describe (1) attitude toward Navy basic training, (2) expectation (or description) of Navy duty eighteen months after boot camp, (3) attitude toward civilian jobs, (4) the situation in which he would try hardest to do a good job, and (5) the situation in which he would be most satisfied. Questions four and five thus describe optimal leadership climate. They are compared in this report to descriptions of actual leadership climate at boot camp and on Navy duty.

The five leadership power dimensions used in this study were those identified by French and Raven (1959): 1. legitimate power based on rank and position, (2) expert power based on knowledge, (3) reward power based on positive rewards, (4) referent power based on personal respect, and (5) coercive power based on negative sanctions and punishment. Attitudes toward the use of the five power modes by superiors were obtained by presenting situations that illustrated each mode. The respondents indicated (1) how frequently each form of power is used during basic training (or current duty), (2) how frequently they think each form of power should be used during basic training, (3) how frequently each form of power is used in most civilian jobs, (4) how hard they would try to do a good job under each mode of power, and (5) how satisfied

they feel with each mode of power. The results from questions four and five are analyzed in this report. The results from question one are also presented for comparison. Discussions of other phases of the project can be found in other reports (Maynard, Thornton and Nealey, 1974; Nix, Thornton and Nealey, 1974; Thornton, Hamilton and Nealey, 1973; and Thornton and Nealey, 1974).

In addition to the organizational climate and leadership power questions, respondents were presented fourteen Likert-type items designed to probe general attitudes toward the military, basic training, the supervision process, and taking orders. Each item consisted of a statement with which the respondent indicated agreement or disagreement on a five-point scale. The items were grouped by a priori judgment into four dimensions. Only one dimension is relevant to the focus of this report. As the items in Table 5 show, this dimension involves concern for good interpersonal relations in peer and superior-subordinate relations. Results from all four dimensions are presented by Maynard, et al., (1974).

RESULTS

The results showing mean levels of each of the organizational climate variables judged by the three groups to elicit maximum effort to do a good job are shown in the left half of Table 2. The three groups differ significantly in a consistent direction on each of the five climate variables. Inspection

of the group means shows that a favorable climate (i.e., democratic, informal, permissive, general supervision, and considerate leadership) takes on increasing importance for the more experienced groups. Multiple comparisons of all pairs of mean differences for each item were carried out with the Sheffe procedure (Winer, 1971) in order to discover pairs of means differing significantly at the five percent level of confidence. The experienced enlisted men had significantly higher means than did the basic trainees on each of the five climate dimensions.

The right half of Table 2 shows mean climate scores judged to result in highest satisfaction with duty. The "satisfaction" pattern of scores is very similar to the "effort" pattern of scores; the more experienced groups, in order to be satisfied, require more favorable climates than do the less experienced groups.

The relative climate levels optimal for effort and satisfaction can be seen clearly in Figure 1 which displays graphically the data shown in Table 2. In every case climate judged optimal for satisfaction is slightly more favorable than climate judged optimal for eliciting effort. In other words, enlisted men seem to realize that the leadership climate that will draw from them their best effort needs to be a little "tougher" than the climate with which they are most satisfied.

Basic trainees and experienced enlisted men were also asked to describe the climate typical of their current duty

situations. These data are tabled in the top half of Table 4 and also shown for comparison in Figure 1. Table 4 shows that the regular Navy duty situations described by experienced enlisted men were significantly more favorable than the climate of basic training. However, Figure 1 shows quite dramatically the discrepancies between climate described as optimal for effort and satisfaction and the actual climate at boot camp and on Navy duty. The discrepancies between optimal and actual climate were somewhat greater among basic trainees in the boot camp situation than among experienced enlisted men on normal Navy duty.

For ease of comparison, Figure 2 presents the profiles of organizational climate judged to be optimal in eliciting effort to do a good job as seen by the three groups. The relationship between amount of experience in the Navy and preference for more favorable climate can be clearly seen. In general, all three groups emphasized the need for democratic decision making and considerate leadership. It is in these two dimensions where the most striking discrepancies between optimal and actual climates are noted (see Figure 1). Also striking is the difference on the close vs. general supervision dimension between experienced enlisted men on the one hand and basic trainees and new recruits on the other. Perhaps the added training and experience among the group with two years of Navy duty contributes to the judgment that they work best under general supervision.

Table 3 shows mean responses to the questions, "How hard would you try to do a good job?" and "How satisfied would you feel?" with each of the five modes of leadership power. For example, if your supervisor emphasizes his rank and authority (uses legitimate power) what level of effort and satisfaction would result? As the left half of Table 3 shows, the differences between new recruits and trainees are small and the mean levels of effort that would result from the application of any of the five modes of leadership power are quite high in the basic training setting. These data taken at face value indicate that high levels of effort can be elicited from recruits during basic training by using any of the five modes of power. The situation is somewhat different for the experienced enlisted men. The mean effort elicited by the use of legitimate, reward and coercive power are markedly reduced by comparison with the two less experienced groups. This result can be seen clearly in Figure 3 which graphically displays the data in the left half of Table 3. In Navy duty situations the experienced enlisted men report that legitimate and coercive power in particular have lost their previous potency to elicit effort to do a good job. Only expert and referent power remain highly effective.

Inspection of the mean levels of satisfaction with the power modes (see right half of Table 3) shows that among new recruits and basic trainees, expert, reward and referent power modes are satisfying while legitimate and especially

coercive power modes are dissatisfying. The experienced enlisted men also find legitimate and coercive power dissatisfying but more extremely so than is the case with the less experienced group. The experienced enlisted men indicate that reward power is less satisfying than reported by the new recruits and basic trainees. The low reward power scores given by experienced enlisted men for both effort and satisfaction are somewhat surprising since the use of reward power is often endorsed by social scientists as congruent with accepted principles of motivation, i.e., giving or withholding reinforcement as appropriate for good or poor performance is theoretically effective. However, application of reinforcement principles can sometimes backfire if all elements of the reinforcement system are not carefully understood and uniformly applied (see for instance Campbell, Dunnette, Lawler and Weick, 1970; Lawler, 1971).

In the lower half of Table 4 the reported frequencies of use of the various modes of power are shown for basic training and Navy duty. Both reward and coercive power are used significantly less frequently on Navy duty than during basic training. These differences are good signs in the sense that both reward and coercive power are reported to be less effective and less satisfying for experienced enlisted men than for basic trainees. Another good sign is the frequent use of expert power which, as discussed above, was endorsed by all groups as being both effective and satisfying. Unfortunately,

referent power which all groups judged to be effective and satisfying was used less frequently than either legitimate or coercive power.

Table 5 presents mean responses of the three groups to four items designed to measure attitudes toward several aspects of peer and superior-subordinate relations. Concern for good interpersonal relations is highest among the more experienced men and lowest among the new recruits. This finding reinforces those in Tables 2 and 3 that point to the greater importance to experienced enlisted men of a favorable leadership climate. Leadership, of course, operates through interpersonal contact. Apparently even a few weeks of Navy experience contribute to the judgment that work effectiveness is low unless interpersonal contact is characterized by mutual liking and consideration.

DISCUSSION

The findings involving perceptions of optimal and actual organizational climate are quite clear. Perceptions of ideal climate were strongly related to amount of experience in the Navy. As amount of experience increased, enlisted men felt that more positive climates were required to elicit effort and satisfaction. The differences were minor between new recruits and basic trainees, but larger after eighteen months of actual duty experience. Viewing changes in perceptions of ideal leadership climate as a socialization process would fit

with this pattern of results since new recruits and basic trainees are both in the organizational entry process while the group of enlisted men have "full membership" in the Navy and presumably would have internalized the values and norms typical of Navy enlisted men.

The effort and satisfaction means bore a consistent relation to each other with a slightly more positive value required for satisfaction than for effort. The high apparent correlation between the effort and satisfaction scores reveals an implicit assumption by these respondents that satisfying environments are conducive to high effort and vice versa. The actual relationship between job satisfaction and productivity has been the subject of much research (see for instance, Vroom, 1964) with weak positive relationships the most frequent result. In other words, the relation between effort and satisfaction perceived by our respondents may be an overestimation of the actual relation.

A key issue is the discrepancy between perceived optimal leadership climate and the actual leadership climate experienced in basic training and on Navy duty. Recall our earlier point that discrepancies between optimal and actual are likely to have important behavior consequences. Discrepancies do occur in the negative direction for all five climate dimensions (see Figure 1). In general, the discrepancies between optimal and actual are less severe on Navy duty than in basic training. This occurred because the climate of Navy duty was somewhat

more positive than that of basic training. However, large discrepancies remained on the dimensions of hierarchical vs. democratic decision making, formal vs. informal authority structure, and inconsiderate vs. considerate leadership. These dimensions may be useful targets for improvement in Navy leadership practices. Discrepancies on the performance evaluation and closeness of supervision dimensions were not severe. It is worth mentioning that Thornton and Nealey (1974) found that these same respondents perceived leadership climates typical of civilian jobs to be much closer to the optimal levels than were the climates they experienced in the Navy. The implication of this situation for reenlistment is obvious.

The intent of the questions about use of leadership power was to discover which forms of power were seen to be effective and satisfying. The results are subject to interpretation within a socialization framework. Few differences were seen between new recruits and basic trainees, but the experienced enlisted men differed markedly. They reported being highly responsive only to expert and referent power whereas the new recruits and basic trainees reported that all five leader power approaches would lead to high effort. However, all groups indicated low satisfaction when legitimate and coercive power were used. It's as if the experienced enlisted men had achieved enough power and organizational savvy to resist leadership power attempts when the approach

taken ("pulling rank" and threats) was one they disliked. The new recruits and basic trainees admitted that these forms of influence were disliked but effective. Not only were legitimate and coercive power less effective with experienced enlisted men, they were also more strongly disliked than was the case with the new recruits and trainees.

Again, a key issue is the actual frequency with which leaders at basic training and on Navy duty attempt to use the various modes of power. On this issue there was good news and bad news. The good news is that reward and coercive power are used less frequently on Navy duty than at boot camp. The bad news is the underuse of referent power which all groups saw as effective and satisfying. Fortunately, expert power (endorsed by all groups) was frequently used both at basic and on Navy duty (although it was used less during basic training than coercive power, the least liked form of power). Priority targets for change might be decreased use of legitimate and coercive power modes and increased use of referent power. However, given the nature of the military mission and the structure and personnel policies typical of military organizations, this may prove a difficult prescription for the Navy to fill. The following analysis may help to understand why.

Student (1968) has applied the Katz and Kahn (1966) notion of "incremental influence" to the five modes of leadership power used in the present study. Incremental influence refers to the influence a leader has to stimulate work-related behavior above and beyond mechanical compliance with the

routine directives and work requirements of the organization. It suggests an ability to motivate performance above the expected quota. Student (1968) argues that of the five French and Raven (1959) power modes, expert and referent power may be summed to index the incremental influence of the leader. Moreover, expert and referent power are operationalized through the leader's own behavior. They derive from the way he personally uses his formal position; therefore, some leaders have much more incremental influence than others. By contrast, legitimate, reward, and coercive power derive from the leader's occupancy of a position in the organization's role system, and are potentially equally available to all leaders at a given hierarchical level. We might argue further that expert and especially referent power take some time to develop. It takes time for the leader to demonstrate his task-relevant abilities and time for a bond of mutual trust and respect to develop between leader and followers. On the other hand, legitimate power is "instant" in the sense that anyone in the position or anyone with stripes on his sleeve can exert some influence. Coercive power is also instant in that threats must be taken seriously if the follower knows that the leader's position enables him to deliver on his threats.

Considering the above theoretical arguments, a personnel policy that involves frequent transfers of personnel and a tradition that is uneasy with fraternization between superior and subordinate suggests that Navy duty and particularly boot

camp may present environments in which referent power is difficult to establish. In the meantime, the highly visible indicators of hierarchical position and the many rules and regulations typical of military organizations makes the use of legitimate and coercive power almost too easy and quick. And, as our data show, this pattern is likely to "work" in boot camp. While new recruits don't necessarily have accurate expectations of boot camp (Nix, Thornton and Nealey, 1974), they expect it to be something less than a warm human experience. They have few earned rights and skills as new organizational members and little knowledge of the system. In other words, they have no power. No wonder they are so easy to influence. Our data show, however, that they are not satisfied with the leadership climate and power modes applied to them and this may set the stage for later difficulties. Studies of the basic training period itself usually show that recruit attitudes improve over the period of training whether the respondents are Marines (Booth and Hoiberg, 1973), Navy trainees (Schneider and Katz, 1973), or Army basic trainees (Drucker, 1974). It is not inconsistent with these findings, however, that socialization processes set in motion during basic training may present later problems for the service. Maynard, et al (1974) show that some attitudes (for instance, the beliefs that all orders are equally important and that one's first and only thought on receiving an order should be immediate compliance) are changed markedly by basic training only to revert after

eighteen months of Navy duty to their pre-basic training levels or even lower.

Our data show, and common experience suggests, that experienced enlisted men are much more difficult to influence by the same methods that worked in boot camp. Legitimate and coercive power work less well and leadership climates must be much more positive to elicit work effort from the experienced enlisted man. He has been socialized in the way the system works and is at the same time more skillful, more mature, and probably more confident that he can successfully resist disliked influence attempts. The attitude items displayed in Table 5 fit this interpretation. Experienced enlisted men feel it is more important to like a supervisor if they are to work for him. They are also quicker to lose respect for a superior who flaunts his authority or fails to consider the feelings of his men.

Further research is required to determine if the discrepancies between the optimal and actual leadership system experienced by Navy enlisted men has the negative consequences for effort and satisfaction discovered by other researchers. If such consequences are found, several remedial strategies could be applied. Obviously, the discrepancies are greater for some men than others. Perhaps enlistees with expectations more in line with Navy leadership practices could be sought. Alternatively, the Navy may attempt to modify the least effec-

tive leadership practices through leader selection and training programs designed to reduce the frequency of ineffective leadership behavior and encourage effective leader behaviors.

New Recruits

Optimal climate for effort
Optimal climate for satisfaction

Basic Trainees

Optimal climate for effort
Optimal climate for satisfaction
Actual climate in basic training

Experienced Enlisted Men

Optimal climate for effort
Optimal climate for satisfaction
Actual climate in Navy duty

New Recruits

Optimal climate for effort
Optimal climate for satisfaction

Basic Trainees

Optimal climate for effort
Optimal climate for satisfaction
Actual climate in basic training

Experienced Enlisted Men

Optimal climate for effort
Optimal climate for satisfaction
Actual climate in Navy duty

New Recruits

Optimal climate for effort
Optimal climate for satisfaction

Basic Trainees

Optimal climate for effort
Optimal climate for satisfaction
Actual climate in basic training

Experienced Enlisted Men

Optimal climate for effort
Optimal climate for satisfaction
Actual climate in Navy duty

New Recruits

Optimal climate for effort
Optimal climate for satisfaction

Basic Trainees

Optimal climate for effort
Optimal climate for satisfaction
Actual climate in basic training

Experienced Enlisted Men

Optimal climate for effort
Optimal climate for satisfaction
Actual climate in Navy duty

New Recruits

Optimal climate for effort
Optimal climate for satisfaction

Basic Trainees

Optimal climate for effort
Optimal climate for satisfaction
Actual climate in basic training

Experienced Enlisted Men

Optimal climate for effort
Optimal climate for satisfaction
Actual climate in Navy duty

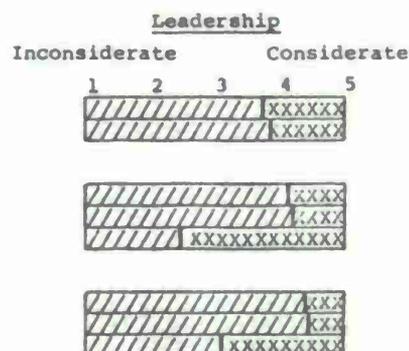
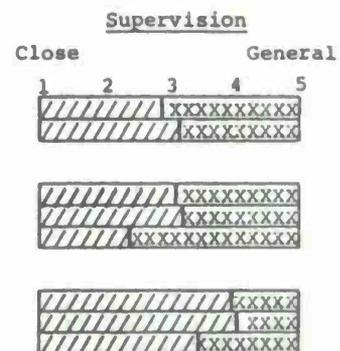
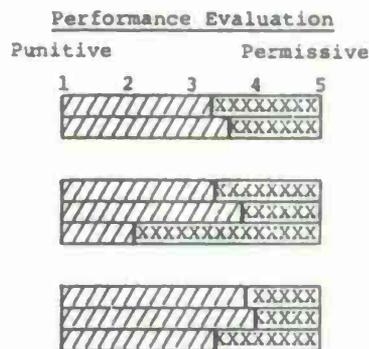
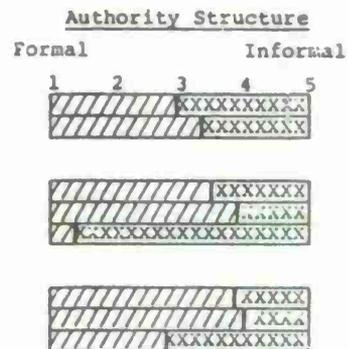
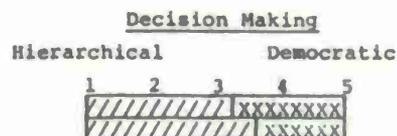


Figure 1

Optimal leadership climates for effort and satisfaction and actual leadership climates at boot camp and on Navy duty.

Optimal Climate for Effort

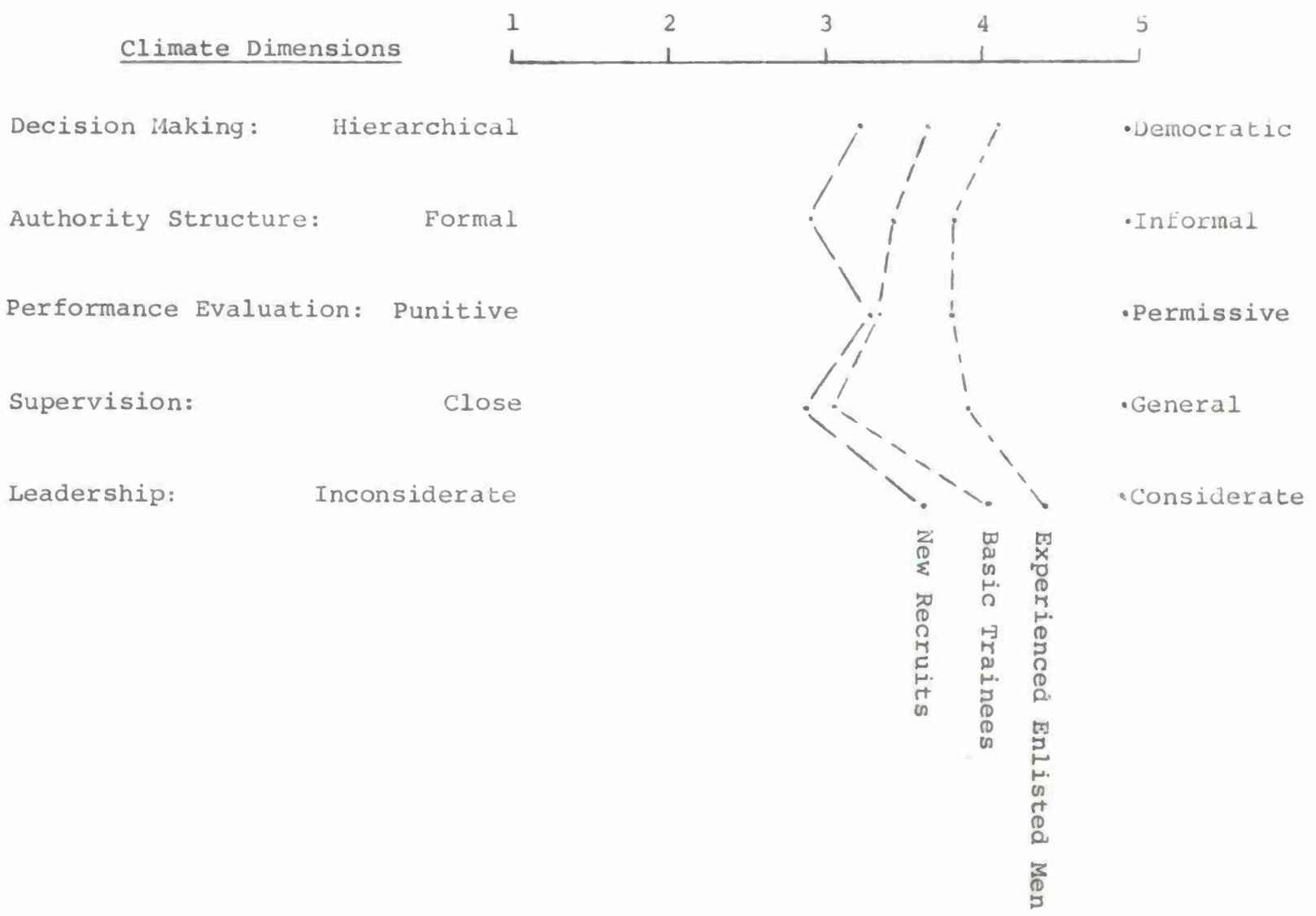


Figure 2

Mean leadership climate scores judged by the three samples to be optimal in eliciting effort to do a good job.

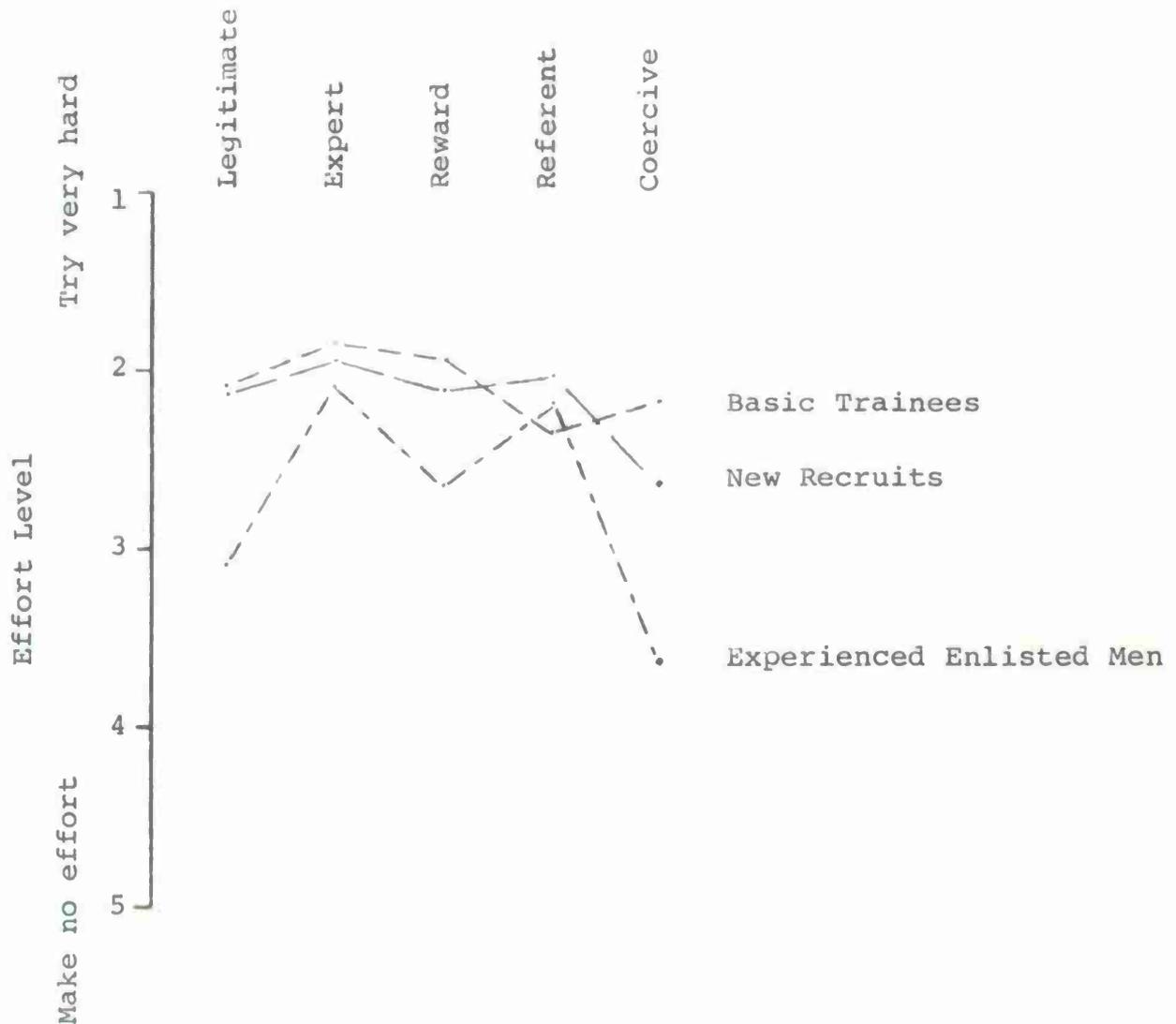


Figure 3

Mean levels of effort to do a good job judged by the three samples to result from use of the five modes of leadership power.

Table 1
Demographic Variables for Three Samples of Navy Recruits

Variables	New recruits		Basic trainees		Experienced enlisted men	
	\bar{X}	S.D.	\bar{X}	S.D.	\bar{X}	S.D.
Age (months) ¹	228	14.8	230	16.3		
Population of Home Town ²	3.46	1.72	3.32	1.57	3.02	1.70
High School Class Standing ³	2.85	.80	2.86	.74	2.98	.79
N in sample	303		365		599	

¹Age not obtained from experienced enlisted men

²1 = Less than 5,000

2 = 5,000 - 10,000

3 = 10,000 - 30,000

4 = 30,000 - 100,000

5 = 100,000 - 1,000,000

6 = Over 1,000,000

³1 = Bottom 25 percent

2 = Below average but not in bottom 25 percent

3 = Above average but not in top 25 percent

4 = Top 25 percent

Table 2

Mean Leadership Climate Scores Judged by Three Groups
Differing in Organizational Experience to be Optimal in
Eliciting Effort to do a Good Job and in Eliciting Satisfaction

Leadership Variables	Leadership which Elicits Effort				Leadership which Elicits Satisfaction			
	New Recruits (N=303) (1)	Basic Trainees (N=365) (2)	Experienced Enlisted Men (N=599) (3)	F Comparison	New Recruits (N=303) (1)	Basic Trainees (N=365) (2)	Experienced Enlisted Men (N=599) (3)	F Comparison
<u>Climate Dimensions</u>								
Decision-Making: Hierarchical (1) vs. Democratic (5)	3.24 ¹ (1.47)	3.68 (1.46)	4.11 (1.12)	45.61*** 1<2<3	3.62 (1.33)	4.00 (1.32)	4.19 (1.11)	21.38*** 1<2=3
Authority Structure: Formal (1) vs. Informal (5)	2.95 (1.33)	3.48 (1.41)	3.83 (1.15)	47.58*** 1<2<3	3.34 (1.33)	3.84 (1.31)	3.97 (1.08)	27.57*** 1<2=3
Performance Evaluation: Punitive (1) vs. Permissive (5)	3.29 (1.41)	3.36 (1.49)	3.84 (1.21)	22.67*** 1=2<3	3.60 (1.33)	3.74 (1.32)	3.95 (1.16)	8.28*** 1=2<3
Supervision: Close (1) vs. General (5)	2.91 (1.32)	3.10 (1.44)	3.95 (1.15)	84.07*** 1=2<3	3.16 (1.30)	3.19 (1.49)	4.03 (1.14)	69.87*** 1=2<3
Leadership: Incon- siderate (1) vs. Considerate (5)	3.68 (1.27)	4.10 (1.25)	4.42 (1.02)	40.38*** 1<2<3	3.86 (1.24)	4.18 (1.20)	4.47 (1.00)	29.43*** 1<2<3

¹Mean value; standard deviation in parentheses

*p < .05; **p < .01; ***p < .001

Table 3

Mean Levels of Effort to do a Good Job and Mean Satisfaction Levels that would Result from Use of the Five Modes of Leadership Power as Judged by Three Groups Differing in Organizational Experience.

Leadership Power Modes	Level of Effort Elicited				Level of Satisfaction Elicited			
	New Recruits (N=303) (1)	Basic Trainees (N=365) (2)	Experienced Enlisted Men (N=599) (3)	F Comparison	New Recruits (N=303) (1)	Basic Trainees (N=365) (2)	Experienced Enlisted Men (N=599) (3)	F Comparison
Legitimate ¹	3.88 ² (1.13)	3.91 (1.10)	2.91 (1.10)	122.54*** 1=2>3	2.80 (1.15)	2.86 (1.33)	1.93 (1.18)	86.07*** 1=2>3
Expert	4.08 (1.11)	4.17 (.98)	3.92 (.96)	7.10** 1=2; 1=3 2>3	3.67 (1.06)	3.79 (1.14)	3.71 (1.14)	.98 1=2=3
Reward	3.89 (1.10)	4.08 (1.08)	3.36 (1.17)	51.92*** 1=2>3	3.43 (1.24)	3.49 (1.29)	2.81 (1.29)	41.06*** 1=2>3
Referent	3.98 (1.08)	3.67 (1.30)	3.84 (1.21)	5.33** 1=3; 2=3 1>2	3.65 (1.08)	3.46 (1.28)	3.66 (1.27)	3.15* 1=2=3
Coercive	3.40 (1.33)	3.84 (1.32)	2.40 (1.21)	157.47*** 3<1<2	2.06 (1.12)	2.06 (1.28)	1.33 (.76)	78.85*** 1=2>3

¹For all powers: 1 = seldom; 5 = frequent use

²Mean value; standard deviation in parentheses

*p < .05
**p < .01
***p < .001

Table 4

Mean Organizational Climate Scores and
Mean Frequency of Leadership Power Use in
Basic Training and Navy Duty as Reported
by Basic Trainees and Experienced Enlisted Men

Leadership Variables	Leadership in Basic Training Basic Trainees (N=365)	Leadership on Navy Duty Experienced Enlisted Men (N=599)	<u>t</u>
<u>Climate Dimensions</u>			
Decision-Making: Hierarchical (1) vs. Democratic (5)	2.00 ¹ (1.20)	2.65 (1.13)	-8.39***
Authority Structure: Formal (1) vs. Informal (5)	1.35 (.84)	2.75 (1.09)	-22.44***
Performance Evalua- tion: Punitive (1) vs. Permissive (5)	2.14 (1.53)	3.37 (1.13)	-13.34***
Supervision: Close (1) vs. General (5)	2.37 (1.42)	3.45 (1.18)	-12.23***
Leadership: Incon- siderate (1) vs. Considerate (5)	2.45 (1.49)	3.08 (1.30)	-6.68***
<u>Leadership Power Modes</u>			
Legitimate ²	2.93 (1.50)	2.81 (1.46)	1.21
Expert	3.32 (1.40)	3.22 (1.27)	1.11
Reward	3.40 (1.44)	2.30 (1.35)	11.79***
Referent	2.78 (1.53)	2.70 (1.45)	.80
Coercive	3.72 (1.45)	2.90 (1.55)	8.28***

¹Mean value; standard deviation in parentheses

²For all powers: 1 = seldom; 5 = frequent use

*p < .05

**p < .01

***p < .001

Table 5

Mean Responses of the Three Groups to Attitude Items
Showing Concern for Good Interpersonal Relations

Attitude Items	Position in Navy			F Comparison
	New Recruits (1)	Basic Trainees (2)	Experi- enced Enlisted Men (3)	
1. If I don't like a supervisor, I can't work for him.	2.50	2.25	3.00***	
2. People who don't like each other can't do a good job together.	3.43	4.51	3.50***	
3. If a supervisor gives me an order just to show his authority, I lose all respect for him.	3.15	3.87	3.92***	
4. In making decisions, officers have to consider the feelings of their men.	<u>3.80</u>	<u>3.93</u>	<u>4.00**</u>	
	Dimension Mean	3.23	3.64	3.60***
				35.82 1<2=3

*p < .05

**p < .01

***p < .001

REFERENCES

- Anikeeff, A. M. The effect of job satisfaction upon attitudes of business administrators and employees. Journal of Social Psychology, 1957, 45, 277-281.
- Booth, R. F., & Hoiberg, A. Change in Marine recruits' attitudes related to recruit characteristics and drill instructors' attitudes. Psychological Reports, 1973, 33, 63-71.
- Brim, O. G. Socialization through the life cycle. In O. G. Brim and S. Wheelers (Eds.) Socialization after childhood. New York: John Wiley & Sons, 1966.
- Byrne, D. Interpersonal attraction and attitude similarity. Journal of Abnormal and Social Psychology, 1961, 62, 713-715.
- Campbell, J. P., Dunnette, M. D., Lawler, E. E., & Weick, K. E. Managerial behavior, performance, and effectiveness. New York: McGraw-Hill, 1970.
- Davis, K. Human relations at work. New York: McGraw-Hill, 1962.
- Drucker, E. H. A longitudinal study of attitude change and alienation during basic combat training (HumRRO Technical Report 74-15). Alexandria, Va.: Human Resources Research Organization, June 1974.
- Foa, U. G. A test of the foreman-worker relationship. Personnel Psychology, 1956, 9, 469-486.
- Foa, U. G. Relation of worker's expectation to satisfaction with supervisor. Personnel Psychology, 1957, 10, 161-168.
- French, J. R. P., & Raven, B. The bases of social power. In D. Cartwright (Ed.), Studies in social power. Ann Arbor: University of Michigan, Institute for Social Research, 1959.
- Goslin, D. A. Introduction. In D. A. Goslin (Ed.), Handbook of socialization theory and research. Chicago: Rand McNally, 1969.
- Hemphill, J. K., Seigel, A., & Westie, C. W. An exploratory study of relations between perceptions of leader behavior, group characteristics, and expectations concerning the behavior of ideal leaders. Columbus: Ohio State University, Personnel Research Board, Unpublished report, 1951.

- Homans, G. C. The human group. New York: Harcourt, Brace, 1950.
- Katz, D., & Kahn, R. L. The social psychology of organizations. New York: Wiley, 1966.
- Korman, A. K. "Consideration," "initiating structure," and organizational criteria. Personnel Psychology, 1966, 19, 349-361.
- Lawler, E. E., III. Pay and organizational effectiveness: A psychological view. New York: McGraw-Hill, Inc., 1971.
- Lawrie, J. W. Convergent job expectations and ratings of industrial foremen. Journal of Applied Psychology, 1966, 50, 97-101.
- Levinson, H., Charlton, R. P., Munden, K. J., Mandl, H. J., & Solley, C. M. Men, management, and mental health. Cambridge: Harvard University Press, 1962.
- Maynard, W. S., Jr., Thornton, G. C., III, & Nealey, S. M. Navy basic training as seen by new recruits, basic trainees, and experienced enlisted men (TR 4). Seattle, Washington: Battelle, Human Affairs Research Centers, October 1974.
- Miles, R. E. Attitudes toward management theory as a factor in managers' relationship with their superiors. Academy of Management Journal, 1964, 7, 308-314.
- Moore, W. E. Occupational socialization. In D. A. Goslin (Ed.), Handbook of socialization theory and research. Chicago: Rand McNally, 1969.
- Nealey, S. M., & Fiedler, F. E. Leadership functions of middle managers. Psychological Bulletin, 1968, 70, 313-329.
- Nix, S., Thornton, G. C., III, & Nealey, S. M. Navy leadership: Are recruit expectations accurate? (TR 3). Seattle, Washington, Battelle, Human Affairs Research Centers, October 1974.
- Patton, W. M. Studies in industrial empathy: III. A study of supervisory empathy in the textile industry. Journal of Applied Psychology, 1954, 38, 285-288.
- Porter, L. W., & Lawler, E. E. Managerial attitudes and performance. Homewood, Ill.: Irwin-Dorsey, 1968.

- Porter, L. W., & Steers, R. M. Organizational, work, and personal factors in employee turnover and absenteeism. Psychological Bulletin, 1973, 80, 151-176.
- Sarbin, T. R., & Jones, D. S. The assessment of role-expectations in the selection of supervisory personnel. Educational Psychological Measurement, 1955, 15, 236-239.
- Schneider, J., & Katz, A. Personnel reactions to incentives Naval conditions and experiences: A longitudinal research study (Rep. No. 3: Measurement of attitude change during recruit training). Washington, D.C.: Washington Navy Yard, Naval Personnel Research and Development Laboratory, January 1973.
- Secord, P. F., & Backman, C. W. Interpersonal congruency, perceived similarity, and friendship. Sociometry, 1964, 27, 115-127.
- Stogdill, R. M. Handbook of leadership: A survey of theory and research. New York: The Free Press, a division of Macmillan Publishing Co., Inc., 1974.
- Student, K. R. Supervisory influence and work-group performance. Journal of Applied Psychology, 1968, 52, 188-194.
- Tannenbaum, R., Weschler, I. R., & Massarik, F. Leadership and organization. New York: McGraw-Hill, 1961.
- Thornton, G. C., III, Hamilton, J., & Nealey, S. M. Differences in attitudes toward leadership between "draft-induced" and "true" volunteers (TR 1). Seattle, Washington: Battelle, Human Affairs Research Centers, December 1973.
- Thornton, G. C., III, & Nealey, S. M. Comparisons of military and civilian leadership among Navy recruits (TR 2). Seattle, Washington: Battelle, Human Affairs Research Centers, October 1974.
- Van Maanen, J. "Breaking in": A consideration of organizational socialization. Technical Report No. 10, Office of Naval Research, Contract N00014-69-A-0200-9001 NR151-315, University of California, Irvine, California, August 1972.
- Vroom, V. H. Work and motivation. New York: Wiley, 1964.

Whisler, T. L. The "assistant-to" in four administrative settings. Administrative Science Quarterly, 1960, 5, 181-216.

Winer, B. J. Statistical principles in experimental design (Second Edition). New York: McGraw-Hill, 1971.

Zigler, E., & Child, I. L. Socialization. In G. Lindzey and E. Aronson (Eds.), The handbook of social psychology (Second Edition). Reading, Massachusetts: Addison-Wesley, 1969.

OFFICE OF NAVAL RESEARCH
PERSONNEL AND TRAINING RESEARCH PROGRAMS (Code 452)
DISTRIBUTION LIST

3	Office of Naval Research (Code 452) 800 N. Quincy Street Arlington, VA 22217	Dr. Clayton P. Alderfer Department of Administrative Sciences Yale University New Haven, CT 06520
6	Director U. S. Naval Research Laboratory Washington, DC 20390 ATTN. Technical Information Div.	Dr. James A. Bayton Department of Psychology Howard University Washington, DC 20001
12	Defense Documentation Center Building 5 Cameron Station Alexandria, VA 22314	Dr. H. Russell Bernard Dept. of Sociology and Anthropology West Virginia University Morgantown, WV 26506
6	Library, Code 2029 U. S. Naval Research Laboratory Washington, DC 20390 Science and Technology Division Library of Congress Washington, DC 20540 Psychologist ONR Branch Office 495 Summer Street Boston, MA 02210 Psychologist ONR Branch Office 1030 E. Green Street Pasadena, CA 91106 Research Psychologist ONR Branch Office 536 S. Clark Street Chicago, IL 60605 Director Human Resources Research Office ARPA, Room 625 1400 Wilson Blvd. Arlington, VA 22209 Dr. Alvin J. Abrams Navy Personnel R&D Center San Diego, CA 92152	Dr. Milton R. Blood Department of Psychology University of California Berkeley, CA 94720 Dr. David G. Bowers Institute for Social Research University of Michigan Ann Arbor, MI 48106 Dr. Fred E. Fiedler Department of Psychology University of Washington Seattle, WA 98195 Dr. Samuel L. Gaertner Department of Psychology University of Delaware 220 Wolf Hall Newark, DE 19711 Dr. Gloria L. Grace System Development Corporation 2500 Colorado Avenue Santa Monica, CA 90406 Dr. Eric Gunderson Code 8030 Navy Medical Neuropsychiatric Research Unit San Diego, CA 92152

Dr. J. Richard Hackman
 Department of Administrative
 Sciences
 Yale University
 New Haven, CT 06520

Dr. Thomas W. Harrell
 Graduate School of Business
 Stanford University
 Stanford, CA 94305

Dr. Norman J. Johnson
 School of Urban & Public Affairs
 Carnegie-Mellon University
 Pittsburgh, PA 15213

Dr. Terence R. Mitchell
 School of Business
 Administration
 University of Washington
 Seattle, WA 98195

Dr. Edgar H. Schein
 Sloan School of Management
 Massachusetts Institute
 of Technology
 Cambridge, MA 02139

Dr. Siegfried Streufert
 Department of Psychology
 Purdue University
 Lafayette, IN 47907

Dr. Saul B. Sells
 Texas Christian University
 Fort Worth, TX 76129

Dr. Victor H. Vroom
 School of Organization &
 Management
 Yale University
 56 Hillhouse Avenue
 New Haven, CT 06520

Dr. Clark L. Wilson
 Graduate School of Business
 Administration
 University of Bridgeport
 Bridgeport, CT 06602

Dr. Philip G. Zimbardo
 Department of Psychology
 Stanford University
 Stanford, CA 94305

Dr. Richard E. Sykes
 Minnesota Systems Research, Inc.
 2412 University Avenue, S. E.
 Minneapolis, MN 55414

Dr. Karlene H. Roberts
 School of Business Administration
 University of California
 Berkeley, CA 94720

Military Assistant for Human
 Resources
 OAD(E&LS) ODDR&E
 Pentagon 3D129
 Washington, DC 20301

AFOSR (NL)
 1400 Wilson Blvd.
 Arlington, VA 22209

Air University Library/LSE-8110
 Maxwell AFB, AL 36112

Lt. Col. R. B. Tebbs
 DFSL
 USAF Academy, CO 80840

Office of the Deputy Chief of
 Staff for Personnel, Research
 Office
 ATTN: DAPE-PBR
 Washington, DC 20310

Chief, Plans & Operations Office
 USA Research Institute for the
 Behavioral & Social Sciences
 Room 278
 1300 Wilson Blvd.
 Arlington, VA 22209

2 Army Research Institute
 Commonwealth Bldg.
 1300 Wilson Blvd.
 Rosslyn, VA 22209

Chief, Psychological Research
 Branch
 U. S. Coast Guard (G-P-1/62)
 400 7th Street, S. W.
 Washington, DC 20590

Dr. A. L. Slafkosky
 Scientific Advisor
 Commandant of the Marine
 Corps (Code RD-1)
 Washington, DC 20380

Commandant of the Marine Corps
 (Code MPI-20)
 Washington, DC 20380

Chief of Naval Personnel
 Assistant for Research Liaison
 (Pers-Or)
 Washington, DC 20370

Bureau of Naval Personnel
 (Pers-6)
 Assistant Chief of Naval
 Personnel for Human Goals
 Washington, DC 20370

Cdr. Paul D. Nelson, MSC, USN
 Head, Human Performance Div.
 (Code 44)
 Navy Medical R&D Command
 Bethesda, MD 20014

Naval Postgraduate School
 Monterey, CA 93940
 ATTN: Library (Code 2124)

Professor John Senger
 Operations Research &
 Administration Sciences
 Naval Postgraduate School
 Monterey, CA 93940

Training Officer
 Human Resource Management Center
 NTC, San Diego, CA 92133

Scientific Director
 Naval Health Research Center
 San Diego, CA 92152

5 Navy Personnel R&D Center
 (Code 10)
 San Diego, CA 92152

Officer in Charge (Code L5)
 Naval Aerospace Medical
 Research Lab.
 Naval Aerospace Medical Center
 Pensacola, FL 32512

Capt. Bruce G. Stone, U. S. N.
 (Code N-33)
 Director, Education & Training
 Research and Program Development
 Chief of Naval Education and
 Training Staff
 Naval Air Station
 Pensacola, FL 32508

HumRRO (ATTN: Library)
 300 N. Washington Street
 Alexandria, VA 22314

Director of Research
 HumRRO Division #4 (Infantry)
 P. O. Box 2086
 Fort Benning, GA 31905

Journal Supplement Abstract Service
 APA
 1200 17th Street, N. W.
 Washington, DC 20036

Division Director for Social Science
 National Science Foundation
 1800 G St., N. W.
 Washington, DC 20550

Office of the Air Attache
 Embassy of Australia
 1601 Massachusetts Avenue, N. W.
 Washington, DC 20036

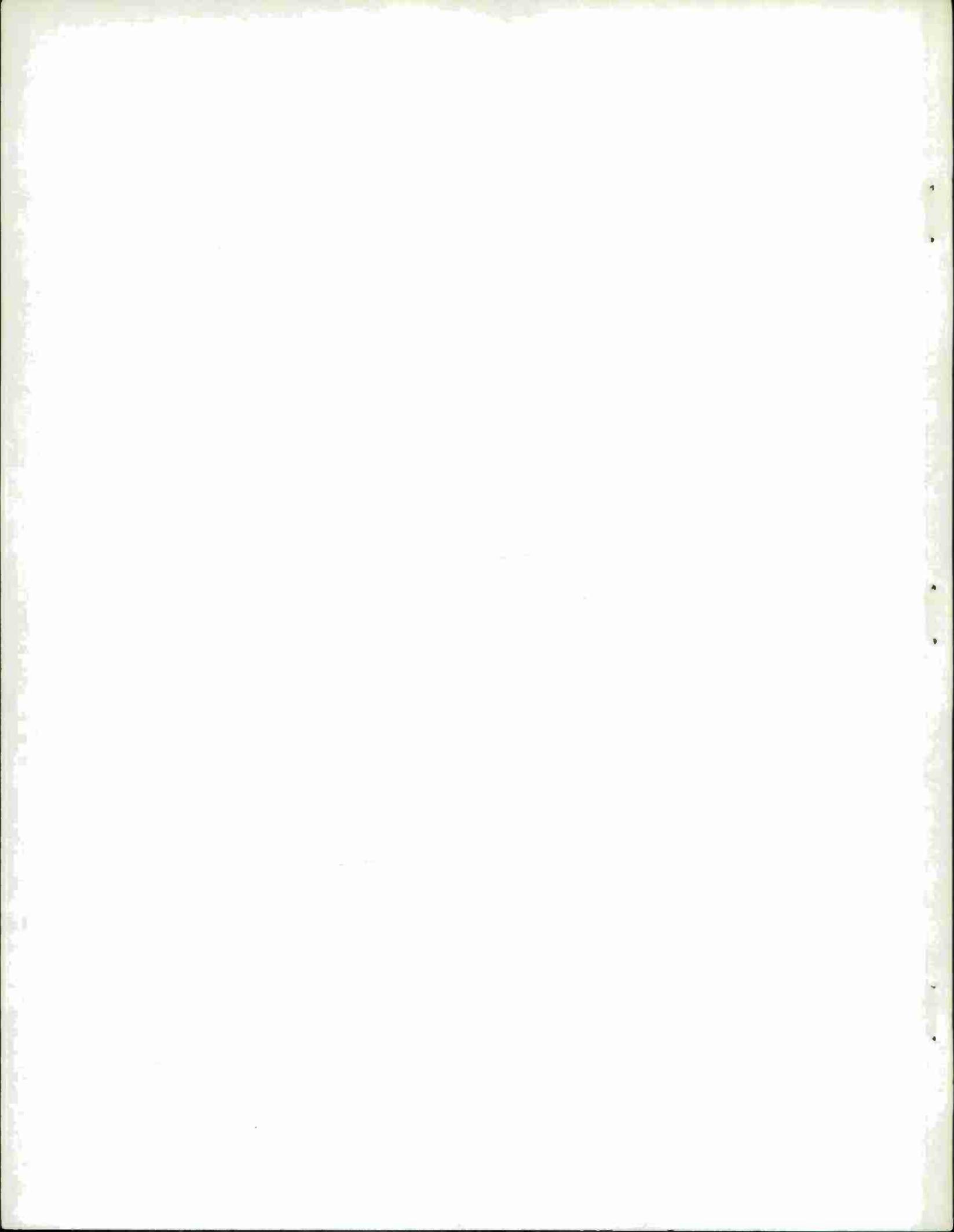
Scientific Information Officer
 British Embassy
 3100 Massachusetts Avenue, N. W.
 Washington, DC 20008

Canadian Defence Liaison
 Staff, Washington
 2450 Massachusetts Avenue, N. W.
 Washington, DC 20008
 ATTN: Chief, Defence Research

Dr. Lennart Levi, Director
 Lab. for Clinical Stress Research
 Fack
 S-104 01 Stockholm, SWEDEN

Mr. Luigi Petrullo
 2431 N. Edgewood Street
 Arlington, VA 22207

Dr. John J. Collins
 9521 Cable Dr.
 Kensington, MD 20795



1875

1876

U165713