Reenlistment Incentives:

More is Not Better in the Fleet Either

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Incentives such as reenlistment bonuses have a long history of use as a means of retaining people in the military services. The basic assumption behind them is "more is better." In a Navy fleet survey of men in critical ratings, single incentives and double incentive packages were compared for potential influence on reenlistment in the all-volunteer force setting. There was no support for "more is better." The most attractive items revealed a

20. strong interest first in "fate control" in one's work, improved retirement benefits, and educational leave. Manpower retention strategies will have to take all three needs into account.

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Navy Career Motivation Programs in an All-Volunteer Condition

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INTRODUCTION

There are two basic intervention strategies that may be used to induce changes in individual behavior within organizational settings. The first of these strategies incorporates what might be termed an "incentive" or (Type I) approach, where behaviors may be altered by introducing changes in the value of incentives administered contingent upon the occurrence of specific, desired behaviors. Underlying this incentive approach is the well-founded notion that through the administration of appropriate reinforcements contingent upon the emission of desired behaviors, such behaviors may be shaped and maintained (cf. Bandura & Walters, 1964). One prescription for the use of an incentive intervention (or Type I) strategy in military settings may be ascribed to the President's Commission on an All-Volunteer Armed Force (Gates, 1970) where pay raises were endorsed as a means of increasing the number of enlistments and reenlistments.

A second intervention strategy that can be used to bring about behavioral changes in organizational settings may be labeled the "organization system-change" (or Type II) approach in which the organizational structure or tasks are altered, thereby bringing about changes in individual behavior.

Within the context of Navy career motivation, these intervention strategies may be employed for enhancing the likelihood that an individual will enlist in the Navy as well as for increasing the possibility that the individual reenlist in the Navy. Consistent with such possible uses of organizational intervention strategies, the current program of research on Navy career motivation has focused on the use of incentive (or Type I) approaches as means of influencing career motivation. Previous reports in this series have described attempts to evaluate the impact that various incentives might have upon an individual's initial decision to enlist in the Navy (Glickman, Korman, Goodstadt, Frey & Romanczuk, 1973); (Korman, Goodstadt, Glickman & Romanczuk, 1973); (Frey, Glickman, Korman, Goodstadt & Romanczuk, 1974). The present report concerns the potential impact

that organizationally administered incentives might have upon the reenlistment decisions of enlisted men currently in the Navy.

An important assumption underlying the incentive intervention approach is that "more is better" such that when greater societal value is attached to particular incentives, such incentives are assumed to be more effective in terms of behavioral impact. A straightforward illustration of this assumption may be found in the manpower projections developed by the Gates Commission (p.56). In the Commission Report, it was estimated that a 10% increase in basic military pay would result in a 12.5% increase in the enlistment rate while a 40% pay raise would bring about a 49% increase in the number of voluntary enlistees.

Our previous research on young civilian men that tests the "more is better" assumption has found that in terms of enlistment incentives, support for such an assumption must be highly qualified. Indeed, in many instances more of an incentive is no better and sometimes it is worse (Glickman, et al., 1973; Frey, et al., 1974) for inducing an increase in enlistment potential of youth.

As part of the present report, we seek to examine the "more is better" assumption in the course of two experiments in which hypothetical single incentives and double incentive packages were presented to personnel in their first term of service in the Navy, who evaluated various incentives in terms of the impact that such changes would have upon their intention to reenlist. An added feature of these studies is that, in the second experiment, the means through which incentives were administered was varied. For some Navy enlisted personnel, the incentives were presented via a mail questionnaire sent directly to the enlisted man from the American Institutes for Research, while for other Navy enlisted personnel, the incentives were presented to the enlisted man by his Navy career counselor. The aim of evaluating the effects of presentation via different media was to examine the generalizability of findings as well as to determine whether one of the procedures is better suited for future evaluations of reenlistment incentives.

METHOD

Two successive experiments were conducted involving similar procedures for sampling and analysis of reactions of enlisted Navy fleet personnel in various critical ratings to sets of incentives that might be used by the Navy to maximize reenlistments. Each of these will be described in turn and results and implications compared and cummulated.

Experiment I

Incentive development. A variety of procedures were employed in order to be sure to consider a wide range of possibilities with potential applicability to contemporary enlisted Navy personnel. A very important factor in formulating these incentives were our discussions with Navy officials in the Bureau of Naval Personnel (Pers A12 and Pers B) concerning the types of incentives considered to be viable within the Navy setting, considering the new extraordinary demands being made by the All-Volunteer Force (AVF). Also important in this development was the work of many previous researchers in the field of Naval enlistment incentives (cf. Gilbert Survey, 1972) and the youth attitude surveys sponsored by ONR, conducted by the University of Michigan (Johnston & Bachman, 1972). A third influence was our continuing surveillance of contemporary behavioral science research on the changing values and mores of our society. Finally, a major factor in our thinking was the findings of our other recent studies in Naval career motivation. Thus, in both our interview research (Glickman, et al., 1973) and in our questionnaire survey of junior-college students (Korman, et al., 1973) we found continually that respondents ascribe high value to "fate-control" in one's vocational life, as well as to traditional tangible incentives such as money, the opportunity for advancement, and health and welfare benefits. Particularly notable in the latter study was the finding in a factor analysis of a preliminary set of experimental enlistment incentives that approximately 48% of the common variance was accounted for by a factor denoting desire for "fate-control" in one's vocational life. In addition,

consistent with our previous discussion, this last study also suggested the possibility that different incentives might hold different values for men from different socio-economic backgrounds. Hence, our analysis of experimental incentives needed to take these findings into consideration.

Administrative procedures. As a result of these influences a total of 12 experimental incentives were developed. In Appendix A can be found the questionnaires which include the instructions to respondents, the complete set of incentives, and the response alternatives. The procedure used for evaluating these incentives was a function of our interest in determining the effects of these incentives both singly and in combination with one another. Besides presentation of the single incentives, all possible (66) double packages were used. Four different questionnaires were developed. Each member of the available sample was randomly assigned one of the questionnaires. Questionnaire A simply presented the 12 single incentives. Questionnaires B, C, and D each presented different subsets of the double packages such that, taken together, all 66 double packages were evaluated. The specific incentives and double packages in each questionnaire are shown in Figure 1.

In response to each set of 1 or 2 incentive statements, the subject was requested to indicate: "... what effect you think each of these might have on your interest in reenlisting at the end of your first tour." Four alternatives were offered, ranging from, "I would be less likely to reenlist if this change were introduced;" to "I would be very likely to reenlist if this change were introduced."

The appropriate questionnaire (A, B, C, or D) was sent to the individual through the U.S. Postal Service. A cover letter briefly explained the study -- i.e., "The question that concerns us is to find out what changes the Navy might make in order to interest qualified individuals in reenlisting." The complete cover letter is included with the questionnaires in Appendix A.

Items or Item Packages Included in Questionnaire	QUESTIONNAIRES			
	A	B	C	D
	1	11+12	1+3	12+9
	2	1+2	10+12	7+10
	3	9+10	6+8	5+8
	4	3+4	4+9	6+9
	5	7+8	2+10	4+7
	6	5+6	12+1	1+4
	7	12+8	11+3	8+11
	8	5+1	7+2	6+12
	9	10+11	4+6	2+5
	10	2+3	3+5	10+1
	11	8+9	9+11	11+2
	12	4+5	10+8	3+9
		6+7	2+4	4+10
		1+8	5+7	2+8
		5+12	1+6	12+3
		2+6	8+3	11+5
		7+11	10+5	1+7
		4+8	6+11	3+6
		6+10	12+7	
		3+7	9+1	
		5+9	4+12	
		4+11	7+9	
		3+10		
		9+2		
		11+1		
		2+12		

Figure 1. Experiments I and II -- Item Numbers of Single Incentives and Incentive Packages in Each Questionnaire

In this way, some subjects received simple (single) incentives and others received complex (double) incentives. This permitted us to ascertain the value ascribed to each of the incentives when presented singly and when additional potential value would be involved by increasing the number of incentives in a "package" with response "demand" controlled by presenting only one type of set (single or double) to any respondent.

Experiment I Sample. A random sample of 1500 enlisted, first term Navy men in three critical ratings was obtained from the Navy Personnel Master Tape--Hull Technicians (HT), Boiler Technicians (BT), and Communication Technicians (IC). 500 from each rating were selected. After one round of callback letters, 607 usable questionnaires were returned. This represents a return rate of 40%. The mailing and returns extended through the summer of 1973.

Experiment II

Incentive Development. The six most attractive incentives from Experiment I were retained. After consultation with Navy officials, consideration of previous research (mentioned earlier), and consideration of the implications of Experiment I, six new incentives were also developed.

Administrative procedure. A total of 12 experimental incentives (6 old, 6 new) were used. In Appendix C can be found the questionnaires which include the instructions to respondents, the complete set of incentives, and the response alternatives. As before, the single incentives and all possible (66) double packages were used. Four different questionnaires were developed. Each member of the available sample was randomly assigned one of the questionnaires. The format of the questionnaires was exactly the same as in Experiment I, as well as the distribution of single incentives and packages as shown in Figure 1.

The item presentation format and the four response alternatives were exactly the same as before.

In this way, some subjects received simple (single) incentives and others received complex (double) incentives. This permitted us to ascertain the value ascribed to each of the incentives when presented singly and when additional potential value would be involved by increasing the number of incentives in a "package" with response "demand" controlled by presenting only one type of set (single or double) to any respondent.

Experiment II Sample. There were actually two samples. The first sample was randomly selected from the enlisted Personnel Master Tape. 1200 men's names were obtained, 600 first termers each from two critical ratings -- Boatswain's Mates (BM) and Aviation Technicians (AT). These people received their questionnaires directly through the U. S. Postal Service.

The second sample was obtained by mailing 8 questionnaires (2 of each type) to each of 110 Navy Career Counselors. The Career Counselors were requested to administer the questionnaires individually to certain of those who normally come to them for counseling. The questionnaire was to be given only to Group A and Group B critically rated personnel (reference BUPERSINST 1133.25A - Change 1).

421 usable questionnaires were returned from Sample 1. This is a return rate of 35%. 326 usable questionnaires from Sample 2 were returned. This is a return rate of 37%. The mailing and returns extended from January through March 1974.

EXPERIMENT I RESULTS

Effects of Increasing the Number of Incentives. It was decided that to compare every single incentive with every package in which it was contained would not be cost beneficial. This would have resulted in 132 (i.e., 12 incentives X 11 packages) significance tests. The chances of spurious significance in many of the tests would virtually approach certainty.

Instead, the following procedure was used. Take Item I as an example. An overall average of all 11 packages containing Item I was obtained. This new score (package average) was then compared with the rating of Item I to see, if on the average, double packages containing Item I were more attractive than the single incentive. The same procedure was followed for the remainder of the 12 incentives.

In order to undertake all the analyses of interest as one integrated package, an analysis of variance design was first set up. The four design variables were Item Type (single incentive, package average), Rating (HT, BT, IC), Educational Level (non-high school graduate, high school graduate, attended college or technical school), and Time in Service (1 through 18 months, 18 through 30 months, 30 through 42 months, 42 through 48 months). The dependent variable was the rated attractiveness of the item.

The response alternatives a, b, c, d were converted to scores of 1, 2, 3, 4 respectively. The higher the score the more attractive the item is for inducing reenlistment.

The first analysis compared each of the 12 single incentives with its package average. In five cases, the single incentive was significantly more attractive than its package average. In three cases, the package average was significantly more attractive than the single incentive. The remaining four cases showed no significant difference between the single incentive and its package average. All these tests were made after first removing the confounding effects of the other three independent variables, using Overall and Spiegel's (1969) method 2, least squares analysis of variance.

The above set of analyses is actually biased in favor of the "more is better" assumption. Each of the incentives, including the least attractive ones, is compared with its package average. In the three cases where the package average was more attractive, the respective single incentive was among the 5 least attractive single incentives. Considering this, plus the fact that in five cases the single incentive was more attractive than its package average, the "more is better" assumption received no support whatsoever. Table I shows the marginal means for each single incentive and its package average. (These marginal means also are adjusted for confounding).

Differences in Attractiveness of Incentives as a Function of Socio-demographic Status. Separate tests were made for effects due to each of the other three independent variables, using the least-squares technique mentioned above. There were no significant differences in the attractiveness of the items due to any of the other three independent variables (Rating, Educational Level, Time in Service).

Table 2 ranks orders the single incentives by their overall attractiveness mean--highest to lowest. It is noteworthy that the most attractive incentive would allow the Navy man maximal fate control in his vocational life. He could leave at any time with only three months notice required. Some of the other most attractive items provided, again, fate control (#6), educational benefits (#9, #10), and improved retirement benefits (#5, #11). The first two domains were also found to be among the most important in an enlistment incentive survey of civilian youth (Frey, et al., 1974).

Because of the nature of the response alternatives, another type of analysis was done. Response alternative "d" ("I would be very likely to reenlist if this change were introduced") has meaningful administrative implications. The percentage of respondents who respond with the strong statement "d" for a given incentive is an immediate estimate of behavioral intention to reenlist in the Navy if such a policy were to be adopted.

TABLE 1

Experiment I -- Marginal Means of Single Incentives and Their Package Averages

Experimental Incentives for Reenlistment	Single Incentive Mean	Package Average Mean
Pay for sea duty substantially higher than for shore duty	2.63	2.79*
Spend part of work week with special groups to develop better conditions in Navy	2.48	2.52
One month advance notice of dates, etc. for cruises of more than one week	2.47	2.64*
Be able to convert from one critical rating to another	2.32	2.47*
20-year retirement with 3/4 pay	2.92	2.74*
Guaranteed assignments for half of second tour	2.86	2.78
Work with groups to develop more effective task performance	2.57	2.58
Bonus up to 30 days extra leave for good performance	2.88	2.82
Civilian training courses credited toward promotion	2.87	2.70*
One term of educational leave with pay plus tuition for every two years of service	3.01	2.78*
15-year retirement with 1/2 pay	2.92	2.76*
Leave the Navy at any time with three months notice	3.28	2.96*

* Significant difference between the single incentive and its package average ($p < .05$).

TABLE 2*

Experiment I -- Overall Means of Each Incentive

Experimental Incentives for Reenlistment	Mean Rating
Leave the Navy at any time with three months notice	3.28
One term of educational leave with pay plus tuition for every two years of service	3.01
15-year retirement with 1/2 pay	2.92
20-year retirement with 3/4 pay	2.92
Bonus up to 30 days extra leave for good performance	2.88
Civilian training courses credited toward promotion	2.87
Guaranteed assignments for half of second tour	2.86
Pay for sea duty substantially higher than for shore duty	2.63
Work with groups to develop more effective task performance	2.57
Spend part of work week with special groups to develop better conditions in Navy	2.48
One month advance notice of dates, etc. for cruises of more than one week	2.47
Be able to convert from one critical rating to another	2.32

* The unadjusted means and standard deviations for the entire sampling design (Figure 1) are shown in Appendix B.

Table 3 shows the percentage who answered "d" for each single incentive and one of the double packages. The latter was included because the percentage was almost 40%.

The two single incentives with the highest percentage were item 12 (leave the Navy at any time with three month's notice) - 54%, and item 10 (one term of educational leave for every two years of service - 35%. These provided for fate control and educational benefits. Item 12, of course, reveals that more than half of the Navy men surveyed would seriously consider reenlisting under a policy where they do not feel frozen in place for a long period of time.

TABLE 3

Experiment I -- Percentage of Respondents Who Would be Very Likely to Reenlist If Policy were Adopted

Item	Percent	Item	Percent
1	9%	8	26%
2	9%	9	26%
3	9%	10	35%
4	6%	11	29%
5	29%	12	54%
6	24%	12 + 8	39%
7	12%		

EXPERIMENT II RESULTS

As mentioned previously, the six best single incentives from Experiment I were used again. This was done to test whether their high level of attractiveness would hold up in replication. If so, they could be strongly recommended for possible implementation.

Effects of Increasing the Number of Incentives. In order to undertake all the analyses of interest as one integrated package, an analysis of variance design was used. The independent variables were the same as before with one addition. Two methods of administration were used this time. 1200 questionnaires were mailed directly to individuals as was done in Experiment I. 880 questionnaires were also sent to Navy career counselors who, in turn, administered them to critically rated personnel who came to them for career counseling. This was done to see whether the attractiveness of the items would be affected by the different methods of administration.

Thus, there were five independent variables (Method of Administration, Item Type, Rating, Educational Level, and Time in Service). The dependent variables were the rated attractiveness of the items.

Each of the 12 single incentives was compared with its package average. The confounding effects of the other independent variables were first removed through least-squares techniques (Overall and Spiegel, 1969). In six cases, the single incentive was more attractive than its package average. In only two cases was the single incentive less attractive than its package average. As was the case previously, such an analysis is biased in favor of the "more is better" assumption, since the lowest rated single incentives are included in the comparisons. Also, the two single

incentives that were less attractive than their package average were the two least attractive of the 12 incentives. Therefore, we can reasonably conclude that the "more is better" assumption once again received no support. Such a successful replication enhances the validity of our conclusion. Both iterations also showed that single incentives were preferred over their package average more often than the reverse case. This suggests that "more" could sometimes be "worse." Table 4 shows the marginal means for each of the 12 single incentives and their package averages.

Effects of Different Methods of Administration. Using least-squares techniques, the attractiveness scores of the men who received their questionnaires directly through the mail were compared with the attractiveness scores of those who received the questionnaires from their career counselors. There were no significant differences on any of the items. This extends the generalizability of our results in that they were not specific to one method of administration.

Differences in Attractiveness of Incentives as a Function of Socio-demographic Status. Tests for effects due to each of the other three independent variables were made, using least-squares techniques. There were no significant effects. As was the case in Experiment I, differences in educational level, rating, and time in service had no effect on the attractiveness of the items. The items had the same appeal for the whole sample.

Table 5 rank orders the single incentives by their overall attractiveness mean--highest to lowest. The highest ranked items were virtually the same as in Experiment I. The most attractive incentive was once again the option of getting out at any time after three month's notice--i.e., maximization of fate control in one's vocational life. Improved retirement benefits and educational benefits were also among the most attractive items again. Thus, the relative attractiveness of the same dimensions was successfully replicated. This result, of course, gives strong evidence for the validity of the initial findings. One new item was among the most attractive--bonus up to 25% of base pay for exceptional performance. The exact same item was very attractive to civilian male youth as a possible

TABLE 4

Experiment II -- Marginal Means of Single Incentives and Their Package Averages

Experimental Incentives for Reenlistment	Single Incentive Mean	Package Average Mean
One free 10 minute long distance call every 2 weeks when away from home part	2.38	2.66*
Free vocational guidance from a civilian professional counselor near end of first tour	2.47	2.73*
Guaranteed assignments for half of second tour	3.00	2.91
Leave the Navy at any time with three months notice	3.37	3.16*
Higher pay for "dirty" jobs	2.76	2.76
30-days extra paid leave per year for volunteer service in community	2.85	2.85
15-year retirement at 1/2 pay	3.05	2.95
One term of educational leave with pay plus tuition for very two years of service	3.23	2.93*
Civilian training courses credited toward promotion	3.04	2.83*
Bonus up to 25% of base pay for exceptional performance	3.23	2.94*
Change to any other shortage rating with same grade and pay	2.94	2.73*
20-year retirement with 3/4 pay	3.16	2.83*

* Significant difference between the single incentive and its package average ($p < .05$).

TABLE 5*

Experiment II -- Overall Means of Each Incentive

Experimental Incentives for Reenlistment	Mean Rating
Leave the Navy at any time with three months notice	3.37
One term of educational leave with pay plus tuition for every two years of service	3.23
Bonus up to 25% of base pay for exceptional performance	3.23
20-year retirement with 3/4 pay	3.16
15-year retirement with 1/2 pay	3.05
Civilian training courses credited toward promotion	3.04
Guaranteed assignments for half of second tour	3.00
Change to any other shortage rating with same grade and pay	2.94
30-days extra paid leave per year for volunteer service in community	2.85
Higher pay for "dirty" jobs	2.76
Free vocational guidance from a civilian professional counselor near end of first tour	2.47
One free 10 minute long distance call every 2 weeks when away from home port	2.38

* The unadjusted means and standard deviations for the entire sampling design (Figure 1) are shown in Appendix D.

enlistment incentive (Frey, et al., 1974). Apparently, the prospect of a performance bonus is useful for both attracing men into the service and retaining them in the service.

Table 6 shows the percentage who answered "d" ("I would be very likely to reenlist of this change were introduced") for each single incentive and three of the double packages. The latter were included because the percentage was 45% or above.

The three items with the highest percentage of "d" responses were Item 4 (leave the Navy at any time with three month's notice) - 51%, Item 12 (20 year retirement at 3/4 pay) - 41%, and Item 8 (one term of educational leave for every two years of service) - 39%. These are the same three dimensions which had the highest attractiveness means.

Differences on the Six Replicated Single Incentives from Experiment I to Experiment II. Tests were made to see whether the attractiveness of the six replicated single incentives changed over time. In three cases, a single incentive was significantly more attractive the second time. The other three cases showed no significant difference. However, the largest mean difference was only 0.24 on a four-point scale. This does not seem to be very meaningful in practical terms. The importance of this result, however, is that all six incentives maintained their high level of attractiveness in a replication. This enhances the validity of our conclusion concerning these items. Table 7 shows the attractiveness means of the six single incentives for each experiment.

The results were very consistent for the two experiments. The "more is better" assumption appears not to be a fruitful approach for manpower retention programs.

TABLE 6

Experiment II -- Percentage of Respondents Who would be Very Likely to Reenlist if Policy were Adopted

Item	Percent	Item	Percent
1	7%	9	25%
2	7%	10	37%
3	25%	11	29%
4	51%	12	41%
5	29%	4 + 7	51%
6	22%	3 + 4	46%
7	37%	4 + 8	45%
8	39%		

TABLE 7

Marginal Means of Replicated Incentives for Experiment I and Experiment II

Item	Experiment I Mean	Experiment II Mean
Leave the Navy at any time with three months notice	3.28	3.37
One term of educational leave with pay plus tuition for every two years of service	3.01	3.23
15-year retirement with 1/2 pay	2.92	3.05
20-year retirement with 3/4 pay	2.92	3.16*
Civilian training courses credited toward promotion	2.87	3.04*
Guaranteed assignments for half of second tour	2.86	3.00*

* Item significantly more attractive in Experiment II ($p < .05$).

DISCUSSION AND IMPLICATIONS

More is Better?

As had already been demonstrated with civilian samples, both experiments with first term sailers conclusively demonstrated that "more is not better." Again, there was a strong suggestion that "more can be worse." More often than not, single incentives were more attractive than their package average. It also should be noted that even the lowest rated single incentive had a mean rating which reflected a mildly positive attitude towards reenlistment (a mean greater than 2.3). Thus, when the incentives were combined into packages, there was never included a negatively valued object which possibly could have countervened the additive effect of the double incentives.

Our interpretations here essentially recapitulate those made in our previous report on enlistment incentives (Frey et al., 1974). Perceptually, incentives are not a "bag of goodies" to which the Navy can keep adding until it becomes an irresistible inducement to reenlist. "Upping the ante" in such a fashion may often lead one to the conclusion that a Navy career is so unattractive that the Navy feels it must resort to heaping bribe upon bribe to trap him again.

What might be further reasons for the "more can be worse" findings?

Another possibility may be that the abundance of the incentive packages violates an equity norm, thus becoming counterproductive. This norm may be a general social equity norm (cf. Adams, 1965), a personal equity norm as to what is suitable for the self (Korman, 1970, 1971) or both. For example, equity theory research has shown that people tend to work harder when they believe they are being overpaid in order to maintain a state of equity. If the abundance of the incentive packages is seen as overpayment, the Navy man would feel obliged to put out increased effort if he were to reenlist. Such a prospect, of course, would not whet his appetite to do so.

A third possible explanation is that these added incentives may be

perceived as grossly manipulative. This would immediately lead to feelings of resentment, negative affect, and "reactance" against the manipulator because one's feelings of free choice are being violated (Brehm, 1966). Brehm's theory predicts that if a person does indeed feel that his freedom of choice is threatened, he will be even less likely to reenlist than he would without the prospect of the incentives (i.e., he psychologically reestablishes his freedom of choice).

Relative Appeal of Different Types of Incentives

Both sets of experiments revealed three domains which would be most attractive for inducing reenlistment--fate control in one's vocational life, improved retirement benefits, and improved educational benefits. This finding emphasizes the importance of both perceived "fate control" and "traditional incentives" as necessary factors to influence and improve Naval career motivation. Interest in equitable traditional incentives (e.g., improved retirement benefits) has not waned, but they are not enough by themselves. A large degree of self-determination is expected as well. The latter is even relatively more important.

This should not be surprising. Today's youth places a high value upon playing an active role in determining the shape of his present and future activities and lifestyle. The typical young man in the military keeps well abreast of events in civilian life and is in continual contact with his civilian peers. Thus, his view of the possible satisfactions offered by continuing his life in the military are strongly conditioned by the changes in the nature of work in civilian life. He is less inclined than his predecessors to passive acceptance of perceived arbitrary constraints upon his personal life and work environment as a condition of staying in the military.

While realizing, to be sure, that there is no absolute freedom in either civilian or military life, the first term Navy man obviously has serious misgivings about long term contracts. Even the three month's notice requirement is still much more restrictive than in most civilian jobs. However, the fact that 51 to 54% of the men say that they would be

very likely to reenlist if this policy existed indicates that they do not have a pervasive anti-Navy bias.

It should be emphasized that we do not have here an "either-or" condition. Lack of fate control cannot be redeemed by tangible incentives; nor can increased fate control completely supplant the traditional incentives.

Related Research

This report has pointed out a number of findings having both general theoretical interest and particular practical implications for the Navy, generated by our two samplings of the attractiveness of various experimental reenlistment incentives to enlisted Navy men in various critical ratings.

Work completed on other subtasks of our research program shed more light on the reliability and generalizability of the results, interpretations and implications reported here.

Similar incentives for enlistment were included in a survey given to civilian male youth, age 16-22. Single incentives, double and triple incentive packages were also compared on their influence upon enlistment intention. The absolute value of single incentives was also varied (e.g. $1000 vs $3000 bonus). The major conclusion was that more is also not better for enlistment incentives. To cite just one dramatic example, 27% of the civilian youth would seriously consider enlisting for the $1000 bonus, but only 8% would do so for the $3,000 bonus (Frey et al., 1974).

Operational Implications

For the Navy, there are two major operational implications in the results so far. First, there is demonstrated the potential utility of designing incentives that have a reasonable expectation of increasing current reenlistment rates. Better yet, these incentives were attractive to men in shortage ratings--the very people most crucial for the Navy to retain.

Second, is the indication that a viable strategy for the competitive appeal of the Navy vis-a-vis the lure of returning to civilian life cannot rely predominantly upon tangible incentives. Serious consideration must also be given to experimenting with organizational changes that provide a psychological climate that offers Navy men a larger measure of personal fate control in their vocational life. As shown, today's youth is still responsive to traditional incentives, but this is not enough. They need to be able to perceive that a continuing commitment to the Navy does not mean that you are "locked-in". They need to be able to see that many of the career options available, if they should return to civilian life, are also available when you remain a sailor, plus maybe a few that are not available to civilians. Most particularly, the Navy needs to show that it too allows a person to take into account the possibility that as he gains experience and maturity, as he learns more about himself and the world about him after he has been in the Navy for two or three years, he can correct the course he set out on as a "green kid"--with the anticipation of help rather than resistance from the Navy. Encouraging such "course corrections" greatly benefits the Navy because it may result in appeal for people who demonstrate increased productivity, enhanced career motivation, and a higher probability of reenlistment.

Suggestions for Administrative Experiments

The results of this study apply to an "as if" condition, because the respondents have been asked, "What if?" The incentives offered were not "real". For the most part you can not actually put them in a reenlistment contract now. The degree of validity of our interpretations and recommendations, of course, can be ultimately established only by administrative experiments in which such ideas for establishing incentives and making organizational change are put into effect operationally (usually on a pilot basis first) and their effectiveness measured in actual practice. No survey results can be valid on their own without such experiments.

We have kept in mind the Navy's aim of translating the research findings into administrative action from the beginning of our present career

motivation research program. And so we will devote the last section of this report to a few suggested "action packages". The number is purposely limited, and the order of presentation is not meant to constitute a recommended priority. In each instance it is assumed that the administrative experiment would have an evaluation component built into it.

Tangible Incentives. The most promising incentives, roughly speaking, reflect the same dimensions that are considered to be important in civilian jobs. The Navy is currently using reenlistment bonuses (i.e., tangible incentives) as part of its manpower retention strategy to compete with the attraction of civilian jobs.

In general, any Navy experimentation with such reenlistment bonuses should be based upon careful testing of alternatives. From the evidence of this study, at least, "more is better" is a poor operating principle for attempting to retain youth in an organization (i.e., the Navy) which has to compete for personnel on a voluntary basis. Reenlistment programs based on financial incentives that are too high could drive people away (besides costing the Navy inordinate amounts of money). The means for operationally testing the utility of financial incentives is obvious--implementation accompanied by comparison of "before" and "after" behavioral indices and/or by comparison of results with "experimental" and "control" groups. Only in this way can meaningful cause-effect analysis of changes in reenlistment rates be made.

Three Months Notice to Quit Option. The extremely high percentage (51-54%) of men who would be very likely to reenlist, given the option of leave the Navy at any time with three month's notice, speaks for itself. When a potential incentive sparks such interest, the Navy should seriously consider establishing it as policy. With the appropriate safeguards to protect its interests, there does not seem to be any way the Navy could lose. Every person retained in a critical rating is a substantial saving to the Navy. Prorating of reenlistment bonuses based on length of time served in the second enlistment might be employed to control the reenlistment bonus budget. Also, by continuing to exert good quality control as to who gets recommended for reenlistment, the money will be spent only on those the Navy really wants to keep.

In addition to the professed interest, such a policy should enhance manpower retention rates for a number of psychological reasons. It is much easier to make a smaller decision (three months) rather than a long-term one (four to six years). The young man (to whom six years is the rest of his youth) is not forced into an either-or choice of such psychological impact. Many people on the fence see no real choice other than getting out if it means six years. Besides, each extra month that the Navy man stays in the service makes the return to civilian life less attractive. The perceived adjustment to civilian life will be more difficult, and his investment in the Navy is increasing with no expected return unless he stays for the minimum retirement time.

As an added note, we might predict that the percentage of those who would take advantage of the option would be surprisingly low. This line of reasoning stems directly from our previous discussion of reactance theory. Under the option plan, the Navy man is not locked in. He now holds the perception that he is free to leave at any time. He does not need to reestablish his lost freedom by leaving at the first opportunity. We would recommend implementing this option on a pilot basis in order to properly evaluate and modify it as necessary.

Improved Retirement and Educational Benefits Both experiments also showed the high attractiveness of improved retirement and educational benefits. Recommendations in these areas, especially an improved retirement plan, are difficult to make because of the tremendous cost involved. One attractive item in this domain does not seem to commit the Navy to any extra expense. Definite guidelines could be set up to give credit towards promotion for accredited civilian training courses related to a man's occupational specialty. In this way, the Navy man knows that all extra effort on his part to improve his skills will directly and immediately improve his prospects of promotion. That is, the man can be given more assurance that the Navy is practicing equity: extra work brings extra rewards. One does not need to belabor the fact that people with such perceptions are much more likely to see the Navy as a possibility for a fulfilling career and, hence, seriously consider reenlisting.

Performance Bonuses As a final illustration of an action package idea, we see intriguing possibilities in the use of a performance bonus stemming from the very high attraction for Item 10 in Experiment II (Performance bonus up to 25% of base pay). In Experiment II, over 37% of the Navy men surveyed said that they would seriously consider reenlisting if that incentive existed, making it one of the top appeals on that basis. Explicit recognition of individual performance of exceptional qualities is generally considered to be a desirable element in most wage and salary plans. The commitment to this aspect of the work ethic still appears to be strong among young people. However, there is no provision for individualized reward for quality performance in our military services. Enlisted proficiency pay (Pro-pay) increments are allocated to categories of personnel on the basis of the occupational specialties in which they are engaged; and the needs of the service dictate which groups are to be granted this bonus.

One procedure by which a performance pay system might be introduced is to mate it with Pro-pay. It can be presumed that budgetary considerations will enter into determination of the feasibility of inaugurating performance pay. Therefore, it is suggested that part of the budgetary allowance now assigned to Pro-pay might be reallocated to performance pay. That is, the number of ratings and people eligible for Pro-pay could be cut back to free funds for initiating a performance pay plan.

It should also be pointed out that it would be possible to implement performance pay on a selective basis rather than across the board. Employing a rationale like that governing Pro-pay, application could be restricted to certain groups, and these could be changed from time to time as organizational requirements dictate.

An attractive feature of the performance pay concept is that it does not entail guarantees to individual Navy men. Furthermore, since we have data demonstrating an equally strong appeal among civilians, the nature of this concept would argue, subject to obtaining further confirmatory evidence, that it is an incentive that would have impact both for recruiting and reenlistment purposes.

Naturally, these do not represent the limit of specific operational implications that might be derived from our findings. It is hoped that they stimulate readers to generate additional ideas of their own.

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APPENDIX A

Questionnaire A. See Figure 1 for the composition of Questionnaires B, C, and D.

AMERICAN INSTITUTES FOR RESEARCH
WASHINGTON OFFICES

Address: 8555 Sixteenth Street, Silver Spring, Maryland 20910
Telephone: (301) 587-8201

NAVY INCENTIVE AND BENEFITS SURVEY

This is a Navy Incentive and Benefits Survey. It is being carried out by the American Institutes for Research (AIR), with the approval and support of the Office of Naval Research. AIR is a private scientific research organization.

The question that concerns us is to find out what changes the Navy might make in order to interest qualified individuals in reenlisting. This information will be of value both to the Navy in its planning activities and to the enlisted men serving in the Navy, both now and in the future. It is our belief that the best way to get this information is to ask people, like yourself, who are serving their first tour of duty and who will need to make a reenlistment decision in the foreseeable future.

We need to know some things about you in order to understand the information we will get, but your name and answers will not be seen by anyone in the Navy. Navy officials will only be given the analysis of the survey results.

It will only take about 15 minutes to complete this questionnaire. Please answer each item with careful thought. There are no "right" or "wrong" answers. We want your honest opinions. Only in this way can we help to bring about changes that will make the Navy a better organization.

When you have answered all of the questions, put this questionnaire in the envelope provided and mail it back. This envelope is already addressed and has a stamp on it. Please do this as soon as you can--on the day that you get this, if possible. We hope to get returns from nearly everyone to whom this questionnaire is sent, so that the results will be most useful.

If you have any additional comments regarding particular items, please write them on the back of the questionnaire.

Sincerely,

Albert S. Glickman, Ph.D.
Deputy Director
Washington Office

N-00014-72-C-0387

NAVY INCENTIVE AND BENEFITS SURVEY

Please fill in the information required below:

Name_____ Rating:_____
Last First Middle Initial

Pay Grade:_____

Social Security No._____ Age (last birthday)_____

Education: (Check highest level):
_____Non-High School graduate _____Attended College
_____High School graduate _____Attended Technical School (after high school)

Length of Service (number of months)_____

Marital Status: (Check one)
_____single _____married _____separated or divorced

Number of Children:_____

I. Instructions USE A PENCIL

Place an "X" in the box next to the statement which best answers each of these two questions.

A. What are you most likely to do after your first enlistment?

- ☐ Work for an employer, on salary, wages, or commission.
- ☐ Go to full-time school or college.
- ☐ Farm for myself.
- ☐ Have my own business.
- ☐ Reenlist in the Navy.
- ☐ I haven't decided what I will do.

B. How definite are your plans about what you'll do when your enlistment expires?

- ☐ I know exactly what I am going to do.
- ☐ I am pretty sure about what I am going to do.
- ☐ I have been doing some thinking about that, but have not yet made up my mind.
- ☐ I haven't given it much thought.
- ☐ There is no sense in trying to make plans.

NAVY INCENTIVE AND BENEFITS SURVEY

INSTRUCTIONS

In this questionnaire, we have listed a number of possible changes which might be made by the Navy. The changes are related to extending existing programs or introducing new policies and practices. We would like to know what effect you think each of these might have on your interest in reenlisting at the end of your first tour. For each item, please indicate which one of the choices listed below comes closest to reflecting how you feel, by putting a circle around one letter.

a. I would be less likely to reenlist if this change were introduced.

b. It would make no difference to me one way or another if this change were introduced.

c. I would be more likely to reenlist if this change were introduced.

d. I would be very likely to reenlist if this change were introduced.

---

a b c d 1. The Navy would make regular pay for sea duty substantially higher than for shore duty.

a b c d 2. Upon reenlisting, a man would be given the opportunity to spend part of his regular work week with special groups concerned with the development of better working conditions and better administrative procedures in the Navy.

a b c d 3. The Navy would establish a policy so that each person would be notified of dates of departure, duration and destination at least one month in advance of cruises of more than one week.

a b c d 4. Navy policy would be changed to allow those in a critical rating to convert to another critical rating in return for a four-year reenlistment.

a b c d 5. Navy policy would be changed so that those retiring after 20 years of service would receive three-fourths pay instead of half-pay.

a. I would be less likely to reenlist if this change were introduced.

b. It would make no difference to me one way or another if this change were introduced.

c. I would be more likely to reenlist if this change were introduced.

d. I would be very likely to reenlist if this change were introduced.

---

a b c d 6. The Navy would guarantee assignments to preferred locations for at least half of the second tour.

a b c d 7. You would be given the opportunity to work with enlisted men's groups authorized to develop more effective ways of performing the tasks of your rating.

a b c d 8. An enlisted man could receive a yearly bonus of up to 30 additional days leave for exceptionally good performance.

a b c d 9. Completion of an accredited civilian training course related to an occupational specialty would be credited toward promotion to a higher pay grade.

a b c d 10. For every two years of Navy service beginning with the second tour, one term of educational leave with pay plus tuition expenses would be given.

a b c d 11. Navy policy would be changed to permit retirement at half-pay after 15 years instead of 20 years of service.

a b c d 12. Upon reenlisting, you would be free to leave the Navy at any time after giving three months notice. Reenlistment bonuses would be prorated based on the length of time served in the second enlistment.

APPENDIX B

APPENDIX B

Questionnaire A	Unadjusted Mean	Standard Deviation
1	2.60	0.68
2	2.53	0.69
3	2.57	0.69
4	2.31	0.66
5	2.97	0.80
6	2.94	0.76
7	2.58	0.75
8	2.92	0.82
9	2.94	0.77
10	3.08	0.80
11	2.96	0.82
12	3.32	0.86

APPENDIX B (continued)

Questionnaire B	Unadjusted Mean	Standard Deviation
11 + 12	2.84	0.75
1 + 2	2.65	0.74
9 + 10	2.96	0.73
3 + 4	2.47	0.76
7 + 8	2.81	0.76
5 + 6	2.94	0.75
12 + 8	3.15	0.83
5 + 1	2.86	0.78
10 + 11	2.84	0.81
2 + 3	2.53	0.72
8 + 9	2.87	0.80
4 + 5	2.48	0.78
6 + 7	2.73	0.76
1 + 8	2.94	0.80
5 + 12	3.05	0.81
2 + 6	2.67	0.72
7 + 11	2.66	0.69
4 + 8	2.52	0.76
6 + 10	2.95	0.75
3 + 7	2.56	0.72
5 + 9	2.75	0.76
4 + 11	2.54	0.79
3 + 10	2.73	0.78
9 + 2	2.59	0.74
11 + 1	2.81	0.78
2 + 12	2.86	0.80

APPENDIX B (continued)

Questionnaire C	Unadjusted Mean	Standard Deviation
1 + 3	2.49	0.65
10 + 12	3.02	0.84
6 + 8	2.85	0.75
4 + 9	2.32	0.74
2 + 10	2.61	0.73
12 + 1	3.04	0.79
11 + 3	2.78	0.86
7 + 2	2.40	0.66
4 + 6	2.45	0.72
3 + 5	2.72	0.77
9 + 11	2.73	0.81
10 + 8	2.92	0.76
2 + 4	2.19	0.60
5 + 7	2.59	0.74
1 + 6	2.91	0.83
8 + 3	2.76	0.75
10 + 5	2.75	0.78
6 + 11	2.86	0.79
12 + 7	2.94	0.80
9 + 1	2.68	0.77
4 + 12	2.83	0.81
7 + 9	2.46	0.69

APPENDIX B (continued)

Questionnaire D	Unadjusted Mean	Standard Deviation
12 + 9	2.99	0.78
7 + 10	2.78	0.81
5 + 8	2.85	0.79
6 + 9	2.91	0.79
4 + 7	2.23	0.80
1 + 4	2.61	0.74
8 + 11	2.97	0.79
6 + 12	3.06	0.84
2 + 5	2.59	0.75
10 + 1	2.90	0.77
11 + 2	2.59	0.79
3 + 9	2.69	0.81
4 + 10	2.61	0.74
2 + 8	2.64	0.75
12 + 3	2.99	0.85
11 + 5	2.89	0.83
1 + 7	2.63	0.73
3 + 6	2.78	0.77

APPENDIX C

Questionnaire A. See Figure 1 for the composition of Questionnaires B, C, and D.

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We need to know some things about you in order to understand the information we will get, but your name and answers will not be seen by anyone in the Navy. Navy officials will only be given the analysis of the survey results.

It will only take about 15 minutes to complete this questionnaire. Please answer each item with careful thought. There are no "right" or "wrong" answers. We want your honest opinions. Only in this way can we help to bring about changes that will make the Navy a better organization.

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If you have any additional comments regarding particular items, please write them on the back of the questionnaire.

Sincerely,

Albert S. Glickman, Ph.D.
Deputy Director
Washington Office

N-00014-72-C-0387

[ ] [ ]

NAVY INCENTIVE AND BENEFITS SURVEY

Please fill in the information required below. PLEASE PRINT.

Name _____
Last First Middle Initial

Social Security No.: Please print your Social Security number in the boxes.

[ ] [ ] [ ] - [ ] [ ] - [ ] [ ] [ ] [ ]

Rating: Place an "X" in the correct box.

[1] BM [2] AT [3] Other (write in)_____

Pay Grade: Place an "X" in the correct box.

[1] E-1
[2] E-3
[3] E-3
[4] E-4
[5] E-5
[6] E-6

Age (last birthday): _____

Education: Place an "X" in the correct box.

[1] Non-High School graduate
[2] High School graduate
[3] Attended College
[4] Attended technical school (after High School)

Length of Service (number of months) _____

Marital Status: Place an "X" in the correct box.

[1] Single [2] Married [3] Separated or Divorced

Number of Children: _____

NAVY INCENTIVE AND BENEFITS SURVEY

INSTRUCTIONS

In this questionnaire, we have listed a number of possible changes which might be made by the Navy. The changes are related to extending existing programs or introducing new policies and practices. We would like to know what effect you think each of these might have on your interest in reenlisting at the end of your first tour. For each item, please indicate which one of the choices listed below comes closest to reflecting how you feel, by putting an X through one number.

[1] I would be less likely to reenlist if this change were introduced.

[2] It would make no difference to me one way or another if this change were introduced.

[3] I would be more likely to reenlist if this change were introduced.

[4] I would be very likely to reenlist if this change were introduced.

---

[1] [2] [3] [4] 1. You would be entitled to make one free 10 minute long distance phone call every two weeks that you were on duty away from your home port or permanent duty station.

[1] [2] [3] [4] 2. If you wanted it, near the end of your first tour, you could get free vocational guidance from a civilian professional counselor to explore the choices available to you both in civilian and in Navy life.

[1] [2] [3] [4] 3. The Navy would guarantee assignments to preferred locations for at least half of the second tour.

[1] [2] [3] [4] 4. Upon reenlisting, you would be free to leave the Navy at any time after giving three months notice. Reenlistment bonuses would be prorated based on the length of time served in the second enlistment.

[1] [2] [3] [4] 5. Men doing the especially fatiguing and "dirty" jobs in the Navy would be given higher pay.

[1] I would be less likely to reenlist if this change were introduced.

[2] It would make no difference to me one way or another if this change were introduced.

[3] I would be more likely to reenlist if this change were introduced.

[4] I would be very likely to reenlist if this change were introduced.

---

[1] [2] [3] [4] 6. If you wanted to, starting in your second tour, you would have up to 30 days extra paid leave per year to do volunteer service in the community such as conservation work, health services, youth work, anti-poverty work, providing technical assistance and instruction, etc.

[1] [2] [3] [4] 7. Navy policy would be changed to permit retirement at half-pay after 15 years instead of 20 years of service.

[1] [2] [3] [4] 8. For every two years of Navy service beginning with the second tour, one term of educational leave with pay, plus tuition expenses, would be given.

[1] [2] [3] [4] 9. Completion of an accredited civilian training course related to an occupational specialty would be credited toward promotion to a higher grade.

[1] [2] [3] [4] 10. After reenlisting, you could receive a yearly bonus of up to 25% of your base pay for exceptionally good performance.

[1] [2] [3] [4] 11. If you wanted to, after reenlisting you could change from your present rating to any other one that was short of people and for which you had the basic qualifications. You would keep the grade level and pay that you had, and you would receive retraining for that rate and rating.

[1] [2] [3] [4] 12. Navy policy would be changed so that those retiring after 20 years of service would receive three-fourths pay instead of half-pay.

APPENDIX D

APPENDIX D

Questionnaire A	Unadjusted Mean	Standard Deviation
1	2.34	0.72
2	2.45	0.75
3	2.98	0.78
4	3.34	0.80
5	2.77	1.00
6	2.79	0.84
7	3.00	0.93
8	3.18	0.80
9	3.00	0.75
10	3.16	0.82
11	2.89	0.88
12	3.15	0.85

APPENDIX D (continued)

Questionnaire B	Unadjusted Mean	Standard Deviation
11 + 12	2.64	0.71
1 + 2	2.51	0.77
9 + 10	2.92	0.80
3 + 4	3.25	0.82
7 + 8	3.15	0.81
5 + 6	2.85	0.93
12 + 8	2.98	0.82
5 + 1	2.58	0.83
10 + 11	2.82	0.83
2 + 3	2.73	0.81
8 + 9	2.87	0.82
4 + 5	3.16	0.86
6 + 7	2.93	0.87
1 + 8	2.72	0.82
5 + 12	2.75	0.87
2 + 6	2.67	0.79
7 + 11	2.88	0.82
4 + 8	3.21	0.85
6 + 10	2.85	0.83
3 + 7	3.01	0.80
5 + 9	2.63	0.84
4 + 11	3.05	0.83
3 + 10	2.93	0.83
9 + 2	2.63	0.78
11 + 1	2.53	0.79
2 + 12	2.72	0.81

APPENDIX D (continued)

Questionnaire C	Unadjusted Mean	Standard Deviation
1 + 3	2.43	0.70
10 + 12	2.92	0.78
6 + 8	2.82	0.82
4 + 9	3.24	0.79
2 + 10	2.67	0.80
12 + 1	2.62	0.84
11 + 3	2.75	0.78
7 + 2	2.72	0.81
4 + 6	3.06	0.81
3 + 5	2.59	0.93
9 + 11	2.56	0.78
10 + 8	2.88	0.81
2 + 4	2.95	0.79
5 + 7	2.64	0.91
1 + 6	2.47	0.69
8 + 3	2.91	0.77
10 + 5	2.66	0.80
6 + 11	2.63	0.81
12 + 7	2.86	0.81
9 + 1	2.46	0.70
4 + 12	3.13	0.73
7 + 9	2.79	0.74

APPENDIX D (continued)

Questionnaire D	Unadjusted Mean	Standard Deviation
12 + 9	2.73	0.75
7 + 10	2.90	0.81
5 + 8	2.81	0.83
6 + 9	2.75	0.83
4 + 7	3.32	0.83
1 + 4	2.99	0.93
8 + 11	2.93	0.80
6 + 12	2.78	0.84
2 + 5	2.64	0.83
10 + 1	2.73	0.84
11 + 2	2.65	0.79
3 + 9	3.05	0.73
4 + 10	3.26	0.79
2 + 8	2.86	0.75
12 + 3	2.98	0.84
11 + 5	2.64	0.79
1 + 7	2.73	0.82
3 + 6	2.94	0.80

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