CORRECTIONAL RETRAINING IN THE NAVY:
FOLLOW-UP EVALUATION

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CORRECTIONAL RETRAINING IN THE NAVY: FOLLOW-UP EVALUATION

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The objectives of this effort were (1) to conduct a follow-up evaluation of the effectiveness of pilot retraining programs at correctional custody units (CCUs) especially established for retraining at Pearl Harbor, Hawaii and Coronado, California and at a Behavior Skill Training (BEST) Unit established at Norfolk, Virginia in improving performance and reducing disciplinary problems (recidivism) and attrition, and (2) to determine the survival rates of individuals assigned to CCUs (including those at Coronado and Pearl Harbor) and brigs during FY81. For the retraining (longitudinal) sample, performance was

measured through supervisory ratings obtained at various intervals. For the longitudinal and FY81 samples, recidivism was measured by determining the number of times assignees had been reassigned to a CCU or brig following retraining; and attrition, by using two survivability measures. Results showed that the retraining programs at CCUs Pearl Harbor and Coronado and BEST were effective in improving performance and in reducing recidivism and attrition. No significant differences were found between results of the previous and current evaluations of these programs. The survivability rates for those assigned to CCUs or brigs during FY81 varied widely. However, only 43 percent of those assigned to brigs are still in the service or successfully completed service, compared to 71 percent for CCUs.

FOREWORD

This work was conducted under subproject Z1251-PN.03 (Evaluation of Retraining Approaches), in response to a request by the Deputy Chief of Naval Operations (OP-01). The objectives of the research effort were (1) to evaluate the long-term effectiveness of the pilot retraining programs at the Correctional Custody Units (CCUs), Pearl Harbor, Hawaii, and Coronado, California, and at the Behavior Skill Training (BEST) Unit at Norfolk, Virginia and (2) to determine the survival rates of individuals assigned to CCUs and brigs during FY81. A previous report described an earlier evaluation of the pilot retraining programs (NPRDC TR 82-35).

At the beginning of FY82, CNO issued an instruction that provided for the development of standard policies, philosophies, and procedures for operating CCUs and brigs (including rehabilitation as a major element in CCUs). However, since the samples used in this evaluation were assigned to the CCUs and brigs prior to FY82, they were not affected by the changes.

Appreciation is expressed to the staff of Commander, Naval Military Personnel Command (NMPC-84), particularly to Mr. James Grabein and Ms. Betty Grechanik for their assistance in accessing the disciplinary action data card computerized files.

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SUMMARY

Problem and Background

Over the years, the Navy, like all military organizations, has faced problems in discipline and attrition. To address the discipline problem, it has established a number of correctional custody units (CCUs) and brigs. To address the attrition problem, it developed and instituted pilot retraining programs at CCUs especially established for retraining at Pearl Harbor, Hawaii and Coronado, California and at a Behavior Skill Training (BEST) Unit established at Norfolk, Virginia.

In a previous effort, the retraining programs were evaluated to determine whether they were effective in improving performance, reducing disciplinary problems (recidivism), and reducing attrition. The sample used in the evaluation was comprised of those individuals who had been assigned to the retraining programs since their establishment through September 1980. Performance was measured through supervisory ratings obtained at various intervals; recidivism, by comparing the number of nonjudicial punishments (NJPs) individuals had before being assigned to retraining with the number they received after retraining; and attrition, by comparing the length of time individuals stayed in the Navy following retraining to that of a comparable control group. Results indicated that the CCU/BEST retraining programs are effective in improving performance following retraining, increasing survivability in the Navy, and decreasing recidivism.

Objectives

The objectives of the current effort were (1) to evaluate the long-term effectiveness of the retraining programs at CCUs Coronado and Pearl Harbor and BEST Norfolk, and (2) to determine the survival rates of individuals assigned to CCUs (including those at Coronado and Pearl Harbor) and brigs during FY81.

Approach

1. Additional supervisory data were collected for BEST at 6 and 12 months after retraining.

2. To determine whether retraining programs were effective in terms of recidivism, the number of times sample members had been reassigned to a CCU or brig following retraining was determined.

3. To determine how effective retraining programs were in reducing first-term enlisted attrition, the length of time sample members remained in the Navy following retraining was evaluated using (a) an 18-month goal (18-MG) survivability measure to determine how many individuals remained in service 18 months following retraining and (b) a survivability index (SI) to determine the proportion of obligated service completed following retraining.

Results

1. BEST assignees continued to show the most improvement in performance. Seventy percent of the BEST sample who remained in the Navy and whose supervisors returned performance ratings at 12 months had improved in overall performance, compared to 50 percent for CCU Coronado. Data at 12 months were not available for CCU Pearl Harbor.

2. Recidivism rates showed that BEST assignees were just as likely to be reassigned to a brig or CCU as were those assigned to CCUs Pearl Harbor or Coronado.

3. Individuals assigned to CCUs Pearl Harbor and Coronado in FY81 had fewer prior NJPs than did those in the original longitudinal sample.

4. The 18-MG survivability rates for the longitudinal sample were 73, 68, and 55 percent for BEST, CCU Pearl Harbor, and CCU Coronado respectively. The mean SIs calculated for the sample showed that BEST assignees (with prior NJPs) completed an average of 82 percent of their enlistment, compared to 72 and 74 percent for Coronado and Pearl Harbor. Approximately 59 percent of BEST personnel (with prior NJPs) completed their entire enlistment, compared to 52 and 53 percent for Coronado and Pearl Harbor.

5. The SIs for those assigned to CCUs or brigs during FY81 varied widely. However, only 43 percent of those assigned to brigs are still in the service or successfully completed service, compared to 71 percent for CCUs.

6. For the longitudinal sample, BEST had the highest percent of success discharges (68%), closely followed by CCU Pearl Harbor. The success rates for those assigned to CCUs and brigs in FY81 were 62 and 46 percent respectively.

7. The reenlistment rates for the retraining programs at CCUs Pearl Harbor and Coronado and BEST were low when compared to overall Navy rates.

Conclusions

1. The retraining programs at CCUs Pearl Harbor and Coronado and BEST seem to be effective in improving performance and in reducing recidivism and attrition. No significant differences were found between results of the previous and current evaluations of these programs.

2. Differences among the retraining programs at BEST, Coronado, and Pearl Harbor appear to be attributable to the standards for assigning individuals to units rather than to differences in the programs themselves.

3. The considerable variability in the survivability indices of the CCUs and brigs may be related to the number of prior NJPs, differences in tracking intervals, or both.

4. The SI was a useful measure of survivability and is consistent with other survivability measures.

Recommendations

1. Program evaluation should be incorporated into NMPC's management of correctional programs in order to evaluate policy changes and determine unit effectiveness.

2. A standard set of criteria upon which correctional programs may be evaluated should be developed.

3. Feedback should be provided to individual CCUs and brigs regarding unit effectiveness using established criteria.

4. Instructor selection, training, and performance should be monitored to provide recommendations for an improved system.

5. Concepts and training modules developed for the retraining programs at Coronado, Pearl Harbor, and BEST should be examined for integration into recruit training.

6. Existing survivability measures should be tested and new measures developed in R&D to address attrition/retention evaluation problems in the future.

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INTRODUCTION

Problem and Background

Disciplinary and Retraining Programs

Over the years, the Navy, like all military organizations, has faced problems in discipline and attrition. To address the discipline problem among enlisted personnel, it has established a number of correctional custody units (CCUs) and brigs. Basically, CCUs are used to confine individuals who are being punished under Article 15, Uniform Code of Military Justice (UCMJ), for periods of between 7 to 30 days. Correctional custody is a way to dispose of minor infractions of discipline without having to stigmatize the offender with a court-martial sentence. A brig, on the other hand, is used to confine individuals who are being punished because of a significant breach of the UCMJ. Such confinement is conducted under close and constant supervision.

To address the attrition problem among enlisted personnel, the Navy has attempted to rehabilitate those who are likely to be discharged prematurely. To that end, pilot retraining programs were developed and instituted at CCUs especially established for retraining at Pearl Harbor, Hawaii (August 1978) and Coronado, California (March 1979) and at a Behavior Skill Training (BEST) unit established at Norfolk, Virginia (July 1979). These retraining programs were developed according to a behavior consequences model of behavioral change. The retraining approach consists of providing a highly structured military environment, which means that an individual must be responsible for his own actions and is penalized for failing to behave and/or perform appropriately. The staffs provide a supportive environment and are, at the same time, exemplary role models. This retraining approach has a sound basis in the criminal justice system literature. Fersh (1980) has identified two basic models of rehabilitation: the "reform" model and the "rethinking" model. The former emphasizes counseling to restructure an individual's thoughts and feelings about himself and his environment, while the latter (followed in the BEST and CCU programs) is consistent with the behavior consequences approach to rehabilitation.

The retraining programs are described in detail in a previous report (Doherty & Bacon, 1982). The candidate selection criteria for individuals sent to the programs at CCUs Pearl Harbor and Coronado and BEST Norfolk are quite similar. The individuals sent to the units are young, nonrated personnel who are becoming discipline problems and whose performance is unsatisfactory but who, as judged by their commanding officers (COs), have the potential to complete their enlistments in a productive manner. The major difference between the CCU and BEST programs is that individuals are sent to the CCUs as a result of commanding officer's nonjudicial punishment (NJP). Assignment to BEST is not considered as punishment. Rather, marginal performers can be sent to BEST, at the discretion of their CO, without having committed an NJP offense. Also, those assigned to BEST must have at least 2 years of active duty left at the time of assignment.

The CCU/BEST programs are approximately 30 days in duration. Both types of programs emphasize physical training, attitude improvement, military skills training, and both individual and group counseling. A major difference between the CCU and BEST programs is that the CCU program includes 25 hours per week devoted to constructive work projects large enough to employ entire units. Although the BEST program does include work projects, they are not regularly scheduled and are intended to provide meaningful learning experiences for the individual.

Because a dedicated and competent staff was considered essential to the success of the retraining programs, specific criteria for staff selection were developed. When the units were first organized, letters were sent to unit commanders, COs, and officers in charge (OICs) throughout the fleet, explaining the importance of the programs and urging their support in recruiting and recommending qualified petty officers to serve as staff. From the resulting pool of applicants, staff members were chosen based on their supervisory leadership qualities, degree of maturity and emotional stability, desire to assist and guide junior personnel, and counseling ability.

The number of billets authorized for the CCUs and BEST differed. At the CCUs, 1 officer (the OIC) and 25 staff enlisted billets were authorized. At BEST, 4 officers, in addition to the OIC, and 25 staff enlisted billets were authorized. In both programs, retraining is highly manpower-intensive, with that at BEST requiring more resources.

Evaluation of Retraining Programs

The retraining programs at CCUs Pearl Harbor and Coronado and BEST Norfolk were evaluated to determine whether they were effective in improving performance, reducing disciplinary problems (recidivism), and reducing attrition (Doherty & Bacon, 1982). The sample used in that evaluation was comprised of 1527 individuals--343 from CCU Pearl Harbor, 539 from CCU Coronado, and 645 from BEST. All sample members had been assigned to the CCUs or BEST during the period from the date of establishment of each unit through September 1980. This cutoff date was used to permit 1-year follow-up of individuals following retraining.

The following approach was used in the evaluation:

1. To determine whether individual performance had improved after retraining at the CCUs or BEST, supervisory performance ratings obtained at intervals from 1 week to 12 months on a number of scales were analyzed.

2. To determine whether CCU/BEST programs were effective in terms of recidivism, the number of NJPs individuals received after completing CCU/BEST retraining was determined and compared to the number they received prior to program assignment. Individuals were considered recidivists if they received an NJP during the 1-year period following retraining, even though a significant proportion of BEST assignees had not previously received an NJP.

3. To determine how effective CCU/BEST programs were in reducing first-term enlisted personnel attrition, the length of time individuals stayed in the Navy following retraining was compared to that of a control group (N = 417) who had similar demographic characteristics and disciplinary records but who had not been sent to retraining programs.

The results of the evaluation, which were discussed in briefings to the Chief of Naval Operations (OP-01) in June 1981 and described in detail by Doherty and Bacon (1982), are summarized below:

1. Six months after retraining, 73 percent of BEST individuals had improved in performance, compared to 51 and 61 percent respectively for CCUs Coronado and Pearl Harbor. At 12 months, 54 percent of CCU Coronado individuals had improved. Sufficient data were not available for CCU Pearl Harbor and BEST Norfolk at 12 months for a valid comparison.

2.   The percentages of individuals who were classified as recidivists (i.e., those who received an NJP during the year following retraining) were 36.4, 4.0, and 18.9 percent for CCUs Pearl Harbor and Coronado and BEST Norfolk respectively. A comparison of types of NJPs (e.g., unauthorized absence (UA)) received pre- and postraining showed that frequencies decreased after training.

3.   The attrition rates at the end of 1 year for the BEST Norfolk, CCU Coronado, and CCU Pearl Harbor groups were 6.5, 12.8, and 21.2 percent respectively, compared to 22.8 percent for the control group.

These results indicated that the CCU/BEST programs are effective in increasing survivability in the Navy and in decreasing recidivism. BEST and CCU Coronado are the most effective in terms of survivability; all programs are effective in reducing recidivism. While the most effective aspects of retraining could not be determined from this evaluation, the most important factor seemed to be the outstanding qualities and dedication of the petty officers assigned as staff.

Objectives

The objectives of the current effort were twofold:

1.   To evaluate the long-term effectiveness of the retraining programs at CCUs Coronado and Pearl Harbor and BEST Norfolk.

2.   To determine the survival rates of individuals assigned to CCUs and brigs (including CCUs Pearl Harbor and Coronado) during FY81.

APPROACH

Samples

The sample used to meet the first objective consisted of the 1527 individuals included in the original evaluation--343 from CCU Pearl Harbor, 539 from CCU Coronado, and 645 from BEST, all of whom had been assigned to the units from their time of establishment through September 1980. In addition, data for an additional 436 individuals at BEST were collected, increasing the longitudinal sample size to 1081 for BEST and to 1963 for the total sample.

The sample used to meet the second objective consisted of those individuals assigned to the CCUs and brigs during FY81. Table 1 shows the units included in the study as well as the individual sample sizes. Units that had fewer than 30 individuals assigned during FY81 were not included.

Table 2 presents available demographic variables for sample members. Data for the longitudinal sample were obtained from questionnaires completed by individuals at CCUs Coronado and Pearl Harbor or BEST; those for the FY81 sample were obtained from the diciplinary action data cards completed by administrative personnel at CCUs and brigs. As shown, for the longitudinal sample, the level of education, the years of education, and the age group are approximately the same. However, BEST has a slightly higher percentage of black individuals than do CCUs Pearl Harbor and Coronado. For the FY81 sample, the brigs group included fewer high school graduates. Also, persons assigned to brigs tended to be older than were those assigned to CCUs.

Table 1

Samples from Correctional Custody Units and Brigs

CCUs	N[a]	Brigs	N[a]
Cecil Field	68	Charleston	366
Charleston	72	Corpus Christi	226
Coronado	268	Great Lakes	507
Jacksonville	66	Guam	68
Lemoore	69	Guantanamo Bay	85
Memphis	133	Jacksonville	275
Mayport	30	Long Beach	313
Miramar	103	Memphis	136
New London	355	New London	48
Norfolk	456	Newport	133
Pearl Harbor	184	Norfolk	1,141
Pensacola	118	Pearl Harbor	231
		Pensacola	134
Total	1,922	Philadelphia	490
		Rota, Spain	76
		San Diego	912
		Seattle	220
		Subic Bay	177
		Treasure Island	466
		Yokosuka	63
		Total	6,061

[a]Individuals assigned to these units during FY81.

Table 2

Demographic Variables for Longitudinal and FY81 Samples

| Variable | Longitudinal Sample | | | FY81 Sample | |
	BEST Norfolk (N = 1081) (%)	CCU[a] Pearl Harbor (N = 343) (%)	CCU[a] Coronado (N = 539) (%)	CCUs (N = 1922) (%)	Brigs (N = 6061) (%)
Level of Education					
Non high school graduate	41.8	41.8	41.4	37.9	40.0
High school graduate	58.2	58.2	58.6	62.1	60.0
Years of Education					
10	21.6	26.7	22.0	20.9	20.0
11	19.7	15.2	19.4	17.0	20.0
12	56.3	53.8	55.2	57.9	52.6
12+	2.3	4.3	3.5	4.2	7.4
Mean	11.3	11.3	11.3	11.4	11.4
Age Group					
17-18	18.7	14.1	21.3	15.9	8.4
19	24.1	22.8	23.5	26.0	17.3
20	28.9	30.4	22.8	23.3	21.4
21-22	20.9	25.0	20.5	22.7	30.1
23+	7.4	7.7	11.9	12.1	22.8
Mean	20.5	20.5	20.4	20.2	21.3
Race					
Caucasian	78.1	81.0	82.1	80.3	79.8
Black	18.5	13.6	14.2	15.4	15.0
Other	3.4	5.4	3.7	4.3	5.2

[a]Although these samples are the same as those reported previously (Doherty & Bacon, 1982), the percentages differ because additional questionnaire data were obtained.

Outcome Measures

Performance

1. Longitudinal Sample. Supervisory data were collected for an additional 25 BEST individuals at 6 months after retraining and for an additional 73 BEST individuals at 12 months. No additional data for the two CCUs were added, as data collection had been discontinued at the end of FY81.

2. **FY81 Sample.** No performance data were collected for the individuals assigned to the CCUs and brigs during FY81.

Recidivism

1. **Longitudinal Sample.** To determine whether retraining programs were effective in reducing recidivism, the number of times an individual was reassigned to a CCU or brig following retraining at CCU Coronado, CCU Pearl Harbor, or BEST was determined. Data on reassignment were obtained from the Navy's disciplinary action data card computer file. For this evaluation, individuals who were reassigned to CCUs/brigs during FY81 were considered recidivists.

2. **FY81 Sample.** The mean number of prior NJPs awarded to individuals assigned to CCUs or brigs during FY81 was determined by analyzing the discipline action data card file. Individuals who were assigned to CCUs during FY81 and subsequently returned to CCUs/brigs (through April 1982) were considered recidivists. Recidivism was not determined for FY81 sample members who were assigned to brigs.

Attrition

To determine effectiveness of retraining/correctional units in reducing first-term enlisted attrition, the length of time individuals (both longitudinal and FY81 samples) remained in the Navy following retraining was analyzed. For this analysis, two independent measures of survivability were determined and analyzed: (1) the proportion of individuals who completed up to 18 months of service after retraining, and (2) a calculated survivability index (SI), developed specifically for this evaluation. Two measures were used in an attempt to fairly represent the attrition measure and provide a validity check on the data, since a single measure could provide a biased representation. To develop these measures, release dates for longitudinal sample members were obtained from class rosters; and release dates for FY81 sample members, from the disciplinary action data card file, which contains both demographic information and a disciplinary history. The active duty service date (ADSD), attrition loss (discharge) date, and expiration of active obligated service (EAOS) date for members of both samples were obtained from the April 1982 enlisted survival tracking file (STF) (Gay & Borack, 1981, 1982), a longitudinal data base of all Navy enlisted personnel. When the discipline action card data were matched with the STF data, there were fewer than one percent mismatches on social security numbers. A preliminary analysis of the discipline action card file indicated that the data reported were complete, with almost no variables out of range. The two measures are described below.

1. **18-month goal (18MG).** The 18 month goal (18MG) survivability measure most closely represents the objectives of the retraining programs at CCU Coronado, CCU Pearl Harbor, and BEST; that is, to track individuals for a period of time following release. In this measure, success is defined as completion of 18 months of service after release. This time period was selected because it permitted an adequate follow-up period to fairly evaluate retraining/correctional effectiveness. Individuals included in the analysis had at least 18 months of service remaining following retraining and were tracked (via STF) for at least 18 months. Individuals were selected on this criterion in an attempt to equate them on the time in their enlistments when they were assigned for retraining. The percentage of individuals in both samples still active at 3-month intervals (up to 18 months) following release was determined.

There are disadvantages to the 18MG survivability measure. First, since individuals who had less than 18 months of service remaining after retraining or who were not tracked for at least 18 months were eliminated, there was no way to determine the effect of retraining on individuals who enter the program late in their career. Second, since this measure may be a reflection of entry time into retraining programs, those who enter the programs at different chronological times may not be comparable; for example, those who entered the program in FY80 may not behave the same in terms of survivability as those who entered in FY79.

2. Survivability Index (SI). The survivability index (SI) was developed specifically to compensate for the problems described above. SI, which measures the proportion of obligated service completed following retraining, is derived by dividing the number of months of service completed following retraining by the number of months of service remaining until EAOS. For example, if an individual completes retraining at 26 months after his ADSD, with 22 months remaining until his EAOS and he stays in service until that EAOS, his SI will be 1.0 (48-26 = 22; 22÷22 = 1.0). On the other hand, if that individual was discharged immediately after retraining, his SI would be 0.0 (48-26 = 22; 22÷0 = 0.0). The SI for those who completed part of their enlistment following retraining may range from .01 to .99. For example, if an individual completes retraining at 16 months after ADSD, with 32 months of the enlistment remaining, and he is discharged at 40 months after ADSD, his SI will be .75 (40-16 = 24; 24÷32 = .75). If he completes retraining at 24 months after ADSD, with 24 months remaining, and he is discharged at 30 months after ADSD, his SI will be .25 (30-24 = 6; 6÷24 = .25). This method of computing survivability is an improvement over traditional tracking methods that simply assign success or failure to individuals depending upon whether or not they have completed their enlistment.

The data included in this study are referred to as "progressively censored" data (Lee, 1980), which means that, although the period of the study is fixed, individuals may enter and leave it at different times during that period. Some may be discharged at the completion of the study while some may still be active. For those who are still active (censored data), survival times beyond the study's end need to be estimated. Although Lee (1980) suggests that an appropriate method of estimating survivability is the product-limit (PL) method (Kaplan & Meier, 1958), it was not necessary to derive theoretical survivabilty curves in this case since the study included the entire population. Further, present computer programs assume that censored observations (those still in the Navy) are not related to the true length of time they remain in service. This assumption cannot be met, since there is a finite end of enlistment point representing a survivability goal. The only estimation required was in terms of survivability past the end date of the project (April, 1982). Using all cohort tracking information available, the SI was developed for estimating that survivability.

RESULTS AND DISCUSSION

Performance Comparisons

Longitudinal Sample

Doherty and Bacon (1982) reported the number of individuals at CCU Coronado, CCU Pearl Harbor, and BEST Norfolk who had improved in their overall performance after retraining. Data were provided for all activities for follow-up periods of up to 6 months and for up to 12 months for Coronado. As indicated previously, for this evaluation, additional data were obtained for an additional 25 BEST individuals at 6 months and 73

BEST individuals at 12 months. Thus, the total BEST sample is 332 at 6 months (51.4% of the total sample) and 171 at 12 months (26.5% of the sample).

Figure 1, which presents the revised overall performance data, shows that BEST assignees continue to show the most improvement even at the 12-month follow-up period. In fact, the improvement over the entire year is consistently high for BEST. However, it should be remembered that the data at the 12-month period do not reflect performance ratings of those who have been prematurely discharged and who are presumed to be low performers. However, at least 50 and 70 percent respectively of the CCU Coronado and BEST samples whose supervisors had rated them at 12 months following retraining have improved in overall performance.
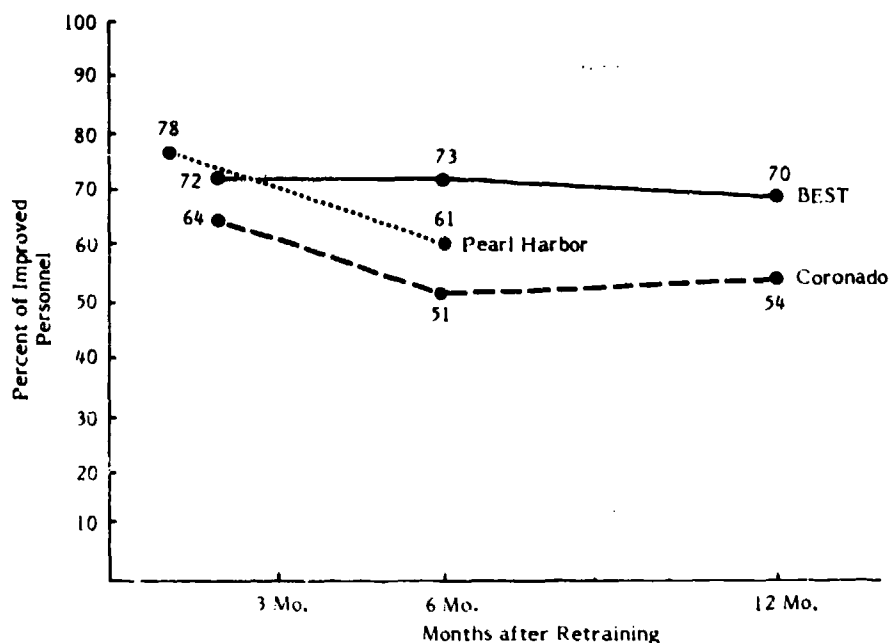

Figure 1. Percent of CCU/BEST assignees who improved in overall performance following retraining.

FY81 Sample

As indicated previously, no performance data were collected on this sample.

Recidivism

Longitudinal Sample

Doherty and Bacon (1982) reported that the mean numbers of prior NJPs for CCU Pearl Harbor, CCU Coronado, and BEST Norfolk assignees were 3.0, 2.6, and 1.8 respectively. The recidivism rates, as determined by matching individuals who were sent to either CCUs or brigs in FY81 following their retraining, were 11.7 percent (N = 410) of the BEST sample, 8.1 percent (N = 184) of the Pearl Harbor sample, and 10.9 percent (N = 268) of the Coronado sample. Thus, individuals released from BEST are as likely to be subsequently sent to a brig or a CCU as are those released from the CCUs.

FY81 Sample

The mean number of prior NJPs for individuals assigned to CCUs or brigs in FY81 is presented in Table 3. As expected, the mean number of prior NJPs awarded to individuals assigned to brigs is greater than the number for individuals assigned to CCUs (2.01 vs. 1.71). Also, individuals assigned to CCUs Pearl Harbor and Coronado in FY81 had fewer prior NJPs than did those in the original sample (1.81 and 2.06 vs. 3.0 and 2.6). This change in the punishment assignment pattern may have implications for long-term survivability, which is addressed in the next section. The recidivism rate for CCUs was 11.9 percent. As indicated previously, recidivism was not determined for brigs.

Attrition

Longitudinal Sample

18-MG Measure. Figure 2, which compares the 18-MG survivability rate of those completing the three pilot retraining units, showed that the rate was 73 percent (N = 476) for BEST, compared to 68 percent (N = 262) and 55 percent (N = 368) for CCUs Pearl Harbor and Coronado respectively. Even though BEST has the highest survivability rate of the three units, it is not known whether or not this finding is meaningful. Since about 27 percent of the BEST sample had no prior NJPs, the high survivability rate may be attributable to initial differences between the BEST prior and nonprior NJP groups. To determine if these two groups were different, their survivability rates for 18 months following assignment were compared. Since results showed there were no differences at the time points from 3 to 18 months, it appears that the only difference between the two groups may be the fact that the nonprior NJP group was probably sent to BEST somewhat sooner than was the NJP group. However, the distinction between prior and nonprior NJP groups may be important if samples equated on lengths of enlistment were analyzed. Thus, the survivability of both groups was plotted for the entire 48-month enlistment starting with the total sample of individuals who were assigned to BEST. The sample sizes for the nonprior and prior NJP groups were reduced to 40 and 173 because they included only those who could have remained in service for 48 months. The results, shown in Figure 3, show that the difference between the two groups increases over time. Given this difference, it was decided that the prior NJP group was similar to the CCU individuals and would be used in further analyses of survivability.

Survivability Index. The mean SIs calculated for individuals assigned to CCU Coronado, CCU Pearl Harbor, and BEST Norfolk (prior NJPs) were .72, .74, and .82 percent respectively. This means that BEST (prior NJPs) individuals completed an average of 82 percent of their enlistment, compared to 72 and 74 percent for CCUs Coronado and Pearl Harbor. Figure 4, which displays the percent of individuals who served 25, 50, 90, and 99 percent of their enlistment shows that approximately 59 percent of the BEST (prior NJP) sample completed their entire enlistment, compared to 53 and 54 percent for Pearl Harbor and Coronado.

The results in Figure 4 are similar to those in Figure 2, with BEST showing a higher survivability rate on both the 18-MG and SI measures. These results are also consistent with previously reported survivabilities. However, while BEST does appear to be more successful in follow-up survivability, two points should be considered.

First, since the time periods available for tracking were not similar, the comparisons among units are biased. Since BEST was established 1 year later than CCU Pearl Harbor and several months after CCU Coronado, BEST individuals had less time to be prematurely discharged than did the other two samples. The longer an individual is tracked

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Table 3

Number of Prior NJPs for FY81 Sample

Activity	Total NJPs	Mean[a]	Standard Deviation	N
Correction Custody Unit				
Pearl Harbor	333	1.81	1.54	184
Coronado	552	2.06	1.64	268
Charleston	173	2.40	1.57	72
Mayport	49	1.69	2.38	30
Jacksonville	97	1.47	1.55	66
Cecil Field	119	1.75	1.72	68
Norfolk	924	2.02	1.96	456
New London	714	2.01	2.11	355
Miramar	107	1.04	1.25	103
Lemoore	73	1.06	1.11	69
Memphis	112	.84	1.13	133
Pensacola	150	1.27	1.34	118
Total		1.71		1,922
Brigs				
Corpus Christi	374	1.65	2.00	226
Jacksonville	495	1.80	2.10	275
San Diego	2,517	2.75	2.47	912
Seattle	533	2.42	2.30	220
Guantanamo Bay	218	2.56	2.51	85
Charleston	452	1.23	1.72	366
Yokosuka	79	1.25	1.57	63
Long Beach	685	2.19	2.14	313
Norfolk	2,443	2.14	2.50	1,141
Pearl Harbor	744	3.22	2.99	231
Rota, Spain	200	2.63	2.51	76
Memphis	82	0.63	0.86	130
Pensacola	204	1.52	1.62	134
Great Lakes	876	1.73	2.26	507
Subic Bay	559	3.15	2.82	177
Guam	69	1.01	1.39	68
Newport	230	1.73	2.18	133
Treasure Island	769	1.65	2.20	466
Philadelphia	642	1.31	1.86	490
New London	24	0.50	1.18	48
Total		2.01		6,061

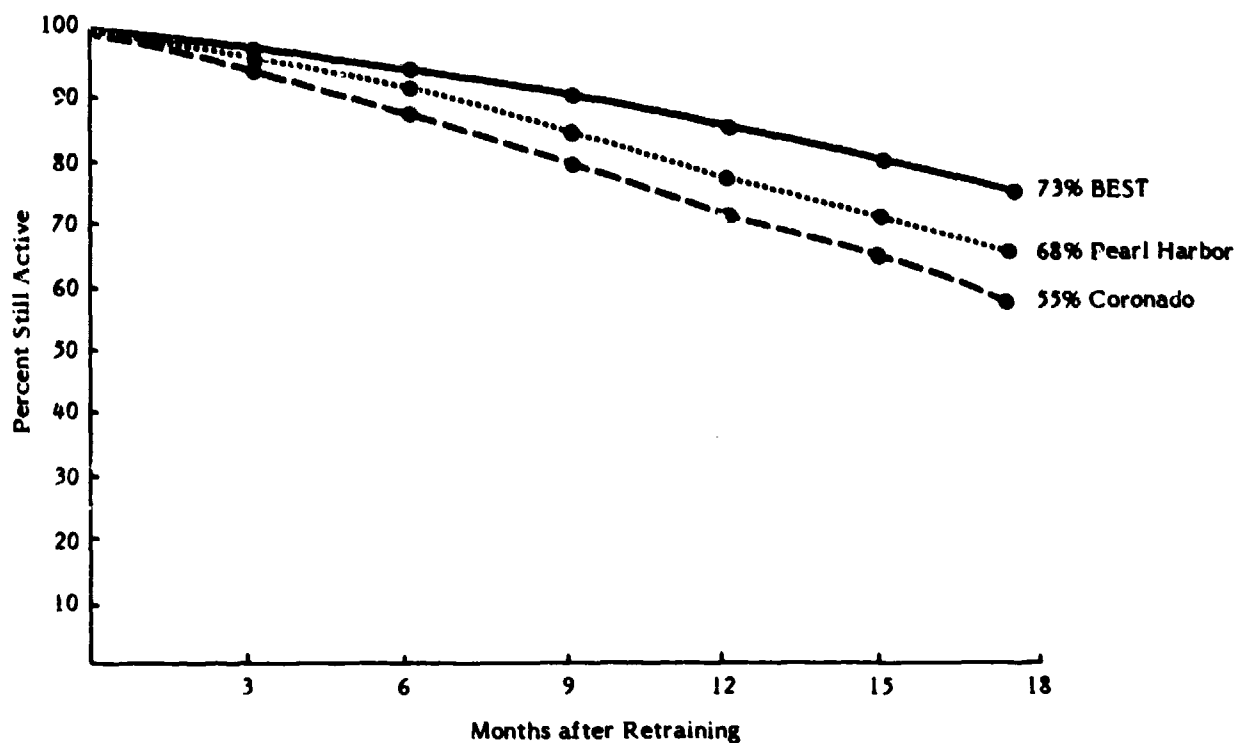[a]Average number of NJPs per individual assigned.

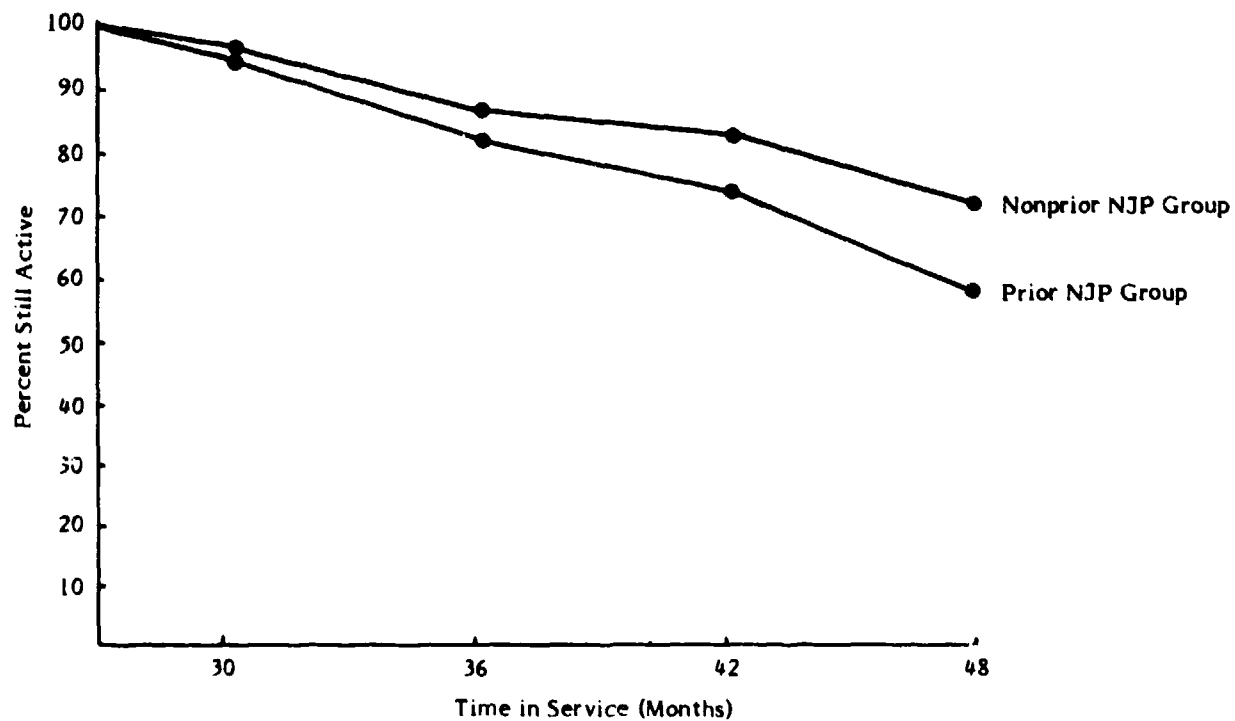Figure 2. Survivability of first-term enlisted personnel 18 months after CCU/BEST retraining.

Figure 3. Comparison of BEST assignees with and without prior NJPs at 48 months after enlistment.
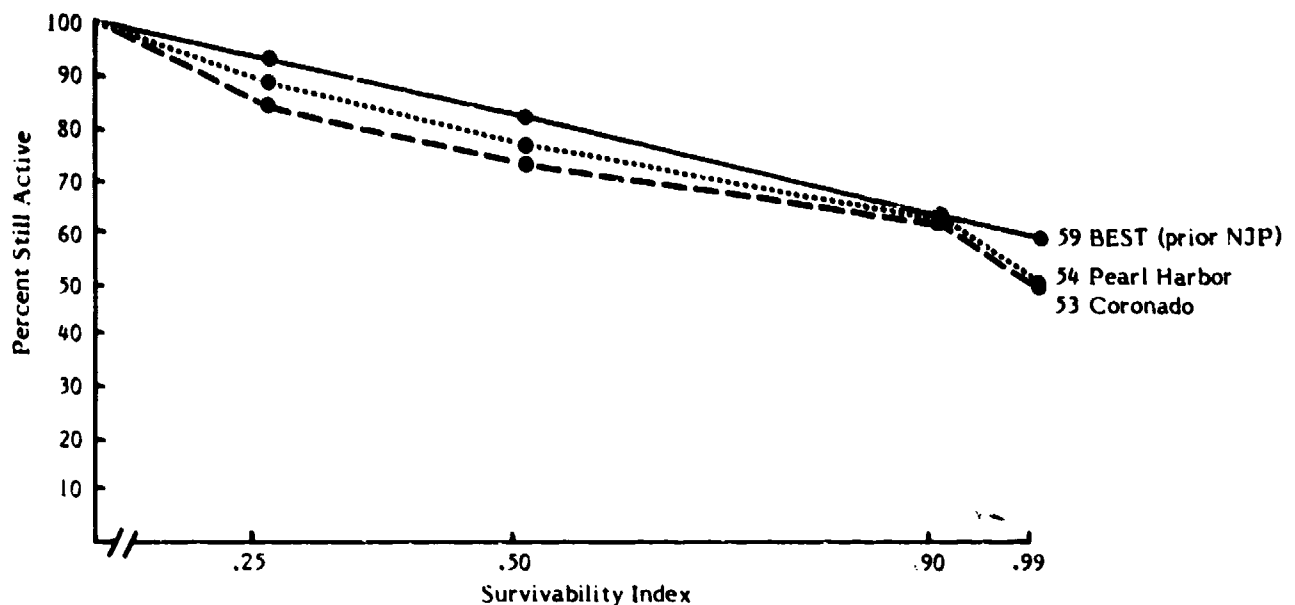
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Figure 4. Percent of enlisted personnel completing specific proportions of their enlistments following CCU/BEST.

in his enlistment, the greater the opportunity that he will be discharged prematurely. Thus, BEST had a better chance of obtaining a higher SI.

Second, the chronological time periods studied were not the same among units. Not only does the amount of tracking time available vary but, also, since Pearl Harbor was established in August 1978 and BEST in July 1979, the samples differ as to the month and year assignments were made. Similarity measures could be affected by this initial time difference.

FY81 Sample

The mean SIs developed for CCUs and brigs are presented in Table 4. As shown, CCUs Cecil Field and Pearl Harbor have the highest SI, while CCU Pensacola had the lowest. The SI for CCU Pearl Harbor has increased from that shown for the longitudinal sample (.86 vs. .74). The reasons for this may be attributed to a number of factors that are beyond the scope of this study. It is reasonable to assume, however, that, since the mean prior NJP rate for the Pearl Harbor longitudinal sample was higher than that for its FY81 sample (2.6 vs. 1.8), an improved SI could be expected.

Brigs at Jacksonville, Yokosuka, Charleston, and Corpus Christi had the highest SI, while that at Rota, Spain had the lowest.

Survivability Comparisons Among CCUs and Brigs

To determine whether the CCUs and brigs differ as to survivability, all individuals who were assigned to these units (excluding CCUs Coronado and Pearl Harbor) during FY79-81 who could have been in the Navy for 42 months were compared. This amounted to initial samples of 1193 for CCUs and 8330 for brigs. Figure 5, which compares the two

Table 4

Mean SIs for CCUs and Brigs
(FY81 Sample)

Activity	Mean	Standard Deviation	N
Correctional Custody Units			
Cecil Field	.872	.27	65
Pearl Harbor	.860	.24	178
Mayport	.810	.31	28
Charleston	.805	.34	68
Jacksonville	.800	.32	63
Lemoore	.781	.32	65
Memphis	.743	.38	120
Coronado	.737	.32	261
Norfolk	.729	.36	432
Miramar	.724	.37	98
New London	.715	.37	339
Pensacola	.628	.41	112
Brigs			
Jacksonville	.821	.31	265
Yokosuka	.815	.33	59
Charleston	.814	.30	350
Corpus Christi	.813	.32	210
Treasure Island	.782	.34	431
Philadelphia	.779	.35	459
Memphis	.758	.37	119
Norfolk	.751	.37	1,073
New London	.748	.27	46
Seattle	.738	.37	204
Great Lakes	.707	.40	480
Long Beach	.698	.38	295
Guam	.697	.36	65
Pensacola	.689	.37	122
Newport	.684	.36	127
Subic Bay	.678	.38	166
Guantanamo Bay	.676	.35	77
Pearl Harbor	.666	.40	224
San Diego	.664	.40	872
Rota, Spain	.618	.40	74

100
90
80
Percent Still Active
70 ———● 71 CCUs
60
50
40 ● 43 Brigs
30
20
10

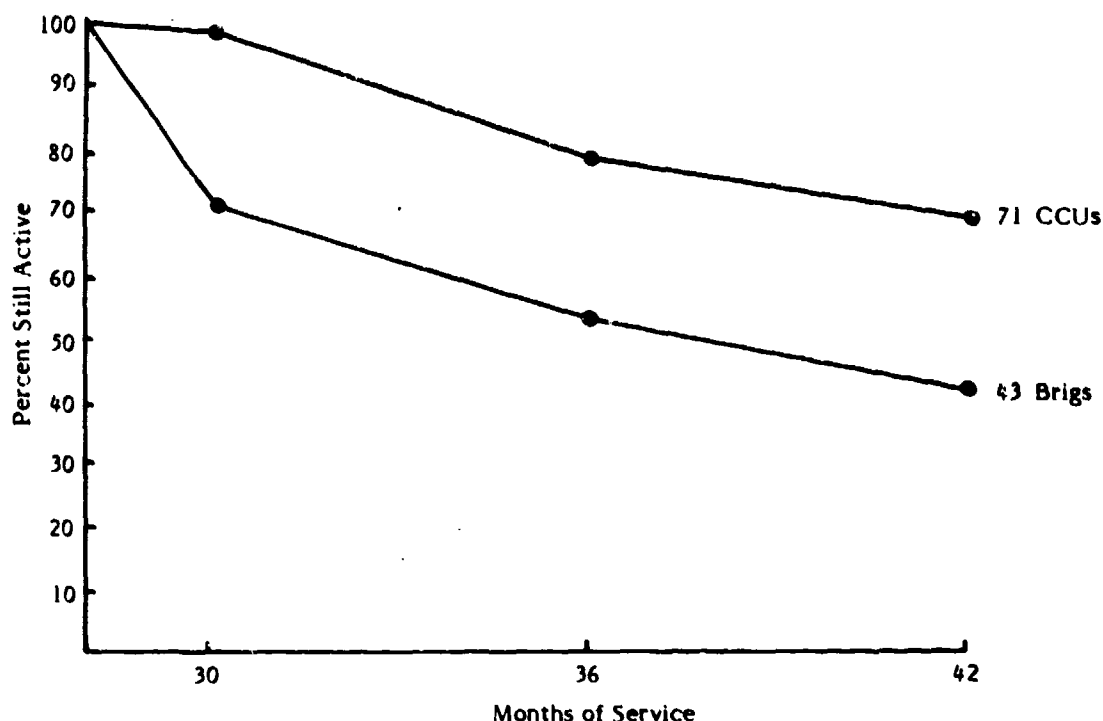30   36   42
Months of Service

Figure 5. Percent of enlisted personnel still active at the end of 42 months of service for CCUs and brigs.

groups, shows that only 43 percent of brig assignees are still in the service, while 71 percent of CCU assignees remain. Thus, it appears that CCUs are more effective than brigs as to Navy survivability, a result that is not too surprising, considering the level of severity of offenses.
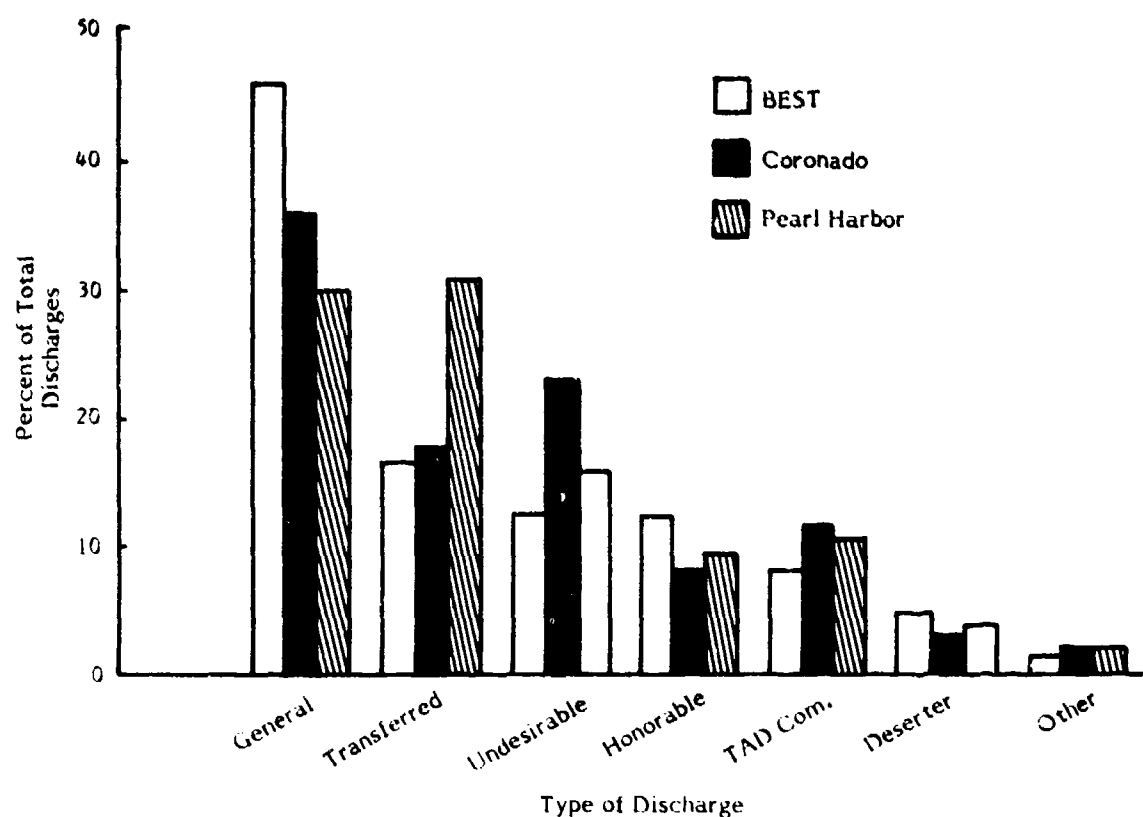
Types of Discharges

Longitudinal Sample

The number and type of discharges were determined from the STF. Discharges were classified in the same manner used by NMPC-84[1] in determining whether a discharge is to be considered a "success" or a "failure"; that is, undesirable discharges and deserters are considered failures, while honorable discharges, general discharges, and transfers (to reserve, officer candidate school, etc.) are considered successes. Table 5, which displays the percent of success and failures for CCU Coronado, CCU Pearl Harbor, and BEST Norfolk, shows that BEST had the highest percent of success discharges, closely followed by Pearl Harbor. Figure 6, which presents the type of discharge awarded to individuals at CCU Pearl Harbor, CCU Coronado, and BEST, shows that BEST had the largest number of general discharges; Pearl Harbor, the greatest number of transfers; and Coronado, the most undesirable discharges. The units were similar with respect to honorable and other discharges.

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[1]Success/failure classification is described in NMPC-84 memo ser 84/380 of 1 July 1982.

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Table 5

Percent of Success/Failure Discharges

Unit	Type of Discharges				N Discharged	Total N
	Success		Failure			
	%	N	%	N		
Longitudinal Sample						
BEST	67.4	363	32.6	176	539	1,081
Pearl Harbor	65.8	172	34.2	90	262	343
Coronado	53.9	206	46.1	177	383	539
FY81 Sample						
CCUs	61.9	584	38.1	360	944	1,922
Brigs	46.4	1,472	53.6	1,700	3,172	6,061

Figure 6. Percent of type of discharge for BEST, Coronado, and Pearl Harbor.

FY81 Sample

Table 5, which also displays the percent of success/failure discharges for the FY81 sample, shows that the success rate for brig assignees was 16 percent lower than that for CCU assignees. These results are consistent with previously reported attrition results, and with what is known about the type of individual sent to brigs and CCUs.

Reenlistment

The reenlistment rates of individuals assigned to CCU Coronado, CCU Pearl Harbor, or BEST were compared to the overall Navy reenlistment rate for FY82 (through June 1982), which is 17 percent.[2] For BEST, 13.8 percent (N = 203) reenlisted at the end of their first term, compared to 9.1 percent (N = 197) and 9.5 percent (N = 263) for CCUs Coronado and Pearl Harbor.[3] Even though these samples are small, the reenlistment rates are lower than the overall Navy reenlistment. However, there is no reason to believe that the retraining programs would have had a beneficial effect on reenlistment, since program goals were not directed at improving reenlistment. Rather, the main objective was to aid individuals in completing their enlistments by encouraging them to accept responsibility for their actions, not necessarily make the Navy a career.

Demographic Variables

As in the previous report (Doherty & Bacon, 1982), demographic variables were generally found to be unrelated to performance, recidivism, and enlistment survival for both samples. This is true for single predictor variables, as well as for combinations of predictors.

CONCLUSIONS

1. Based upon the outcome measures, it appears that the pilot retraining programs at CCU Coronado, CCU Pearl Harbor, and BEST Norfolk are more effective than the traditional methods of correction used at other CCUs and brigs. BEST is somewhat more effective in survivability than the other units and Pearl Harbor has improved somewhat in all outcome measures over time. However, no significant differences were found from those previously reported.

2. The difference between the pilot retraining programs appear to be due to the type of individuals assigned and the time involved in tracking intervals rather than to the program content or policies.

3. The standardized discipline action data card file was a reliable source of recidivism and survivability data. The cards were far more complete and timely than were evaluation forms developed by individual units.

4. The considerable variability in the CCU SIs may be related to program administration. Part of the variability may be explained by considering the number of

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[2]Department of Defense OASD (Comptroller) Directorate for Information, Resources Management Systems report; subj: Reenlistment rates by service, 28 September 1982.

[3]These rates are to be considered gross reenlistment rates, since no data were available on the number of eligibles and ineligibles.

prior NJPs as a factor. Units having a greater mean number of NJPs tended to have lower SIs than did those with a lower mean number of NJPs.

5. The SI was a useful measure of survivability and is consistent with other survivability measures.

6. Since the retraining programs for either the longitudinal or FY81 sample were not standardized as to training and administration policies at the time of data collection, it was not possible to make meaningful comparisons or draw conclusions regarding training factors related to survivability.

7. Types of individuals who would survive longer in the Navy following retraining could not be identified.

RECOMMENDATIONS

1. Program evaluation should be incorporated into NMPC's management of correctional programs in order to evaluate policy changes and determine unit effectiveness.

2. A standard set of program criteria should be developed upon which correctional programs may be evaluated (e.g., survivability, performance, etc.). Program criteria for CCUs and brigs should correspond to the program goals. This would result in different criteria for CCUs and brigs. Using established criteria would enable comparisons among equivalent programs and aid in the determination of cost-effective procedures.

3. The discipline action data card system should be continued as a standardized means of collecting evaluation information on CCUs and brigs. A standard reporting system is necessary to conduct program evaluation.

4. Feedback should be provided to individual CCU and brig staffs regarding unit effectiveness using established criteria. Such feedback should include evaluation results, diagnosis program deficiencies, and proposals for ameliorative actions.

5. Doherty and Bacon (1982), on the basis of interviews, showed that the effectiveness of CCU Coronado, CCU Pearl Harbor, and BEST Norfolk programs depended upon the quality of the instructors. Thus, instructor selection, training, and performance should be monitored and evaluated to provide recommendations for an improved system.

6. Concepts and training modules developed for the retraining programs at Coronado, Pearl Harbor, and BEST should be examined for integration into recruit training where feasible and appropriate. Selected training, developed specifically to provide needed information to individuals with potential discipline problems and performance difficulties, could prove especially beneficial to recruits.

7. Existing survivability measures should be tested and new ones develoepd in R&D to address attrition/retention evaluation problems in the future.

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