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# **The Effects of Retraining Interventions on Individuals Confined in Navy Correctional Facilities**

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13. ABSTRACT (Maximum 200 words) This report presents an analysis of the effects of retraining interventions on individuals confined in the Navy's brig and correctional custody units. Data were collected from prisoners and awardees confined between October 1989 and October 1991, using self-reports of behavioral change, indirect measures of personality dimensions, and ratings by corrections staff members. Confinees showed significant increases in self-esteem and feelings of safety, decreases in anomia, and achieved a more internal locus of control over their period of confinement. Feelings of belonging were found to modify change in scores on scales measuring personality dimensions. Staff ratings of the performance of prisoners and awardees were positively correlated with self-reports of behavioral and attitudinal change. Participants in selected programs reported more behavioral change than nonparticipants.				
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## Foreword

This report presents an analysis of the effects of retraining interventions on individuals confined in the Navy's correctional facilities, and utilizes data collected during the implementation phase of a system for conducting ongoing evaluation of correctional programs in the Navy.

This effort was sponsored by the Bureau of Naval Personnel (PERS-84) and funded by work unit R1770, program element 0603707N.

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## **Summary**

### **Problem**

The Navy expends significant resources on programs to retrain its members confined in correctional facilities, but has had no system for evaluating program effectiveness. Along with other changes to corrections system, the Bureau of Naval Personnel (PERS-84) implemented in 1989 a comprehensive evaluation system designed to allow managers to determine the success of various retraining efforts.

### **Objective**

This report presents an analysis of the effects of retraining interventions on individuals confined in the Navy's brig and correctional custody units, as reflected by self-reports and in ratings by custodial personnel.

### **Approach**

Data analyzed in this report were collected from individuals confined in Navy corrections facilities and from corrections staff personnel over a 2-year period, from October 1989 through October 1991, during the implementation phase of the ongoing evaluation efforts. Data collection efforts expanded from one facility in 1989 to include all 26 brig and correctional custody units (CCUs). Instruments used for the collection of data included the Personality Inventory and Evaluation Survey (PINES), a Prerelease Questionnaire, and the Responsible Sailor Scale (RSS) on which confinees' performance and attitudes were rated by corrections staff members. The PINES questionnaire, which yields measures on several personality dimensions, was administered at entry and release from the correctional facility to reflect changes over the period of confinement. Similarly, staff members completed the RSS rating scale three times during an individual's confinement. Analyses of change during confinement were limited to those who served 8 days or more.

### **Results**

As hypothesized, confinees showed significant increases in self-esteem, safety, and belonging scale scores between entry and release from the brig or CCU, as well as reduced external locus of control, anomia, and need-determined expression (expediency). Acceptance of authority scores declined somewhat. As expected, scores on the belonging scale appeared to moderate scores on other scales: high belonging was associated with high self-esteem and with low external locus of control and anomia. Positive scores on most of the PINES scales at release were moderately related to positive ratings by staff members, and to perceptions of fair treatment while confined.

Prisoners and awardees at entry to correctional facilities had lower self-esteem, a more external locus of control, and greater anomia than a comparable normative sample of Navy enlisted personnel. Such differences had largely disappeared by the time of release.

At release, 93 percent of confinees said they had always or usually been treated fairly. Substantial majorities also said that they understood themselves and others better than they had before, and that they felt more positive about themselves.

People at CCUs and combined brig/CCUs tended to rate both programs and staff members more helpful than those at waterfront and consolidated brigs did. On a 7-point scale mean helpfulness was judged by all confinees to be slightly above the midpoint ("somewhat helpful") for eight of ten programs. Final ratings by staff members were significantly different for participants and nonparticipants in the Crossroads program and educational courses.

The average confinee reported between four and five positive behavioral changes as a result of their retraining. Overall, the number of programs participated in was associated with the number of positive behavioral changes reported. Further, those who rated programs most helpful were likely to report a greater number of behavioral changes. Behavioral change was also associated with finding staff members helpful.

The number of positive behavioral changes and the final ratings by staff members were used as two measures of success at the completion of confinement. Regression analyses revealed that the number of behavioral changes could best be predicted by (in order of decreasing contribution) perceived helpfulness of individual counseling, perceived helpfulness of the lead petty officer, perceived helpfulness of vocational training, acceptance of authority score at release, perceived helpfulness of Narcotics Anonymous program, a decrease in external locus of control score between entry and release, and perceived helpfulness of group counseling. Five measures were found to predict the final rating by staff: number of days confined, helpfulness of the work center supervisor, anomia score at brig entry, type of facility in which confined, and helpfulness of the lead petty officer.

## **Discussion**

Convergent evidence pointed to significant change in the attitudes and behaviors of prisoners and awardees who were confined in Navy correctional facilities, whether change was assessed by direct self-report, indirect scale measures, or ratings by corrections staff members. Further, results indicated that participation in retraining programs offered in the correctional facilities contributed to positive behavioral change. The idea that corrections staff members exert a strong influence on retraining success was also supported by these analyses.

Future research efforts will involve a more detailed study of differences in program implementation across sites, and a more thorough investigation of the life histories of certain types of offenders. Data collection procedures will be expanded to support such research plans.

## **Recommendations**

Based upon the results obtained in this analysis, recommendations for ongoing evaluation of Navy corrections programs include the following:

1. The demonstrated validity and reliability of the instruments now in use is such that they are appropriate, and their continued use is advocated.

2. Planning for data collection should precede programmatic and policy changes in order to measure the effects of such changes.

3. Operational measures of the quality and intensity of interactions between corrections staff members and prisoners/awardees should be developed, and that information added to the data base.

4. More detailed background (life history) information should be collected.

5. New dynamic approaches to measuring intraindividual differences longitudinally should be investigated.

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# **Introduction**

## **Problem**

The United States Code requires each military service to provide not only custody of its members sent to correctional facilities but also their retraining, with a view to restoring offenders to active duty. Earlier data have suggested that Navy retraining programs have failed to meet correctional goals. In the past, the Navy has had no system for evaluating the effectiveness of its various retraining programs. Research is required to determine which programs are most effective for which type of confinee, the characteristics of security and training staff that facilitate program effectiveness, and the best mix of work and training to accomplish correctional goals. Without an understanding of the relationships between individual/institutional variables and outcomes, the Navy is unable to allocate retraining resources wisely.

## **Objective**

This report presents an analysis of the effects of retraining interventions on individuals confined in the Navy's brigs and correctional custody units (CCUs), as reflected in self-reports and ratings by custodial personnel.

## **Background**

The Navy Disciplinary System Study and Facility Master Plan, which was developed through the efforts of key military personnel, Department of the Navy civilian staff, and civilian consultants, addressed the need for changes in the Navy's disciplinary system. Consistent with recommendations of the plan, a three-tier corrections system was adopted. New facilities were constructed, a systematic classification procedure was implemented, and programs for retraining and rehabilitation were significantly expanded. The study also called for an ongoing evaluation of corrections programs and, to that end, the Navy Personnel Research and Development Center was asked to design an evaluation system to be implemented concurrently with other changes in the correctional system.

An evaluation system was designed (Kerce, 1989) and implemented to provide an ongoing assessment of both program impact and process integrity, ultimately allowing managers to determine the success of various retraining interventions. Going beyond the evaluation of programs, the system provides data for the development of a Navy Corrections Retraining Model. The retraining model will simultaneously consider prisoner characteristics, staff attributes, organizational structure, and program implementation.

## **Method**

At the individual level of analysis, the corrections evaluation system provides for the routine collection of data from all people confined in Navy brigs and CCUs, and from all corrections staff personnel. Implementation of data collection procedures to support evaluation and the development of the retraining model occurred over a period of 2 years, from October 1989 through October 1991, expanding to include all 26 Navy correctional facilities.

The Navy's correctional system consists of 2 consolidated brig, 8 waterfront brig, 11 combined waterfront brig/CCU facilities, and 5 CCUs, of which 18 are continental United States facilities. In general, it can be said that consolidated brig are used to confine offenders with longer sentences, while waterfront brig are used for pretrial confinement and short-term offenders. CCUs house individuals who are not being court-martialed, but who have been referred for retraining by their commands. Where waterfront brig and CCUs are combined, they occupy separate wings of the facility.

This report presents the results of analyses utilizing data collected from and about individuals confined at all Navy correctional facilities over a 2-year period during which evaluation procedures were being implemented. These data provide the first estimates of program success at the first level (i.e., at the time of release from the facility). Two current works in progress will report on the analysis of staff data and the follow-up of prisoners that have been returned to duty. This latter report will therefore address the issue of second-level success as indicated by performance after individuals are returned to the fleet.

### **Sample**

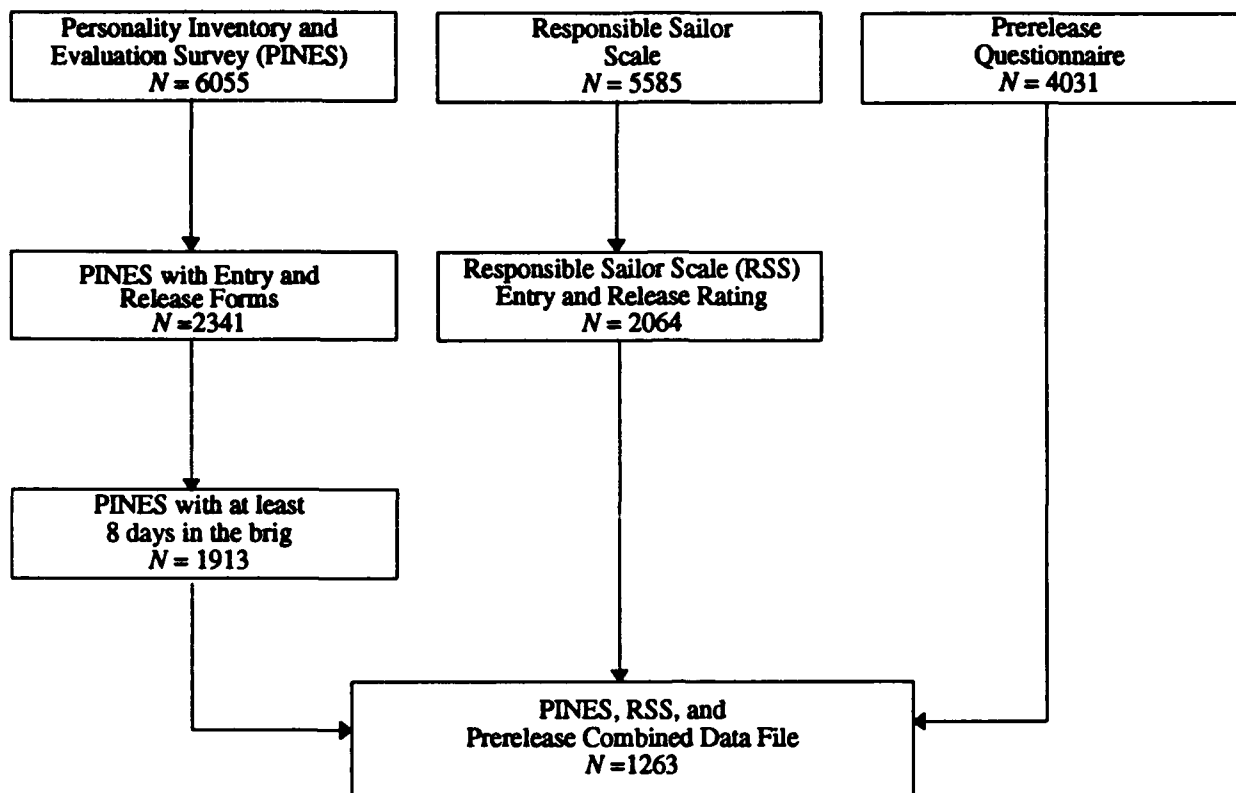
The data base used for analysis includes awardees, detainees, and prisoners. The term "awardee" refers to those undergoing retraining in a CCU. A "detainee" is one who has been sent to a brig, but has not yet been to a court martial. "Prisoner" refers to an adjudged inmate of a brig. For convenience, the term "prisoner" has been used throughout this report to designate all people confined to a brig, including detainees.

As a general rule, participation in evaluation data collection began at a facility following a visit from the researchers. This meant that individual facilities began data collection at different times within the 2-year implementation phase. The size of facility subgroups therefore varies widely, depending upon their date of implementation as well as the size of their prisoner population. For example, most of the CCUs implemented data collection procedures late in 1991 and consequently the number of awardees included in the data base available for this analysis was relatively small. Additionally, the files contained only release data for prisoners who were already in the system when data collection efforts began, and only entry data for individuals who were still confined when analysis began.

A complete data set for a prisoner/awardee should include two administrations of the Personality Inventory and Evaluation Survey (PINES) Questionnaire, a Prerelease Questionnaire, and ratings by two staff members using the Responsible Sailor Scale (RSS) at each of three specified times during his or her confinement. It was found that one or the other of these data components was missing for many people. As shown in Figure 1, this substantially reduced the number of individuals included in the analysis of variables combined from all the forms, and helps to explain why the sample size varies from one analysis to the next.

### **Instruments**

Data were collected through the use of two self-administered questionnaires completed by all prisoners and awardees, known as the Personality Inventory and Evaluation Survey (PINES) and the Prerelease Questionnaire; and by a rating form, called the Responsible Sailor Scale (RSS), used



**Figure 1. Source and processing of corrections evaluation data.**

by staff members to rate prisoners and awardees. Copies of the instruments are included in this report as Appendix A, while more complete information about their development can be found in Kerce (1989). An additional data source was information stored in prisoner files in the Corrections Management Information System (CORMIS).

### Measures

This research was designed to seek convergent evidence of outcomes by using multiple measures whenever possible. For example, behavioral change among prisoners or awardees is assessed through self-reports, ratings by staff, and performance after release and return to duty. This strategy is frequently referred to as triangulation, because it is similar to a trigonometric operation wherein a position is located by taking bearings from two or more different points. It is especially important to take this approach when self-report measures and subjective ratings are used in order to minimize the effects of positive bias and social desirability. In order to assess change, some measures were taken when individuals entered the facility and again just prior to release. Staff ratings of prisoners and awardees were obtained at three specified times.

Although the various measures of attitude and personality used in these analyses are scales composed of a number of related items, scale scores should be considered as a single measure of a concept. Item scores are combined to yield a single scale score, with the number of items in a scale related to the reliability or accuracy of that measure. Scale scores appearing in this report were

computed by adding together scores for individual items, and dividing by the number of items in the scale to facilitate comparisons across scales. Table 1 provides a summary of the measures that were used to analyze the effects of confinement and retraining on individuals in the corrections system.

**Table 1**  
**Measures Used in Analyses**

Variable	Type	Description
Self-esteem	Scale - 14 items	Pre- and post-measures
External locus of control	Scale - 11 items	Pre- and post-measures
Anomia	Scale - 6 items	Pre- and post-measures
Acceptance of authority	Scale - 3 items	Pre- and post-measures
Need-determined expression	Scale - 3 items	Pre- and post-measures
Individualism	Scale - 3 items	Pre- and post-measures
Egalitarianism	Scale - 3 items	Pre- and post-measures
Belonging	Scale - 8 items	Pre- and post-measures
Safety	Scale - 4 items	Pre- and post-measures
Simple Change Scores and Residual Gain Scores		Computed pre- and post-measures
Self-esteem		
External locus of control		
Anomia		
Acceptance of authority		
Individualism		
Egalitarianism		
Need-determined expression		
Belonging		
Safety		
Ratings of programs	1 item	For each of 10 programs
Ratings of individuals	1 item	For each of 3 staff members
Perception of fair treatment	1 item	Multiple choice
Understanding of self and problems	1 item	Multiple choice
Understanding of others	1 item	Multiple choice
Feelings about self	1 item	Multiple choice
Feelings about Navy	1 item	Multiple choice
Reports of behavioral changes	1 item	For each of 10 behaviors
Behavioral change index	Computed	Count of reported behaviors
Staff ratings of prisoners and awardees	18 dimensions	At three specified times
Facility type		
Length of confinement		
Social Security Number		
Age*		
Sex*		
Race*		

\*Available for some respondents.

The selection of the measures to be included in the PINES questionnaire was made on the basis of either (1) a theoretical or rational relationship to the goals of corrections retraining programs, or (2) because they were thought to be modifiers of the effects of retraining programs. Where scales with demonstrated validity and reliability were available, they were adapted from previously-published work. These scales were:

- Locus of Control: Measures the extent to which persons perceive that there is a contingency relationship between their actions and outcomes, or the amount of control they have over their environment (James, 1957).
- Self-esteem: A global self-concept measure adapted from Rosenberg (1965) and Fleming and Courtney (1984).
- Anomia: Measures a generalized sense of alienation and powerlessness (Srole, 1956).

Values: Four subscales from Withey (1965):

Acceptance of Authority  
Need-determined Expression  
Individualism  
Egalitarianism

Two additional scales, measuring closeness of interactions with family (belonging) and feelings of safety and security in the correctional facility, were developed specifically for the PINES questionnaire.

## Analysis

The prisoner's or awardee's social security number was used as the key for matching records from multiple files. Where changes over time were a major concern, as in the case of the PINES data, analyses were restricted to those individuals who were in the brig for at least 8 days. It was felt that an 8-day period was the minimum amount of time for which a difference in scores between entry and release could be attributed to treatment in the brig. Later analyses that varied the cutoff day experimentally confirmed this choice; most of the observed effects in the variables of interest appeared to be strongest when an 8 day cutoff was used.

Most of the analyses also examined differences associated with the type of facility where individuals were confined. Individuals were assigned to one of the following groups: consolidated brigs, waterfront brigs, combined waterfront brig/CCU facilities, or stand-alone CCUs. For some analyses, the consolidated brig population was further divided into those confined 60 days or less and those confined more than 60 days.

Simple change scores and residual gain scores, reflecting the change that is not reflected by the pretest, were both computed for analyses examining change over time as reflected by pre- and post-measures.

## Results

To take advantage of the greatest number of responses available for each analysis, the various data collection instruments were first analyzed individually. The instrument-by-instrument analyses were then followed by analyses of combined files to assess such things as the relationship

among psychological attitudes (as measured by PINES), ratings by staff (RSS), and self-reports of program participation and behavioral change (Prerelease Questionnaire). Findings throughout this section of the report are presented in that order: first, the analysis of individual data sets identified by instrument, followed by analysis of combined data sets.

### **Personality Inventory and Evaluation Survey (PINES)**

This data file included 6,055 individuals for whom at least one PINES questionnaire had been received. Of these, 2,341 had completed both administrations. Much of the missing data can be attributed to the status of individuals at the time facilities implemented data collection procedures. A smaller group of 1,913, who had a complete set of forms and at least 8 days between administrations, was used for analysis of change over time. Those who had completed both questionnaires were compared with those who had missing data for the first administration and those who had missing data for the second administration. The three groups were not found to be significantly different on age, type of court martial, or scale scores.

The PINES questionnaire measures the individual on certain personality dimensions of interest before and after exposure to programs and retraining. It was administered during the initial orientation period and again during the final 5 days before release. Scales composed of multiple questionnaire items are used to measure personality dimensions in order to increase the validity and reliability of each of the measures. The PINES questionnaire includes scales that measure self-esteem (14 items), external locus of control (11 items), anomia (6 items), and four values scales of three items each. Before analysis of scale scores was begun, the reliability of the scales for this population was tested. Items comprising each scale and results of the reliability analyses are provided in Appendix B. Table B-1 shows reliability to be related to the length of the scale, as is commonly found. Internal-consistency reliability coefficients (Cronbach's alpha) reached levels to justify the use of the scale scores as measures of self-esteem, external locus of control, anomia, acceptance of authority, and need-determined expression (expediency). Two other values scales (Individualism and Egalitarianism, both three-item scales) were not found to be reliable measures and so their items were analyzed individually.

In addition to the items comprising the previously-published scales described above, items were included in the PINES questionnaire to measure feelings of safety and security while in the brig (4 items) and feelings of attachment or belonging (8 items). When combined into additive scales, their reliabilities (also shown in Appendix B, Table B-1) were found to be sufficient for their use in subsequent analyses.

### **Analysis of Scale Scores**

Strictly speaking, the measures included in the PINES questionnaire should not be considered personality traits, as the term "trait" implies a more enduring characteristic. Here, the emphasis is on personality dimensions of individuals that have developed as a result of past life experiences and the reinforcement that those experiences provided. The underlying rationale for many aspects of the corrections retraining programs is that such learned responses can be modified through cognitive restructuring techniques (e.g., "reality therapy"), modification of the conditions of reinforcement, and exposure to appropriate role models. Thus, the purpose of pre- and post-measures is to assess the amount of personality or attitude change that might be attributed to

programs, retraining, and exposure to positive role models. Mean entry and release scale scores for the sample as a whole are shown in Table 2, together with the level of statistical significance of the difference between the entry and release score for each scale resulting from repeated measures analysis of variance.

**Table 2**  
**PINES Scale Scores: Comparison of Mean at Entry vs. Mean at Release**

	PINES A: Entry	PINES B: Release	Change Indicated	p Value
Self-esteem (n = 1700)	3.16	3.28	More self-esteem	<.0001
External locus of control (n = 1748)	2.34	2.24	More internal	<.0001
Anomia (n = 1778)	2.55	2.43	Less anomia	<.0001
Safety (n = 1785)	3.03	3.24	More safety	<.0001
Belonging (n = 1745)	3.31	3.33	More belonging	.0493
Acceptance of authority (n = 1841)	3.04	3.01	Less acceptance	.0274
Need-determined expression (n = 1832)	2.35	2.32	Less need-determined	.0283

**Notes.**

1. Analysis restricted to individuals confined for at least 8 days.
2. PINES = Personality Inventory and Evaluation Survey.

**Self-esteem.**

*Assumption: Navy prisoners and awardees tend to have relatively low self-esteem; the ability to function well in military or civilian life will be improved if self-esteem can be enhanced*

*Hypothesis: A measure of self-esteem will be higher upon release from Navy correctional facilities than it was at entry*

The hypothesis regarding self-esteem was confirmed. Table 2 shows that the mean PINES Self-esteem scale score was significantly higher at release than at entry. Fifty-eight percent of all prisoners and awardees showed an increase in self-esteem, 11 percent remained the same, and 31 percent had a decrease in score.

**External Locus of Control.** High scores on the locus of control measure indicate an external orientation while low scores indicate an internal orientation. Individuals with an external orientation tend to believe that the things that happen to them are determined by agents or factors

outside themselves. "Internals," on the other hand, are more likely to believe that they have some control over their environment and the things that happen to them.

***Assumption: Navy prisoners and awardees tend to have an external orientation, leading them to attribute consequences solely to outside events***

***Hypothesis: Individuals will be more internal in their locus of control and more willing to take responsibility for their actions after confinement in a Navy correctional facility***

Supporting this hypothesis, the overall mean locus of control score was significantly lower (more internal) at the release administration of PINES than it was at the entry administration (see Table 2). Fifty-five percent of the individuals had scores indicating a change to a more internal orientation, 12 percent remained the same, and 33 percent had more external scores.

The amount of decrease in locus of control scores was correlated with the amount of increase in self-esteem scale scores. That is, those whose scores indicated a more internal orientation at release were also likely to have a higher self-esteem score at release ( $r = -.40, p < .001.$ )

**Anomia.** An individual who scores high on the anomia scale is experiencing the personal unrest, alienation, and uncertainty that comes from a lack of purpose or ideals. Srole (1956), who developed the anomia scale adapted for use in the PINES questionnaire, called anomia a generalized, pervasive sense of self-to-others alienation.

***Assumption: Persons who are not well-integrated into society are more likely to break the law, or in a military environment, to commit status offenses***

***Hypothesis: A measure of anomia will be lower upon release from Navy correctional facilities than it was at entry***

The mean anomia scale score was significantly lower at the release administration of the PINES questionnaire than at entry, as shown in Table 2. Fifty-two percent of the prisoners and awardees had lower scores at release compared to 28 percent who had higher scores.

The amount of decrease in the anomia scale scores was significantly correlated with the amount of decrease in locus of control scale scores. That is, those whose scores indicated less anomia were also likely to score more internal on the locus of control scale at release ( $r = .43, p < .001$ .)

**Safety.** Items in the safety scale were designed to assess confinees' perceptions of security and safety in correctional facilities. These perceptions were of interest because they may affect behavior while confined and readiness for change.

*Hypothesis: People will feel relatively safe in Navy correctional facilities, and feelings of safety will increase over the time of confinement*

As hypothesized, Table 2 shows that the mean safety scores did increase significantly during confinement. Overall, 56 percent of the prisoners and awardees felt safer at release compared to 22 percent who felt less safe. Increases in safety scale score were found to be significantly correlated with increases in self-esteem score between entry and release ( $r = .42, p < .001$ .)

Analysis by type of facility showed that individuals in CCUs had a smaller entry-to-release increase in their safety scores than did those in either waterfront brig or combined waterfront brig/CCUs. However, this can be attributed to the fact the CCU group had a higher mean score at entry--and thus, less room for improvement--than the other two groups did.

**Belonging.** The eight items that make up the belonging scale were intended to assess prisoners' and awardees' closeness to family and significant others. It was believed that the extent of feelings of belonging would influence their scores on other scales. Accordingly, the belonging scores were used to divide the sample into three groups designated as high, medium, and low belonging. As expected, analysis of variance indicated a significant difference among the groups in mean scores at release on the self-esteem, external locus of control, and anomia scales. The top half of Table 3 shows that those in the high belonging group were also higher in self-esteem, more internal in locus of control, and lower in anomia.

**Table 3**  
**Belonging Effects on Scale Scores**

Scale	Belonging Group			F Ratio	Significance of F
	Low	Medium	High		
<b>Self-esteem, Locus of Control, and Anomia Scores at Release by Belonging Group</b>					
Self-esteem	2.97	3.26	3.54	391.5	<.0001
External locus of control	2.43	2.25	2.07	100.5	<.0001
Anomia	2.55	2.45	2.33	2.33	<.0001
<b>Mean Change in Scale Scores by Belonging Group</b>					
Self-esteem	.01	.12	.20	36.8	<.0001
External locus of control	.05	-.11	-.16	10.9	<.0001
Anomia	-.08	-.10	-.16	5.9	.0027

It was further expected that feelings of belonging would modify the effectiveness of programs and training during confinement--that is, those lower in belonging would be less likely to experience positive change than those high in belonging. To investigate this issue, self-esteem, locus of control, and anomia change scores were computed by subtracting the entry score from the release score. Analysis of variance in the change scores by belonging group confirmed that those in the high belonging group had the most positive change for all three scales, followed by the medium and low belonging groups in turn. These results are summarized in the bottom half of Table 3. Regression analyses using residual gain scores also confirmed that the amount of change in self-esteem, locus of control, and anomia increased linearly with belonging scores.

It would therefore be desirable to maintain feelings of belonging as they relate to the interaction of prisoners and awardees with significant others. However, although retraining programs can have an effect on how an individual relates to others in the future, the programs cannot be expected to change such relationships during confinement. As can be seen in Table 2, the mean scores on this scale changed little over the period of confinement.

**Acceptance of Authority.** The three items comprising this scale were designed to assess the level of respect for and acceptance of authority. Scores on this scale were expected to increase over the time of confinement. Table 2 shows that the mean score on this scale actually decreased somewhat between entry and release, however. Overall, 37 percent had lower and 32 percent had higher acceptance of authority scores at release. It should be noted that, despite the observed overall decrease, the percentages of prisoners and awardees who agreed at release with the three positive statements comprising the scale remained at a high level, ranging from 77 up to 85 percent across the items.

Analysis of the amount of change by type of facility revealed that personnel at CCUs differed significantly from those at each of the other three types. The mean acceptance of authority scale scores for individuals in CCUs were higher at release than at entry, the reverse of the pattern for the other types of facilities. This pattern of results was found for both simple change scores and the more rigorous residual gain scores.

**Need-determined Expression (Expediency).** It is believed that individuals who have a values orientation based on expediency or needs of the moment rather than some enduring concept of right and wrong are more likely to go outside the law to satisfy their needs. Three questionnaire items that were designed to assess this orientation comprise the need-determined expression scale.

As seen in Table 2, the mean score at release was slightly lower than at entry, indicating a somewhat less expedient orientation overall. Another way to consider the extent of this difference is to note that 37 percent of the prisoners had a lower score at release compared to 33 percent who had a higher need-determined expression score.

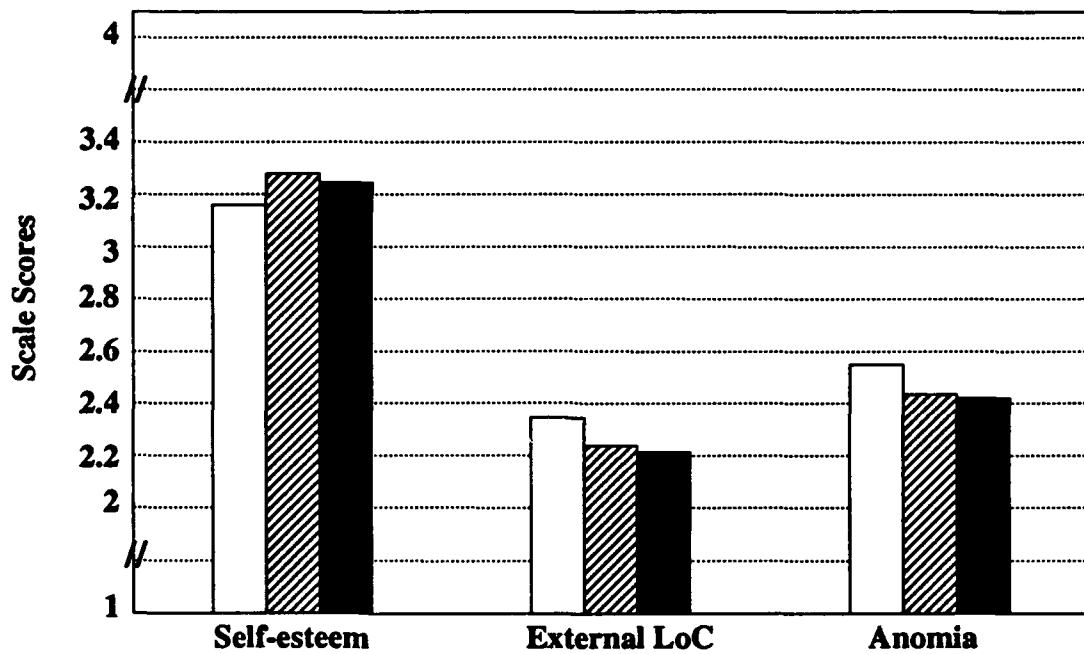
### **Comparison With Navy Normative Sample**

To further investigate the meaning of the self-esteem, locus of control, and anomia scores of the prisoner/awardee sample, their mean scores at entry and release were compared with a normative sample of about 1600 Navy enlisted personnel who were randomly selected for a mail

survey. The survey responses were weighted to reflect the paygrade distributions of both males and females in the Navy.

***Hypothesis: Navy prisoners and awardees will have lower self-esteem, be more external in their locus of control, and have greater anomia than a normative sample of Navy enlisted personnel***

As shown in Figure 2, this hypothesis was confirmed. Overall, prisoners and awardees at entry to a Navy correctional facility were significantly lower in self-esteem, more external in their locus of control, and higher in anomia than the randomly selected Navy enlisted sample (all  $p < .0001$ ).



Note. LoC = locus of control, USN = United States Navy, PINES = Personality Inventory and Evaluation Survey.

□ At Brig Entry    ▨ At Brig Release    ■ USN Normative Scores

**Figure 2. PINES scale scores compared to Navy norms.**

Although self-esteem, locus of control, and anomia scores of prisoners and awardees at entry were significantly different from the random sample, those differences appeared small enough to suggest that they might be overcome with appropriate retraining. The present results confirmed that individuals being released more nearly approximated the normative sample. At the end of confinement, their mean self-esteem score had risen to a point slightly higher than that of the normative sample. The releasees' scores also moved closer to the norm on both the locus of control and anomia scales.

## **Nonscaled Items**

A few items in the PINES questionnaire were designed to stand alone rather than be combined into a scale. These items were analyzed individually by examining the frequency distributions of responses and comparing mean scores at entry and release.

Sixty-four percent of those responding at brig entry agreed that they were worried that loved ones would be disappointed in them. By release, this response had dropped to 49 percent. At entry, 34 percent acknowledged a feeling of hopelessness in agreeing that "I sometimes feel that I will never get out of this place"; 27 percent still agreed with this statement shortly before they were released. Finally, a substantial 74 percent at entry and 90 percent at release agreed that they had made some friends at the brig.

## **Scale Scores and Length of Sentence**

It was felt that the length of sentence might be associated with differential effects of the brig experience, either because a longer sentence would mean additional exposure to programs and positive role models, or a longer sentence would be indicative of individual differences at entry that were related to the seriousness of the offense. To investigate this issue, the sample of prisoners was first divided into two groups: a short term group who had from 8 to 60 days between their first and second PINES questionnaires, and a long term group who had 61 or more days. Analysis of variance was employed to compare the mean scores of these groups on the PINES scales and on the amount of change in these scores between brig entry and release.

Three significant differences were found. The long term group had a higher mean self-esteem score at release ( $F_{1,1698} = 13.64, p = .0002$ ). They also had a greater increase in self-esteem score between entry and release ( $F_{1,1698} = 6.52, p = .0107$ ). On the other hand, the short termers experienced a greater decrease in anomia during their stay in the brig ( $F_{1,1776} = 4.90, p = .0270$ ).

## **Responsible Sailor Scale (RSS)**

Staff ratings of prisoners and awardees were added to the data base, through the use of the RSS, as a reality check on behavior changes reported by the prisoners and awardees themselves.

***Assumption: If behavior changes occur, they will be reflected in staff ratings as well as self-reports***

Typically, rating measures of this type have low reliability due to bias introduced by idiosyncratic rating styles or personal prejudice. In an attempt to minimize the effects of such biases, individuals were rated by two staff members at each rating cycle and mean rating scores were assigned. Ratings were performed three times during the awardee's or prisoner's confinement: while in the orientation period, shortly after moving into the general population, and just prior to release.

There were 5,585 individuals represented in the RSS data base. Of these, 2,064 had at least one initial rating score and one final rating score. In order to examine changes over time, analyses of the RSS were restricted to the latter group.

Mean rating scores represent the average rating over 18 dimensions of performance and attitude, ranging from obedience to punctuality to Navy orientation. Overall, prisoners and awardees received the highest ratings on the obedience and work quality dimensions. Lowest ratings were assigned on the Navy orientation and leadership ability dimensions. Population means for all dimensions at each point in the assessment cycle are summarized in Table C-1, in Appendix C.

For 68 percent of the prisoners and awardees, ratings at prerelease showed improvement over their initial ratings. The average amount of change was .5, based on a 7-point scale. Average ratings for the three cycles were:

Orientation rating	4.7
Second rating	4.8
Prerelease rating	5.2

These means reflect the typical profile for individual prisoners and awardees: near equal ratings for the first and second cycle with the highest rating at the time of release. It is believed that this pattern of near equal ratings at the first and second cycles does not necessarily reflect an absence of change in the behavior, but is the result of difficulties in rating individuals during orientation when staff have had only a short time to observe them.

Inter-rater reliability (a measure of agreement between raters) was assessed and found to be at acceptable levels at each administration. Spearman-Brown coefficients of reliability were:

First administration	.70
Second administration	.65
Final administration	.76

The reliability coefficient for the first administration is no doubt inflated by the practice of checking the midpoint of the scale when staff members feel they do not have sufficient information to provide a realistic rating. Of the 5270 ratings made during the orientation period, 27 percent fit into that category. When rating scales for which the midpoint was checked for all 18 dimensions by both raters were deleted from the analyses, it was found that the mean rating score at first administration was 4.8, and the inter-rater reliability coefficient was .68.

### **Prerelease Questionnaire**

The Prerelease Questionnaire solicits subjective assessments from prisoners and awardees of their experiences while confined. A total of 4,031 Prerelease Questionnaires representing 20 correctional facilities were received. Questionnaire items were presented in three parts dealing with (1) feelings and changes in feelings related to confinement, (2) behavioral changes, and (3) ratings of the helpfulness of selected programs and individuals. In the following section of this report, results have been organized in a similar manner.

## **Part I: Feelings About Fairness, Self, and Navy**

**Fair Treatment.** Prisoners and awardees were first asked if they had been treated fairly while in the correctional facility. Ninety-three percent of the prisoners responding stated that they had "always" or "usually" been treated fairly, while only 7 percent overall responded that they were "seldom" or "never" treated fairly. Neither the race nor sex of the respondent had a significant effect on perceptions of fair treatment.

Differences in the perception of fair treatment were, however, related to both the type of facility and the length of time confined. Awardees in stand-alone CCUs were most positive in their assessments of fair treatment, while prisoners confined in the consolidated briggs were least positive. When prisoners released from consolidated briggs were grouped according to the time elapsed since entry (60 days or less vs. 61 days or more) those with the longer time of confinement were more likely to state that they were treated unfairly, and were significantly different from the consolidateds' short-termers, prisoners from waterfront briggs, and awardees from CCUs.

The remaining four items in Part I of the Prerelease Questionnaire asked released prisoners and awardees to assess how their understanding and feelings about themselves and the Navy had changed since confinement in a correctional facility. These are therefore direct subjective measures, as opposed to the indirect measures represented by changes in scale scores of the PINES questionnaire.

**Understanding of Self.** Half of the prisoners and awardees completing the Prerelease Questionnaire stated that they now understood themselves and their problems "a lot better" than they had when they arrived, and another 24 percent thought their understanding of themselves and their problems was somewhat better. Only 2 percent of the respondents felt that they were more confused about themselves and their problems.

**Understanding Others.** The majority of these prisoners and awardees also believed that they now understood other people better than they had when they arrived at the correctional facilities. When asked how their understanding of others had changed, 65 percent chose the "lot better" or "somewhat better" options, 33 percent said that their understanding of others was just about the same, and only 2 percent stated that they were more confused about others than they had been. For these individuals, understanding oneself better does not always mean that one understands other people better, as illustrated by a correlation coefficient of .51 between the two responses.

**Positive Feelings About Self and Navy.** More than half of the respondents reported that they now felt a lot more positive about themselves compared to the way they had felt when they arrived at the correctional facilities, and another 22 percent felt somewhat more positive about themselves. In contrast, only 14 percent said that they felt a lot more positive about the Navy. The largest number (42%) stated that they felt about the same about the Navy as when they arrived at the brig or CCU, but for almost a third of the respondents, their confinement was associated with less positive feelings about the Navy.

Intuitively, feeling positive about oneself would appear to be related to feelings of self-esteem. This relationship was tested using the Pearson correlation procedure, which resulted in a modest

(although statistically significant) correlation coefficient of .20 between feeling positive about oneself and the final self-esteem score of the PINES questionnaire.

### Part II: Self-reports of Behavioral Change

Prisoners and awardees were asked to consider ways in which their behavior had changed since arriving at the brig or CCU. They were presented with a list of ten behavioral changes and asked to check all those where they thought a change had taken place. Thus, the number of behavioral changes indicated could range from zero (none checked) to ten (all checked).

The three behavioral changes claimed most frequently were: "I can accept responsibility for my actions," "I take more time to consider before I act," and "I am better at setting goals for myself." The option selected least often was "I have mastered some new vocational skills," which is seen as reflecting the lack of vocational training programs at many of the facilities. Complete information about the frequency with which each of the behavioral changes was reported can be found in Table C-2 in Appendix C.

A count of the changes claimed by each individual was then used as an index of behavioral change in further analyses. The behavioral change index approximated a normal distribution, as shown in Figure 3, with 5 percent reporting no behavioral changes and 6 percent who claimed that they had changed in all ten ways. The average number of behavioral statements checked was between four and five at both consolidated and waterfront brig.

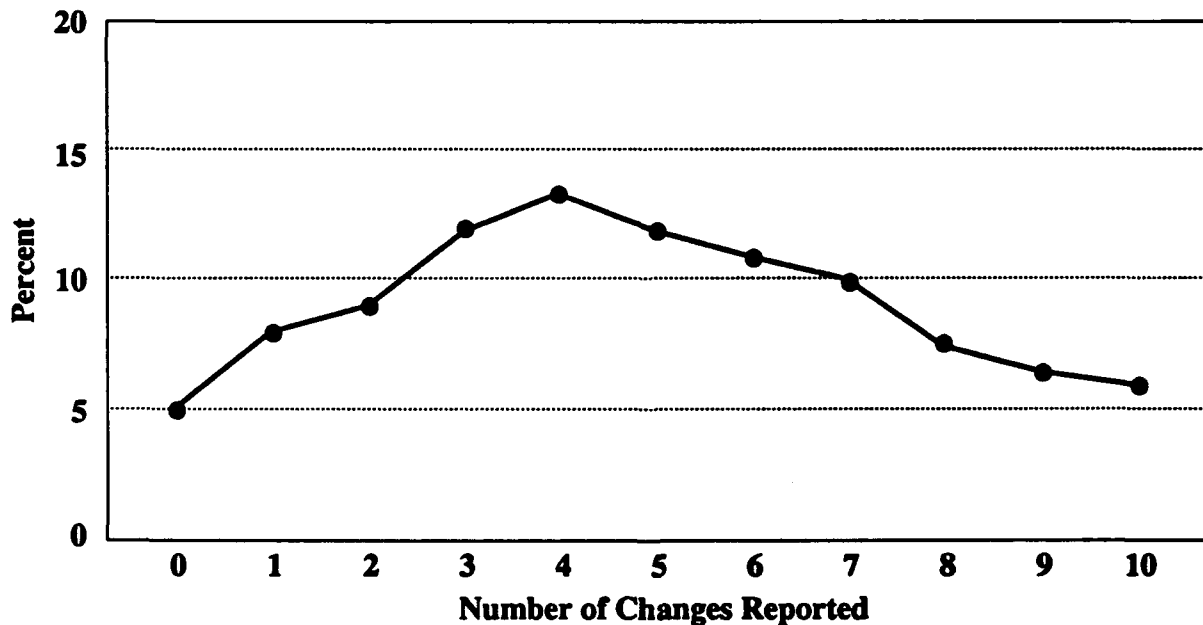


Figure 3. Total sample distribution of the behavioral change index.

The average number of behavioral changes reported by those leaving the CCU was significantly higher than the number reported at waterfront brigs, combined waterfront/CCU facilities, or consolidated brigs, as shown in Table 4. Within the consolidated population it was the group who had been confined longer than 60 days that reported slightly more behavioral change ( $t_{2541} = -1.95, p < .05.$ )

**Table 4**  
**Reported Behavioral Changes by Type of Facility**

Facility Type	Mean Changes
Consolidated Brigs	4.76
Waterfront Brigs	4.76
Correctional custody units (CCUs)	6.22
Combined Waterfront/CCU	5.07

### **Part III: Helpfulness of Programs and Staff**

**Helpfulness of Programs.** In this section of the Prerelease Questionnaire, prisoners and awardees were asked to indicate how helpful they had found various programs and individuals to be during their confinement, using a rating scale from 1 "not at all helpful" to 7 "very helpful." Respondents were instructed to rate only those programs in which they had participated and to indicate in the space provided when they had not participated in a program. Thus, the percent rating a program should be equivalent to the percent who participated. Overall participation in programs ranged from 77 percent receiving individual counseling down to 8 percent participating in the Counseling and Assistance Center (CAAC) program. Participation and helpfulness rating means for each of the programs can be found in Appendix C, Table C-3

Table 5 looks at the mean ratings for programs at each type of facility, including a summary of one-way analysis of variance procedures indicating the significance of differences in the group means. As this table shows, a significant amount of the variance in program ratings can be attributed to the type of facility. Generally, the small sub-sample of awardees rated programs more positively than did prisoners from either waterfront or consolidated brigs, and ratings tended to be somewhat more positive at combined waterfront/CCU facilities than at waterfront brigs without a CCU.

For a supplemental analysis of program helpfulness, consolidated prisoners were divided into two groups on the basis of length of confinement. Prisoners confined less than 60 days tended to rate programs somewhat more helpful than those confined more than 60 days. Differences between the short-term and long-term groups were significant in their helpfulness ratings of the Crossroads program, Alcoholics Anonymous, and Narcotics Anonymous. For these three programs, the group with the shorter confinement period said that they found these three programs more helpful than did the group with a longer confinement.

**Table 5**  
**Ratings of Programs by Type of Facility**

Program	Mean Program Ratings				Analysis of Variance Summary		
	Consolidated	Waterfront	CCU	Waterfront /CCU	df	F	Significance of F
Vocational training	4.97	3.93	5.00	4.60	1142	10.096	.000
Group counseling	4.65	4.76	6.03	4.85	2015	6.322	.000
Individual counseling	4.69	4.91	6.06	5.10	2418	11.344	.000
Alcoholics Anonymous	4.60	4.67	4.00	4.89	987	1.405	.239
Narcotics Anonymous	4.67	3.79	3.00	4.93	707	5.502	.001
Crossroads	4.60	3.79	6.00	4.16	912	4.973	.002
NADSAP	3.78	3.80	5.25	4.17	334	1.169	.322
CAAC	3.32	3.55	4.00	3.31	245	.194	.900
Religious counseling	5.43	5.18	5.83	5.61	1055	2.276	.078
Educational counseling	5.64	4.37	5.53	5.23	1339	18.972	.000

**Note.** CCU = correctional custody units, NADSAP = Naval Alcohol and Drug Safety Action Program, CAAC = Counseling and Assistance Center.

**Helpfulness of Individuals.** Prisoners and awardees leaving correctional facilities were asked to rate the helpfulness of the lead petty officer, counselor, and work center supervisor with whom they had been associated during their confinement. Overall, counselors received slightly higher ratings than did work center supervisors or lead petty officers (see Table C-4, in Appendix C.)

As with the helpfulness of programs, ratings of the helpfulness of people tended to be highest from the stand-alone CCUs and lowest from consolidated briggs. The differences associated with the type of facility were particularly notable in ratings of the counselors, where the mean rating assigned by CCU awardees was a very positive 6.56. Prisoners confined in consolidated briggs less than 60 days rated their work center supervisors lower than the group that had been confined in those facilities for more than 60 days ( $t_{2420} = -3.28, p = .001.$ )

## **Program Participation and Feelings About Self and Navy**

***Assumption: Better understanding of one's self and others will facilitate success in military or civilian life***

***Hypothesis: Exposure to retraining programs and positive role models will lead to more positive feelings about self and Navy***

To examine the relationship between program participation and changes in feelings about oneself and the Navy that occurred over the period of confinement, rating responses for each program were used to divide the sample into three groups: those who did not participate in a program, those who participated in a program but did not find it helpful (i.e., 1, 2, or 3 on the helpfulness scale), and those who participated in a program and found it helpful (4 through 7 on the scale). Regardless of which program was examined, those who rated it helpful were significantly different from nonparticipants and low raters in their answers to feeling positive about oneself, feeling positive about the Navy, understanding of self and understanding of others. That is, those who rated a program helpful tended to give more positive answers to the items dealing with feelings about self and Navy, and the significance levels of the differences indicate that such results are not likely to have occurred by chance.

## **Program Participation and Behavioral Change**

***Assumption: Certain behavioral changes are indicated for successful adaptation to military or civilian life***

***Hypothesis: Participation in brig retraining programs will help promote behavioral change***

The hypothesis that participation in corrections retraining programs would facilitate behavioral change was tested in a number of ways. First, a modest positive correlation ( $r = .18, p < .001$ ) was obtained between the total number of behavioral changes reported and the number of programs in which individuals participated. For each program, the sample was then partitioned into three groups based on program ratings of helpfulness: those who rated a program helpful, those who rated it not helpful, and those who had not participated in the program. As Table 6 shows, people who participated in a program reported more behavioral changes than nonparticipants, and those who rated a program helpful reported more behavioral changes than those who did not find it helpful.

**Table 6**

**Mean Number of Behavioral Changes by Program Rating Groups**

<b>Program</b>	<b>Rated Helpful</b>	<b>Rated Not Helpful</b>	<b>Did Not Participate</b>
Vocational Training	5.84	4.26	4.61
Group Counseling	5.60	4.06	4.35
Individual Counseling	5.48	3.74	4.24
Alcoholics Anonymous	5.48	4.24	4.80
Narcotics Anonymous	5.65	4.38	4.80
Crossroads	5.38	3.82	4.91
NADSAP	5.55	4.03	4.90
CAAC	5.74	4.32	4.90
Religious Counseling	5.66	4.16	4.64
Educational Courses	5.56	3.85	4.63

**Note.** NADSAP = Naval Alcohol and Drug Safety Action Program, CAAC = Counseling and Assistance Center.

In addition, the relationships between the ten individual measures of behavioral change and the perceived helpfulness of programs were examined. Table C-5 in Appendix C presents a matrix of the Spearman correlation coefficients obtained, along with their significance levels. In general, it can be said that individuals who rated programs most helpful were likely to report a greater number of behavioral changes.

**Behavioral Change and the Helpfulness of Staff**

***Assumption: Individual staff members, as role models, influence behavioral changes among the prisoners and awardees with whom they have close contact***

***Hypothesis: The more helpful a prisoner or awardee feels staff members have been, the more likely that behavioral changes have taken place***

Confirming the hypothesis, it was found that prisoners and awardees who reported that their behavior had changed in the specified ways were likely to rate the helpfulness of the staff higher than those who did not report behavioral change. Nonparametric correlation procedures revealed that relationships between perceived staff helpfulness and reported behavioral change were consistently positive and statistically significant, although no correlation coefficient obtained was higher than  $r = .24$ . The correlation matrix is found in Table C-6. Interestingly, being more willing

to accept responsibility for one's actions was found to relate equally to helpfulness ratings of the lead petty officer (LPO), the counselor, and the work center supervisor.

### Results From Multiple Data Sources

The analyses discussed in the following section utilize data from two or more sources and are therefore based on the smaller sample sizes that result from missing forms. The relationships among various self-reports of behavioral change made by prisoners and awardees and the ratings given them by corrections staff were examined to determine if agreement existed. The relationships between indirect and direct self-report measures provided by the prisoners and awardees were also tested. A pattern similar to the one found in the instrument-by-instrument analyses emerged. That is, correlations were in the desired direction, were statistically significant at  $p < .05$ , but were generally quite small.

#### Perceptions of Fair Treatment and Ratings by Staff

Prisoners' and awardees' perceptions of fair treatment were associated with the staff members' ratings of their conduct from the RSS. Fairness scores (high score means unfair treatment) were significantly correlated with both the final staff ratings ( $r = -.13, p < .001$ ) and with the amount of change between the initial and final ratings by staff ( $r = -.18, p < .001$ ).

#### Feelings About Self and Navy and Ratings by Staff

No significant correlation was found between individuals' positive feelings about themselves and the Navy and the way they were rated by brig staff. On the other hand, the amount of change between first and last staff ratings was found to be correlated with the change in prisoners' feelings about the Navy (high score means less positive feelings) ( $r = -.11, p = .003$ ).

#### PINES Scale Scores and Ratings by Staff

Scale scores from the final administration of the PINES questionnaire and staff ratings at the time of release were used in these analyses. Several of the scale scores were moderately but significantly correlated with the staff ratings, as shown in Table 7.

Table 7

#### Relationship Between PINES Scale Scores at Release and Final Staff Ratings

Item	Correlation Coefficient	Significance	n
Self-esteem	.10	.002	838
External locus of control	.13	<.001	844
Anomia	-.12	<.001	866
Belonging	.12	<.001	860
Expediency	-.09	.003	885

Note. PINES = Personality Inventory and Evaluation Survey.

## Self-reports of Behavioral Change and Ratings by Staff

These analyses focussed on responses to each of the ten behavioral change items from the Prerelease Questionnaire as well as a behavioral-change index representing a count of the behavioral changes that each person reported. The relationships between these variables, staff ratings at the time of release, and changes in staff ratings over time were examined.

**Individual Behavioral Changes.** Prisoners and awardees who said that they take more time to consider before acting, that they have mastered some new vocational skills, or that they can control their restlessness better were likely to receive more positive final ratings from the staff ( $r = .10$ ,  $r = .11$ , and  $r = .09$ , respectively; all  $p < .01$ ).

**Behavioral Change Index.** The number of behavioral changes reported by the prisoners and awardees was only weakly correlated with their ratings by staff at release ( $r = .07$ ,  $p = .033$ ) and with the amount of change in the staff ratings over time ( $r = .069$ ,  $p = .042$ ).

## Program Participation and Ratings by Staff

To see if program participation was associated with differences in staff ratings of behavior, prisoners and awardees were divided into participant and nonparticipant groups for each of the ten programs assessed on the Prerelease Questionnaire. Oneway analyses of variance were conducted using final staff ratings as the dependent variable. These procedures indicated that variance in ratings by the staff was generally not associated with program participation. However, there were two exceptions: those who participated in the Crossroads program were rated higher by staff than were nonparticipants, as were those who participated in educational courses. Table 8 summarizes these findings.

Table 8

### Analysis of Variance Summary: Program Participation Effects on Staff Ratings

Program	Final Staff Rating Mean		Analysis of Variance Summary		
	Participants	Nonparticipants	df	F	Significance of F
Crossroads	5.51	5.16	1431	27.76	.000
Educational Courses	5.35	5.16	1437	9.14	.002

## Perceptions of Fair Treatment and PINES Scale Scores

There were significant correlations between responses to the fairness item and final scores on most of the PINES scales. These results indicated that individuals who had a more external locus of control and those who had high anomia at release were more likely to say they had been treated unfairly (both  $p < .001$ ). On the other hand, those who had high scores on safety, belonging, and acceptance of authority at release were more likely to say they had been treated fairly (all  $p < .001$ ). Further, when PINES scale change scores between entry and release were examined, it was found that feeling fairly treated was significantly associated with changes to a more internal locus of

control, decreased anomia, increased safety, increased acceptance of authority, and decreased expediency (all  $p < .001$ ).

### **Program Participation and PINES Scale Scores**

Results presented in this section are based on personality scale data from the PINES Questionnaire combined with program data from the Prerelease Questionnaire.

***Hypothesis: After participation in selected programs, prisoners would score higher self-esteem, more internal locus of control, and lower anomia***

Each PINES scale was examined to determine if differences in scale scores were more strongly related to the type of facility or to program participation and perceptions of program helpfulness. For each program the sample was once again split into three groups representing nonparticipants, the "not-helpful" group, and those who rated the program helpful. Analysis of variance was then conducted on each scale, using the program participation variable and type of facility as independent factors. The most salient results are discussed below, and the corresponding analysis of variance summaries are included in Appendix C, Tables C-7 to C-15.

Looking first at the final scale scores, results of the analyses indicated that differences in self-esteem were associated primarily with the type of facility. Type of facility was not a significant factor in differences on the external locus of control scale. However, it was found that participation in individual counseling or Alcoholics Anonymous was a significant factor in those scores. Differences in anomia scores were also related to program participation but not to type of facility. For anomia, the programs most strongly associated with variance in scale scores were group counseling, individual counseling, and Crossroads. In each instance where program ratings were significant sources of variance, those who rated a program helpful had more positive scale scores than those who said it was not helpful, who in turn had more positive scores than nonparticipants.

Turning to scale change scores (i.e., second administration minus first administration scores) most of the variance in scores for self-esteem, locus of control, safety, belonging, and acceptance of authority was again related to type of facility. Participation in Crossroads and educational courses also made a significant contribution to variance in change scores on external locus of control. Variance in change scores on the anomia scale was not accounted for by facility type, but there were significant program participation effects for individual counseling and the Crossroads program.

If the same analyses are conducted using residual gain scores as opposed to simple change scores, the type of facility does not contribute significantly to their variance except for locus of control. Programs that were associated with positive residual gain scores in self-esteem, locus of control, and anomia were vocational training, group counseling, individual counseling, and educational courses. On the anomia measure only, residual gain scores were also associated with participation in Crossroads.

## Predicting "Success"

The success of Navy corrections retraining programs will ultimately be determined by the behavior of former prisoners and awardees after they are released from the correctional facility. Follow-up procedures have been established for the purpose of assessing the success of individuals returned to active duty, with initial results to be presented in a forthcoming report. In addition to success after release, it is also important to assess first-level success. That is, success demonstrated at the time of release. Two criteria were selected to represent first-level success: final ratings by staff members and the total number of behavioral changes reported by the prisoner or awardee. A series of stepwise multiple regressions were performed to investigate whether these two criteria of success could be predicted from knowledge of program participation, PINES scale scores, length of confinement, or perceived helpfulness of staff and programs. Table 9 summarizes results of the multiple regression procedures.

Table 9

### Results of Multiple Regression Analyses to Predict Retraining Success

Success Indicator	Predictor Variables	Mult <i>R</i>	<i>R</i> <sup>2</sup>	<i>B</i>
<b>Behavioral Change Index</b>	Helpfulness of individual counseling	.36	.13	.17
	Helpfulness of the LPO	.44	.19	.28
	Helpfulness of vocational training	.47	.22	.16
	Release score on acceptance of authority	.49	.24	.21
	Helpfulness of Narcotics Anonymous	.50	.25	.14
	Decrease in external locus of control score	.51	.26	-.07
	Helpfulness of group counseling	.52	.27	.10
<b>Final Rating by Staff</b>	Days confined	.24	.06	.002
	Helpfulness of work center supervisor	.32	.10	.09
	Entry score on anomia	.35	.12	-.06
	Type of facility	.37	.13	-.10
	Helpfulness of the LPO	.38	.15	.07

Note. Mult *R* = multiple correlation coefficient, *R*<sup>2</sup> = variance accounted for, *B* = slope, LPO = lead petty officer.

**Self-reported Behavioral Change.** The first of the multiple regression analyses utilized the behavioral change index as the dependent variable. Groups of variables entered into the equation as predictors were the helpfulness ratings of programs, helpfulness of staff individuals, PINES scale scores at entry and release, amount of change in PINES scale scores between entry and release, type of facility, final ratings by staff members, and total program participation. The criterion for entry was a probability of *F* of .05.

Seven variables were found to be useful predictors of self-reported behavioral change, as shown in Table 9. Yielding a multiple *R* of .52, these variables were: the perceived helpfulness of the individual's LPO; the perceived helpfulness of the individual counseling, Narcotics

Anonymous, vocational training, and group counseling programs; the amount of change on the locus of control score, and the release score on the acceptance of authority scale.

**Ratings by Staff at Release.** Considering individuals' final ratings by staff members as the measure of success, the perceived helpfulness of the LPO and work center supervisor were again significant in the regressions equation. The other three variables entering the equation were the length of confinement, the type of facility, and initial anomia scores. The multiple *R* achieved was .38.

## Discussion

It is frequently possible to overcome the ambiguity of evaluation research results and compensate for the limitations of the individual measures by relying on multiple lines of evidence (Lipsey, Cordray, and Berger, 1981). Throughout this report, convergent evidence has pointed to significant change in the attitudes and behaviors of prisoners and awardees who have been confined in Navy correctional facilities. These changes have been assessed by both indirect and direct self-report measures, and through the opinions of staff members who provided multiple ratings for individuals over their period of confinement. Although the relationships among the various outcomes were significant, they were not particularly strong. Nevertheless, the obtained relationships are notable given the fact that each group of variables is measuring a slightly different set of behaviors or attitudes. The evidence of change in the confined population was also confirmed by the comparison with the Navy normative scores, which indicated that significant differences between the normative and confined samples had largely disappeared by the time confinees were released.

The results reported here are based on cumulative data collected over a 2-year period while evaluation procedures were being put into place. Consequently they reflect some inconsistencies among and within facilities in the way that questionnaires were administered and ratings were taken. In addition to inconsistencies in data collection procedures, certain operational, programmatic, and policy changes aimed at enhancing the effectiveness of retraining were also being implemented over the same period. This meant that results related to a new policy would be contaminated by data collected earlier under a previous policy. Now that these two problems have been largely overcome, it is believed that the findings obtained here will be confirmed and strengthened in subsequent analyses.

The implementation period also provided an opportunity to test the data collection instruments under actual field conditions and to make minor additions or changes where indicated. For example, among the personality dimension scales of the PINES Questionnaire, the least amount of positive change was reflected by scores on the values scales that had relatively low reliability. To improve the reliability of those scales, several additional items were written and added to revised questionnaires.

One of the concepts at the core of the Navy corrections philosophy is the assumption that staff members who are appropriate role models are instrumental in changing attitudes and behaviors of individuals confined in correctional facilities. There is a great deal of theoretical support for such an assumption. Both learning theory and social psychology offer principles that suggest the importance of appropriate role models in the development of strategies for changing deviant

behavior. For example, learning theory suggests that modeling is the most influential of the various modes by which humans learn new types of conduct, and that favorable self-conceptions come from the responses that a person's conduct elicits from other people. Aggregation theory from the educational literature (Janowitz, 1972) further suggests that a single "teacher" should be responsible for well-being and educational process, although the "teacher" may involve others in the process. Applying these principles, the Navy corrections program has moved toward the LPO concept where one staff member remains responsible for a small group of prisoners or awardees during their entire length of confinement. Thus, socialization and learning are facilitated by more intensive human interaction than was possible under the old system.

The idea that staff members exert a strong influence on the successful retraining of prisoners and awardees was supported by these analyses. We have seen, for example, that how individuals rated the helpfulness of their LPOs was an important predictor of both measures of success. We also found there were significant differences in the helpfulness ratings for LPOs, counselors, and work center supervisors among the various types of facilities, with awardees from the stand-alone CCU facilities rating staff higher overall. The question then was whether staff members at some facilities were interacting with prisoners/awardees in a more effective way, or whether there might be systematic differences in the acceptance of authority measure associated with the type of individual confined in the various facilities (i.e., did CCU awardees who rated staff more helpful than consolidated brig prisoners also score higher on acceptance of authority?) When that question was investigated, variance in staff helpfulness ratings was found to be associated with facility type but not with acceptance of authority scores. It is possible, however, that this lack of effect may result from the relatively low reliability of the acceptance of authority measure. A planned future revision of the PINES questionnaire will include an attempt to improve that scale.

People who believe in punishment as a deterrent have occasionally suggested that it is the simple fact of being confined that encourages individuals to change their behavior, although recidivism rates in the civilian community would tend to discourage that notion. These results provide evidence that participation in programs offered in the correctional facilities contributes to measures of first-level success. For each of the ten programs considered, those who rated it helpful reported more behavioral change than did nonparticipants. Additionally, helpfulness ratings for four of the programs were significant predictors of measures of success.

Future research efforts will involve a more detailed study of differences in program implementation across sites, as well as a thorough investigation of the characteristics of programs associated with success.

We have identified the measures of success used in these analyses as "first-level success." That is, they represent success at the time of release from a correctional facility. "Second-level success" reflects what happens to the individual after release and the durability of changes that have occurred. In the case of those returned to active duty, plans called for success to be measured by performance and completion of the obligated term of enlistment. However, with the Navy in its current downsizing mode, these may no longer be valid indicators of success of the correctional programs. If administrative separations following confinement are to be the general rule, there is little opportunity for a released prisoner to achieve second-level success regardless if behavioral changes persist after release. Under such conditions, the measurement of first-level success becomes even more important for evaluating the Navy correctional system.

Recently, there has been a great deal of interest in learning more about the backgrounds of certain types of offenders. As a result, the planned expansion in the area of life history data for prisoners and awardees has now become a priority task. The inclusion of life history in the data base that is being constructed for corrections program evaluation will enhance its value for a number of research and operational applications.

The evaluation of Navy corrections program effectiveness is essentially an attempt to measure change in prisoners and awardees attributable to their experiences during confinement. For this analysis, we elected to use the traditional approach of computing change scores by subtracting score one from score two. However, several new approaches for measuring and analyzing change over time are currently being considered. As Collins (1991) argues, a dynamic approach to detect intraindividual differences may be more appropriate for longitudinal measurement than the more static inter-individual techniques commonly in use. Further investigation of these new methods and their application to corrections data is presently under way.

## **Recommendations**

Based upon the results obtained in this analysis, recommendations for ongoing evaluation of Navy corrections programs include the following:

1. The demonstrated reliability and first-level validity of the instruments now in use is such that they are appropriate for purposes of the project, and their continued use is advocated.
2. Planning for data collection should precede programmatic and policy changes in order to measure the effects of such changes.
3. Operational measures of the quality and intensity of interactions between corrections staff members and prisoners/awardees should be developed, and that information added to the data base.
4. More detailed background (life history) information should be collected.
5. New dynamic approaches to measuring intraindividual differences longitudinally should be investigated.

## References

- Collins, L. M. (1991). Measurement in longitudinal research. In L. M. Collins & J. L. Horn (Eds.), *Best methods for the analysis of change: Recent advances, unanswered questions, future directions*. Washington, DC: American Psychological Association.
- Fleming, J. & Courtney, B. (1984). The dimensionality of self-esteem: Hierarchical facet model for revised measurement scales. *Journal of Personality and Social Psychology*, 46, 404-421.
- James, W. H. (1957). James' internal-external locus of control scale. In J. Robinson & P. Shaver (Eds.), *Measures of social psychological attitudes* (pp 237-243). Ann Arbor: Institute of Social Research.
- Janowitz, M. (1972). *Institution building in urban education*. Chicago: University of Chicago Press.
- Kerce, E. W. (1989). *Navy corrections program evaluation: Volume I. Design* (NPRDC-TR-89-17). San Diego, CA: Navy Personnel Research and Development Center.
- Lipsey, M. W., Cordray, D. S., & Berger, D. E. (1981). Evaluation of a juvenile diversion program: Using multiple lines of evidence. *Evaluation Review*, 5, 283-306.
- Rosenberg, R. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Srole, L. (1956). Social integration and certain corollaries. *American Sociological Review*, 21, 709-716.
- Withey, S. (1965). The U.S. and the U.S.S.R.: A report of the public's perspective on United States-Russian relations in late 1961. In D. Bobrow (Ed.), *Components of defense policy*. Chicago: Rand McNally

**Appendix A**  
**Data Collection Instruments**

**PERS-84**  
**NAVY CORRECTIONS PROGRAM**

***PINES QUESTIONNAIRE***

**Form No. 809F2**



		<b><i>STRONGLY DISAGREE</i></b>	<b><i>DISAGREE</i></b>	<b><i>AGREE</i></b>	<b><i>STRONGLY AGREE</i></b>
7.	When things are going well for me, I consider it a run of good luck.	_____	_____	_____	_____
8.	I have never had anyone to share my private thoughts and feelings with.	_____	_____	_____	_____
9.	The average person is probably better off today than ever.	_____	_____	_____	_____
10.	Everyone should have an equal chance and an equal say in most things.	_____	_____	_____	_____
11.	I take a positive attitude toward myself.	_____	_____	_____	_____
12.	The one person that I care for most feels the same about me.	_____	_____	_____	_____
13.	I worry about my physical safety while I am here in the brig.	_____	_____	_____	_____
14.	Success is mostly a matter of getting good breaks.	_____	_____	_____	_____
15.	Obedience and respect for authority are the most important things in character that children should learn.	_____	_____	_____	_____
16.	I wish I could have more respect for myself.	_____	_____	_____	_____
17.	I feel that I am pretty much alone in the world.	_____	_____	_____	_____
18.	Most of my friends are better looking than I am.	_____	_____	_____	_____
19.	Many times I feel that we might just as well make many of our decisions by flipping a coin.	_____	_____	_____	_____
20.	At times I think I am no good at all.	_____	_____	_____	_____
21.	Success in dealing with people seems to be more a matter of the other person's moods and feelings rather than anything I do.	_____	_____	_____	_____

		<b>STRONGLY DISAGREE</b>	<b>DISAGREE</b>	<b>AGREE</b>	<b>STRONGLY AGREE</b>
22.	I feel inferior to most people when it comes to athletic ability.	_____	_____	_____	_____
23.	The prisoners who are bullies make my life miserable.	_____	_____	_____	_____
24.	There is someone in my life that I can depend upon.	_____	_____	_____	_____
25.	Many times I feel that I have little influence over the things that happen to me.	_____	_____	_____	_____
26.	Nowadays a person has to live pretty much for today and let tomorrow take care of itself.	_____	_____	_____	_____
27.	A group of people that are nearly equal will work a lot better than one where people have bosses and ranks over one another.	_____	_____	_____	_____
28.	I certainly feel useless at times.	_____	_____	_____	_____
29.	To make money there are no right and wrong ways anymore, only easy and hard ways.	_____	_____	_____	_____
30.	I worry that the people I care about are disappointed in me.	_____	_____	_____	_____
31.	I feel safe here.	_____	_____	_____	_____
32.	Everyone should have what he needs, the important things we have belong to all of us.	_____	_____	_____	_____
33.	I feel that I'm a person of worth, at least on an equal basis with others.	_____	_____	_____	_____
34.	I think that life is mostly a gamble.	_____	_____	_____	_____
35.	Most people in public office are not really interested in the problems of the average person.	_____	_____	_____	_____
36.	I am an attractive person.	_____	_____	_____	_____
37.	Our family members maintain close ties.	_____	_____	_____	_____

		<b>STRONGLY DISAGREE</b>	<b>DISAGREE</b>	<b>AGREE</b>	<b>STRONGLY AGREE</b>
38.	It isn't wise to plan too far ahead, because most things turn out to be a matter of good or bad fortune anyhow.	_____	_____	_____	_____
39.	Most people will go out of their way to help someone else.	_____	_____	_____	_____
40.	Since no value lasts forever, the only real values are those that fit the needs of right now.	_____	_____	_____	_____
41.	I am frightened of some of the prisoners here.	_____	_____	_____	_____
42.	I feel that I do not have much to be proud of.	_____	_____	_____	_____
43.	I am good at sports.	_____	_____	_____	_____
44.	Getting a good job seems to be largely a matter of being in the right place at the right time.	_____	_____	_____	_____
45.	I know that the people I care about stand behind me all the way.	_____	_____	_____	_____
46.	Young people sometimes get rebellious ideas but as they grow up they ought to get over them.	_____	_____	_____	_____
47.	On the whole, I am satisfied with myself.	_____	_____	_____	_____
48.	The brig staff makes sure that the trouble-makers here can't bother the rest of us.	_____	_____	_____	_____
49.	There's not much use in worrying about things...what will be, will be.	_____	_____	_____	_____
50.	My spouse/boyfriend/girlfriend is a very responsible person.	_____	_____	_____	_____
51.	All in all, I am inclined to feel that I am a failure.	_____	_____	_____	_____
52.	I have usually found that what is going to happen will happen, no matter what I do.	_____	_____	_____	_____

	<b>STRONGLY DISAGREE</b>	<b>DISAGREE</b>	<b>AGREE</b>	<b>STRONGLY AGREE</b>
53. The solution to almost any human problem should be based on the situation at the time, not on some general idea of right and wrong.	_____	_____	_____	_____
54. We should all admire a person who starts out bravely on their own.	_____	_____	_____	_____
55. Knowing that I am important to someone helps me through the bad times.	_____	_____	_____	_____
56. I sometimes feel that I will never get out of this place.	_____	_____	_____	_____
57. One should not depend on other persons or things, the center of life should be found inside oneself.	_____	_____	_____	_____
58. Do what you want to do and worry about the future later.	_____	_____	_____	_____
59. I have made some friends here.	_____	_____	_____	_____
60. People in our family help one another.	_____	_____	_____	_____

**PERS-84**  
**NAVY CORRECTIONS PROGRAM**

***PRERELEASE QUESTIONNAIRE***

Your SSN: |\_|\_|\_|-|\_|\_|-|\_|\_|\_|\_|

Today's Date: \_\_\_\_\_

Before you are released from the brig, you are required to complete this questionnaire to be used by Navy researchers who are evaluating the Corrections program. The information you provide will be used only for Research purposes. There are no right or wrong answers to these questions. The researchers want to learn about your opinions and your experiences in the brig.

**PART I.** In this section, carefully read all the answers possible for each question, then select **ONE** answer which best reflects how you feel. Then **CIRCLE** the corresponding number.

1. How fairly do you think you have been treated in the brig?
  1. I was always treated fairly.
  2. I was usually treated fairly.
  3. I was seldom treated fairly.
  4. I was never treated fairly.
  
2. How has your understanding of **YOURSELF** changed since you came to the brig?
  1. I understand myself and my problems a lot better than I did before I came here.
  2. I understand myself and my problems somewhat better than I did before I came here.
  3. I understand myself just about the same as I did before I came here.
  4. I am more confused than ever about myself and my problems.
  
3. How has your understanding of **OTHER PEOPLE** changed since you came to the brig?
  1. I understand other people a lot better now.
  2. I understand other people somewhat better now.
  3. I understand other people just about the same as I did before I came here.
  4. I am more confused than ever when it comes to understanding others.

4. How have your feelings about **YOURSELF** changed while you... have been in the brig?

1. I feel a lot more positive about myself
2. I feel somewhat more positive about myself
3. I feel just about the same about myself
4. I feel somewhat less positive about myself
5. I feel a lot less positive about myself

5. How have your feelings about the **NAVY** changed while you have been in the brig?

1. I feel a lot more positive about the Navy.
2. I feel somewhat more positive about the Navy.
3. I feel just about the same about the Navy.
4. I feel somewhat less positive about the Navy.
5. I feel a lot less positive about the Navy.

**PART II.** In this section, you are asked to think about how your **BEHAVIOR** may have changed since you came to this brig. Read the statements below and put a check mark in front of **ALL** statements that are true of you. Please be as honest as you can. Remember, **YOU MAY CHECK MORE THAN ONE.**

- \_\_\_ 1. I don't lose my temper as easily as I did.
- \_\_\_ 2. I take more time to consider before I act.
- \_\_\_ 3. I don't brood about what has happened in the past as much as I did before.
- \_\_\_ 4. I am better at setting goals for myself.
- \_\_\_ 5. I communicate better than I did.
- \_\_\_ 6. I have mastered some new vocational skills.
- \_\_\_ 7. I can control my restlessness better.
- \_\_\_ 8. It is easier for me to ask others for help.
- \_\_\_ 9. I can work with others better.
- \_\_\_ 10. I can accept responsibility for my actions.

**PART III.**

A. Here is a list of programs in which you may have participated since you came to this brig. Please **CIRCLE ONE NUMBER** on each scale to indicate how much a program helped you. If you did not participate in a program, put a check in the column at the end.

		<b>Not Applicable</b>
a.	Vocational Training	
	Not at all helpful <input type="checkbox"/> [1] <input type="checkbox"/> [2] <input type="checkbox"/> [3] <input type="checkbox"/> [4] <input type="checkbox"/> [5] <input type="checkbox"/> [6] <input type="checkbox"/> [7] <input type="checkbox"/> Very Helpful	_____
	Somewhat Helpful	
b.	Group Counseling	
	Not at all helpful <input type="checkbox"/> [1] <input type="checkbox"/> [2] <input type="checkbox"/> [3] <input type="checkbox"/> [4] <input type="checkbox"/> [5] <input type="checkbox"/> [6] <input type="checkbox"/> [7] <input type="checkbox"/> Very Helpful	_____
	Somewhat Helpful	
c.	Individual Counseling	
	Not at all helpful <input type="checkbox"/> [1] <input type="checkbox"/> [2] <input type="checkbox"/> [3] <input type="checkbox"/> [4] <input type="checkbox"/> [5] <input type="checkbox"/> [6] <input type="checkbox"/> [7] <input type="checkbox"/> Very Helpful	_____
	Somewhat Helpful	
d.	Alcoholic Anonymous	
	Not at all helpful <input type="checkbox"/> [1] <input type="checkbox"/> [2] <input type="checkbox"/> [3] <input type="checkbox"/> [4] <input type="checkbox"/> [5] <input type="checkbox"/> [6] <input type="checkbox"/> [7] <input type="checkbox"/> Very Helpful	_____
	Somewhat Helpful	
e.	Narcotics Anonymous	
	Not at all helpful <input type="checkbox"/> [1] <input type="checkbox"/> [2] <input type="checkbox"/> [3] <input type="checkbox"/> [4] <input type="checkbox"/> [5] <input type="checkbox"/> [6] <input type="checkbox"/> [7] <input type="checkbox"/> Very Helpful	_____
	Somewhat Helpful	
f.	Crossroads	
	Not at all helpful <input type="checkbox"/> [1] <input type="checkbox"/> [2] <input type="checkbox"/> [3] <input type="checkbox"/> [4] <input type="checkbox"/> [5] <input type="checkbox"/> [6] <input type="checkbox"/> [7] <input type="checkbox"/> Very Helpful	_____
	Somewhat Helpful	
g.	NADSAP	
	Not at all helpful <input type="checkbox"/> [1] <input type="checkbox"/> [2] <input type="checkbox"/> [3] <input type="checkbox"/> [4] <input type="checkbox"/> [5] <input type="checkbox"/> [6] <input type="checkbox"/> [7] <input type="checkbox"/> Very Helpful	_____
	Somewhat Helpful	
h.	CAAC	
	Not at all helpful <input type="checkbox"/> [1] <input type="checkbox"/> [2] <input type="checkbox"/> [3] <input type="checkbox"/> [4] <input type="checkbox"/> [5] <input type="checkbox"/> [6] <input type="checkbox"/> [7] <input type="checkbox"/> Very Helpful	_____
	Somewhat Helpful	
i.	Religious Counseling	
	Not at all helpful <input type="checkbox"/> [1] <input type="checkbox"/> [2] <input type="checkbox"/> [3] <input type="checkbox"/> [4] <input type="checkbox"/> [5] <input type="checkbox"/> [6] <input type="checkbox"/> [7] <input type="checkbox"/> Very Helpful	_____
	Somewhat Helpful	
j.	Educational Courses	
	Not at all helpful <input type="checkbox"/> [1] <input type="checkbox"/> [2] <input type="checkbox"/> [3] <input type="checkbox"/> [4] <input type="checkbox"/> [5] <input type="checkbox"/> [6] <input type="checkbox"/> [7] <input type="checkbox"/> Very Helpful	_____
	Somewhat Helpful	

B. Indicate how helpful each of the following people were to you while you were in the brig. **CIRCLE ONE NUMBER ON EACH SCALE.**

1. How helpful was your LPO?

Not at all helpful |  [1]  [2]  [3]  [4]  [5]  [6]  [7] | Very Helpful  
Somewhat Helpful

2. How helpful was your counselor?

Not at all helpful |  [1]  [2]  [3]  [4]  [5]  [6]  [7] | Very Helpful  
Somewhat Helpful

3. How helpful was your work center supervisor?

Not at all helpful |  [1]  [2]  [3]  [4]  [5]  [6]  [7] | Very Helpful  
Somewhat Helpful

4. How helpful were other prisoners?

Not at all helpful |  [1]  [2]  [3]  [4]  [5]  [6]  [7] | Very Helpful  
Somewhat Helpful

# RESPONSIBLE SERVICE MEMBER SCALE

For: \_\_\_\_\_  
Name

SSN | | | | - | | | - | | | |

For each item, place an 'X' between the vertical lines to show where **THIS SERVICE MEMBER** rates between columns (a) and (b). Base your decision on all available information and your own personal opinion.

(a)	(1) (2) (3) (4) (5) (6) (7)	(b)
Insubordinate; rebellious	_ _ _ _ _ _ _	Obedient; follows orders
Avoids work	_ _ _ _ _ _ _	Hard worker
Poor quality work	_ _ _ _ _ _ _	Good quality work
Irresponsible; never accepts blame	_ _ _ _ _ _ _	Responsible; accountable
Lacks leadership ability	_ _ _ _ _ _ _	Has leadership ability
Complainer; negative attitude	_ _ _ _ _ _ _	Enthusiastic, can-do attitude
Poor, slovenly appearance	_ _ _ _ _ _ _	Neat, military appearance
Repeated disciplinary problems	_ _ _ _ _ _ _	No disciplinary problems
Uneducated; unskilled	_ _ _ _ _ _ _	Knowledgeable; skilled
Unconcerned; selfish	_ _ _ _ _ _ _	Caring; helpful
Unreliable	_ _ _ _ _ _ _	Dependable
Always late	_ _ _ _ _ _ _	Punctual
Lazy	_ _ _ _ _ _ _	Industrious
Devious	_ _ _ _ _ _ _	Straightforward
Dishonest	_ _ _ _ _ _ _	Honest
Dislikes military service	_ _ _ _ _ _ _	Military career oriented
No clear goals	_ _ _ _ _ _ _	Goal directed
Immature; uses poor judgment	_ _ _ _ _ _ _	Mature; uses good judgment

Completed by ID #: \_\_\_\_\_

Date: \_\_\_\_\_

**This is: (check one)**

Indoc rating \_\_\_\_\_  
2nd rating \_\_\_\_\_  
Final rating \_\_\_\_\_

**Appendix B**  
**Composition and Reliability of PINES Scales**

## Composition and Reliability of PINES Scales

<u>Scale</u>	<u>Reliability (alpha)</u>	
	<u>PINES A</u>	<u>PINES B</u>
<b>Self-Esteem</b>	<b>.86</b>	<b>.87</b>
Q1 I feel that I have a number of good qualities.		
Q5 I am able to do things as well as most other people.		
Q11 I take a positive attitude toward myself.		
Q16 I wish I could have more respect for myself. (R)		
Q18 Most of my friends are better looking than I am. (R)		
Q20 At times I think I am no good at all. (R)		
Q22 I feel inferior to most people when it comes to athletic ability. (R)		
Q28 I certainly feel useless at times. (R)		
Q33 I feel that I'm a person of worth, at least on an equal basis with others.		
Q36 I am an attractive person.		
Q42 I feel that I do not have much to be proud of. (R)		
Q43 I am good at sports.		
Q47 On the whole, I am satisfied with myself. (R)		
Q51 All in all, I am inclined to feel that I am a failure.(R)		
 <b>External Locus of Control</b>	 <b>.80</b>	 <b>.84</b>
Q2 It is difficult for ordinary people to have much control over what politicians do in office.		
Q7 When things are going well for me, I consider it a run of good luck.		
Q14 Success is mostly a matter of getting good breaks.		
Q19 Many times I feel that we might just as well make many of our decisions by flipping a coin.		
Q21 Success in dealing with people seems to be more a matter of the other person's moods and feelings rather than anything I do.		
Q25 Many times I feel that I have little influence over the things that happen to me.		
Q34 I think that life is mostly a gamble.		
Q38 It isn't wise to plan too far ahead, because most things turn out to be a matter of good or bad fortune anyhow.		
Q44 Getting a good job seems to be largely a matter of being in the right place at the right time.		
Q49 There's not much use in worrying about things... what will be, will be.		
Q52 I have usually found that what is going to happen will happen, no matter what I do.		

Note: (R) means that the item is reverse-scored

<b>Scale</b>	<b>Reliability (alpha)</b>	
	<b>PINES A</b>	<b>PINES B</b>
<b>Anomia</b>	<b>.51</b>	<b>.52</b>
Q3		
Q9		
Q26		
Q29		
Q35		
Q39		
<b>Safety</b>	<b>.60</b>	<b>.61</b>
Q13		
Q23		
Q31		
Q41		
<b>Belonging</b>	<b>.81</b>	<b>.82</b>
Q8		
Q12		
Q17		
Q24		
Q37		
Q45		
Q55		
Q60		
<b>Acceptance of Authority</b>	<b>.51</b>	<b>.55</b>
Q4		
Q15		
Q46		

Note: (R) means that the item is reverse-scored

<b>Scale</b>	<b>Reliability (alpha)</b>	
	<b>PINES A</b>	<b>PINES B</b>
<b>Equalitarianism</b>	<b>.26</b>	<b>.23</b>
Q10	Everyone should have an equal chance and an equal say in most things.	
Q27	A group of people that are nearly equal will work a lot better than one where people have bosses and ranks over one another.	
Q32	Everyone should have what he needs, the important things we have belong to all of us.	
<b>Need-determined Expression</b>	<b>.44</b>	<b>.52</b>
Q40	Since no value lasts forever, the only real values are those that fit the needs of right now.	
Q53	The solution to almost any human problem should be based on the situation at the time, not on some general idea of right and wrong.	
Q58	Do what you want to do and worry about the future later.	
<b>Individualism</b>	<b>.34</b>	<b>.34</b>
Q6	In life a person should mostly "go it alone," working on one's own and trying to make his or her own life.	
Q54	We should all admire a person who starts out bravely on their own.	
Q57	One should not depend on other persons or things, the center of life should be found inside oneself.	

**Appendix C**  
**Supplemental Tables**

**Table C-1**  
**Mean Ratings by Staff Members**

Dimension	Time 1	Time 2	Time 3
Obedience	4.963	5.060	5.452
Hard Worker	4.854	4.986	5.384
Quality Worker	4.864	4.991	5.409
Responsible	4.768	4.845	5.244
Leadership	4.425	4.362	4.725
Enthusiastic	4.697	4.752	5.137
Appearance	4.901	5.042	5.441
Discipline	4.877	5.091	5.361
Knowledgeable	4.772	4.875	5.283
Caring	4.732	4.810	5.206
Dependable	4.739	4.848	5.244
Punctual	4.822	4.974	5.360
Industrious	4.726	4.842	5.235
Straightforward	4.803	4.896	5.257
Honest	4.822	4.870	5.232
Navy Oriented	4.189	4.272	4.454
Goal Directed	4.570	4.585	4.923
Mature	4.423	4.530	4.883

**Table C-2**  
**Self Reports of Positive Behavioral Changes**

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Behavior	Percent Reporting Change
II.1 Don't lose temper as easily	50
II.2 Take more time to consider before acting	73
II.3 Don't brood about the past as much	48
II.4 Better at setting personal goals	60
II.5 Communicate better	43
II.6 Mastered some new vocational skills	18
II.7 Can control restlessness better	41
II.8 Easier to ask others for help	36
II.9 Work with others better	40
II.10 Can accept responsibility for my actions	77

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**Table C-3**  
**Helpfulness Ratings of Programs by Participants**

Not at all Helpful	[1]	[2]	[3]	[4]	[5]	[6]	[7]	Very Helpful
Somewhat Helpful								

Program	Percent Participating	Mean Rating
Vocational Training	37	4.57
Group Counseling	63	4.77
Individual Counseling	77	4.93
Alcoholics Anonymous	31	4.63
Narcotics Anonymous	22	4.58
Crossroads	28	4.43
NADSAP	11	3.81
CAAC	8	3.27
Religious Counseling	34	5.47
Educational Courses	43	5.23

**Table C-4**  
**Helpfulness Ratings of People**

Not at all Helpful	[1]	[2]	[3]	[4]	[5]	[6]	[7]	Very Helpful
Somewhat Helpful								

Person	Mean Rating
Lead Petty Officer	4.55
Counselor	5.40
Work Center Supervisor	5.08
Other Prisoners	4.84

Table C-3A

Program Participation and Ratings at Consolidated Brigs

Not at all Helpful		[1]		[2]		[3]		[4]		[5]		[6]		[7]		Very Helpful
Somewhat Helpful																

Program	Charleston		Miramar	
	% Participating	Rating Mean	% Participating	Rating Mean
Vocational Training	36	5.20	30	4.78
Group Counseling	59	4.65	64	4.65
Individual Counseling	75	4.88	68	4.52
Alcoholics Anonymous	30	4.55	34	4.58
Narcotics Anonymous	25	4.44	34	4.74
Crossroads	49	4.53	70	4.60
NADSAP	13	4.00	12	3.53
CAAC	7	3.29	10	3.24
Religious Counseling	41	5.91	29	4.90
Educational Courses	60	6.06	43	5.34

Table C-4A

Ratings of Individuals at Consolidated Brigs

Program	Charleston Rating Mean	Miramar Rating Mean
Lead Petty Officer	4.43	4.01
Counselor	4.88	4.97
Work Center Supervisor	5.17	4.62
Other Prisoners	4.74	4.52

Table C-5

## Relationship Between Program Ratings and Behavioral Changes

Behavior	Programs									
	Vocational Training	Group Counseling	Individual Counseling	Alcoholics Anonymous	Narcotics Anonymous	Crossroads	NADSAP	CAAC	Religious Counseling	Educational Courses
Don't lose temper as easily	.15 N=1434 p < .001	.18 N=2480 p < .001	.21 N=3017 p < .001	.14 N=1201 p < .001	.16 N=859 p < .001	.15 N=1096 p < .001	.25 N=428 p < .001	.30 N=315 p < .001	.14 N=1316 p < .001	.18 N=1675 p < .001
Take more time to consider before acting	.14 N=1435 p < .001	.20 N=2481 p < .001	.19 N=3018 p < .001	.17 N=1202 p < .001	.19 N=859 p < .001	.21 N=1097 p < .001	.22 N=428 p < .001	.20 N=315 p < .001	.13 N=1317 p < .001	.12 N=1675 p < .001
Don't brood about past as much	.11 N=1435 p < .001	.16 N=2481 p < .001	.16 N=3018 p < .001	.07 N=1202 p = .010	.12 N=859 p < .001	.15 N=1097 p < .001	.06 N=428 p = .207	.02 N=315 p = .776	.13 N=1317 p < .001	.13 N=1675 p < .001
Better at setting goals	.17 N=1435 p < .001	.22 N=2481 p < .001	.20 N=3018 p < .001	.16 N=1202 p < .001	.13 N=859 p < .001	.22 N=1097 p < .001	.16 N=428 p = .001	.13 N=315 p = .019	.16 N=1317 p < .001	.18 N=1675 p < .001
Communicate better	.18 N=1435 p < .001	.23 N=2481 p < .001	.23 N=3018 p < .001	.19 N=1202 p < .001	.16 N=859 p < .001	.21 N=1097 p < .001	.14 N=428 p = .003	.19 N=315 p = .001	.15 N=1317 p < .001	.17 N=1675 p < .001

Table C-5, cont.

Behavior	Programs									
	Vocational Training	Group Counseling	Individual Counseling	Alcoholics Anonymous	Narcotics Anonymous	Crossroads	NADSAP	CAAC	Religious Counseling	Educational Courses
Mastered new vocational skills	.37 N=1435 p < .001	.10 N=2481 p < .001	.10 N=3018 p < .001	.05 N=1202 p = .059	.04 N=859 p = .237	.05 N=1097 p = .109	.13 N=428 p = .006	.11 N=315 p = .044	.08 N=1317 p = .003	.20 N=1675 p < .001
Control restlessness better	.09 N=1435 p = .001	.16 N=2481 p < .001	.17 N=3018 p < .001	.14 N=1202 p < .001	.12 N=859 p < .001	.12 N=1097 p < .001	.15 N=428 p = .002	.14 N=315 p = .011	.13 N=1317 p < .001	.11 N=1675 p < .001
Easier to ask others for help	.21 N=1435 p < .001	.30 N=2481 p < .001	.25 N=3018 p < .001	.20 N=1202 p < .001	.22 N=859 p < .001	.23 N=1097 p < .001	.24 N=428 p < .001	.20 N=315 p < .001	.18 N=1317 p < .001	.21 N=1675 p < .001
Work better with others	.20 N=1435 p < .001	.24 N=2481 p < .001	.23 N=3018 p < .001	.15 N=1202 p < .001	.20 N=859 p < .001	.23 N=1097 p < .001	.21 N=428 p < .001	.23 N=315 p < .001	.13 N=1317 p < .001	.19 N=1675 p < .001
Accept responsibility for my actions	.12 N=1435 p < .001	.21 N=2481 p < .001	.21 N=3018 p < .001	.22 N=1202 p < .001	.24 N=859 p < .001	.24 N=1097 p < .001	.28 N=428 p < .001	.21 N=315 p < .001	.20 N=1317 p < .001	.18 N=1675 p < .001

**Table C-6**  
**Relationship Between Helpfulness**  
**of Individuals and Prisoner Behavior**

Behavior	Staff Helpfulness Ratings		
	Helpfulness of LPO	Helpfulness of Counselor	Helpfulness of Work Center Supervisor
Don't lose temper as easily	.15 N=3748 p <.001	.13 N=3844 p <.001	.13 N=3729 p <.001
Take more time to consider before acting	.18 N=3749 p <.001	.16 N=3845 p <.001	.17 N=3730 p <.001
Don't brood about past as much	.12 N=3749 p <.001	.11 N=3845 p <.001	.12 N=3730 p <.001
Better at setting goals	.17 N=3749 p <.001	.17 N=3845 p <.001	.19 N=3730 p <.001
Communicate better	.19 N=3749 p <.001	.17 N=3845 p <.001	.20 N=3730 p <.001
Mastered new vocational skills	.08 N=3749 p <.001	.06 N=3845 p <.001	.13 N=3730 p <.001
Controlled restlessness better	.15 N=3749 p <.001	.12 N=3845 p <.001	.13 N=3730 p <.001
Easier to ask others for help	.24 N=3749 p <.001	.18 N=3845 p <.001	.21 N=3730 p <.001
Work better with others	.18 N=3749 p <.001	.18 N=3845 p <.001	.19 N=3730 p <.001
Accept Responsibility for my actions	.15 N=3749 p <.001	.15 N=3845 p <.001	.15 N=3730 p <.001

**Table C-7**

**Analysis of Variance Summary:  
Type of Facility and Individual Counseling Participation  
Effects on External Locus of Control at Release**

Source of Variation	Mean Square	df	F	Sig. of F
<b>Main Effects</b>				
Type of Facility	25.28	3	1.02	.384
Individual Counseling Participation	176.93	2	7.13	.001
<b>Interaction</b>				
Facility x Individual Counseling Participation	21.56	6	.87	.517
Residual (Error)	24.83	1288		

**Table C-8**

**Analysis of Variance Summary:  
Type of Facility and Alcoholics Anonymous Participation  
Effects on External Locus of Control at Release**

Source of Variation	Mean Square	df	F	Sig. of F
<b>Main Effects</b>				
Type of Facility	38.94	3	1.57	.195
Alcoholics Anonymous Participation	169.56	2	6.83	.001
<b>Interaction</b>				
Facility x Alcoholics Anonymous Participation	24.04	6	.97	.445
Residual (Error)	24.83	1288		

**Table C-9**  
**Analysis of Variance Summary:**  
**Type of Facility and Group Counseling Participation**  
**Effects on Anomia at Release**

Source of Variation	Mean Square	df	F	Sig. of F
<b>Main Effects</b>				
Type of Facility	6.86	3	1.09	.353
Group Counseling Participation	52.67	2	8.35	<.001
<b>Interaction</b>				
Facility x Group Counseling Participation	9.23	6	1.46	.187
Residual (Error)	6.30	1308		

**Table C-10**  
**Analysis of Variance Summary:**  
**Type of Facility and Individual Counseling Participation**  
**Effects on Anomia at Release**

Source of Variation	Mean Square	df	F	Sig. of F
<b>Main Effects</b>				
Type of Facility	13.40	3	2.17	.090
Individual Counseling Participation	158.12	2	25.63	<.001
<b>Interaction</b>				
Facility x Individual Counseling Participation	3.63	6	.59	.740
Residual (Error)	6.17	1308		

**Table C-11**  
**Analysis of Variance Summary:**  
**Type of Facility and Crossroads Participation**  
**Effects on Anomia at Release**

Source of Variation	Mean Square	df	F	Sig. of F
<b>Main Effects</b>				
Type of Facility	7.24	3	1.14	.331
Crossroads Participation	33.04	2	5.21	.006
<b>Interaction</b>				
Facility x Crossroads Participation	8.88	5	1.40	.221
<b>Residual (Error)</b>	6.34	1309		

**Table C-12**  
**Analysis of Variance Summary:**  
**Type of Facility and Crossroads Participation**  
**Effects on Change in External Locus of Control**

Source of Variation	Mean Square	df	F	Sig. of F
<b>Main Effects</b>				
Type of Facility	.66	3	4.20	.006
Crossroads Participation	.61	2	3.90	.020
<b>Interaction</b>				
Facility x Crossroads Participation	.24	5	1.54	.176
<b>Residual (Error)</b>	.16	1240		

**Table C-13**

**Analysis of Variance Summary:  
Type of Facility and Educational Courses Participation  
Effects on Change in External Locus of Control**

Source of Variation	Mean Square	df	F	Sig. of F
<b>Main Effects</b>				
Type of Facility	1.58	3	10.09	<.001
Educational Courses Participation	.97	2	6.16	.002
<b>Interaction</b>				
Facility x Educational Courses Participation	.13	5	.85	.516
Residual (Error)	.16	1240		

**Table C-14**

**Analysis of Variance Summary:  
Type of Facility and Individual Counseling Participation  
Effects on Change in Anomia**

Source of Variation	Mean Square	df	F	Sig. of F
<b>Main Effects</b>				
Type of Facility	.12	3	.74	.531
Individual Counseling Participation	1.27	2	7.72	<.001
<b>Interaction</b>				
Facility x Individual Counseling Participation	.20	6	1.20	.306
Residual (Error)	.16	1260		

**Table C-15**  
**Analysis of Variance Summary:**  
**Type of Facility and Crossroads Participation**  
**Effects on Change in Anomia**

Source of Variation	Mean Square	df	F	Sig. of F
<b>Main Effects</b>				
Type of Facility	.06	3	.34	.796
Crossroads Participation	1.55	2	9.50	<.001
<b>Interaction</b>				
Facility x Crossroads Participation	.26	5	1.56	.169
Residual (Error)	.16	1261		

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