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The Special Assignment Battery (SAB) was constructed in response to requests from the Marine Corps for objective procedures that would improve their ability to select the most qualified Marines for the important jobs of recruiter and drill instructor. Prior to implementing the SAB, Headquarters, Marine Corps, requested additional analyses to verify the results of earlier validity studies of the SAB.

Three new investigations were undertaken. Two studies involved the SAB recruiter selection composite, the third concerned the drill instructor selection score. The results from these studies provided strong confirmatory evidence of the positive findings from earlier development work.

Based on these findings, the Navy Personnel Research and Development Center recommended implementing SAB as one of the selectors for assigning Marines to recruiter and drill instructor duty. It was also recommended that, if implemented, SAB be revalidated within two years.

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VALIDATION OF THE
MARINE CORPS SPECIAL ASSIGNMENT BATTERY
(SAB)

NAVY PERSONNEL RESEARCH
AND
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VALIDATION OF THE MARINE CORPS SPECIAL ASSIGNMENT BATTERY (SAB)

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FOREWORD

This report describes three validation studies of the Special Assignment Battery's (SAB) recruiter and drill instructor selection keys. Implementation of the SAB has been recommended by MPI-20, based on the findings and recommendations reported here.

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SUMMARY

Problem

The Special Assignment Battery (SAB) was constructed in response to requests from both the Marine Corps and Navy for development of objective procedures that would improve selection for the critical jobs of recruiter and drill instructor (DI) or company commander. Earlier research describing the development and validation of the SAB reported significant statistical and practical relationships between SAB scores and important aspects of recruiter and DI performance. However, this research relied either on data from predictive studies using relatively small samples of Marine Corps recruiters and DIs, or on concurrent validation studies employing both Navy and Marine Corps recruiters. Consequently, prior to implementation, Headquarters, Marine Corps (HQMC), requested additional analyses of the SAB using larger samples of Marines and predictive validation designs.

Objective

The objective of this research was to conduct analyses to confirm the findings from earlier developmental studies of the SAB.

Approach

Three investigations of the SAB's validity were undertaken, two involving the SAB's recruiter selection composite. The first was a concurrent validation using over one thousand Marine Corps recruiters. The second was a predictive study in which Marines being considered for assignment to recruiter duty were experimentally tested with SAB, although their scores were not used in selection. Those selected by existing procedures were tracked through a minimum of 1 year on recruiting duty. The third study, also a predictive design, involved validating the SAB's DI selection composite against school performance.

Results

The concurrent study showed a significant relationship between the recruiter selection composite and the two performance measures, average monthly production and supervisors' ratings. Recruiters scoring in the lowest 20 percent on the composite enlisted fewer recruits per month and obtained lower ratings from their supervisors than did recruiters with higher scores. As SAB scores increased, production increased, with recruiters whose scores were in the top 20 percent obtaining 27 percent more recruits than did recruiters with scores in the lowest 20 percent.

In the predictive study, Marine Corps recruiters who obtained the lowest composite scores had, in addition to the lowest average production, the highest rate of failure to complete their tour of duty. Increases in production aligned with increased scores even more dramatically for these Marines than for those in the concurrent study--a 40 percent production increase from the lowest scoring group to the highest.

The DI school performance composite showed a stronger correlation with its criterion, DI school completion, than any other SAB composite. Nearly half (47%) of the DIs in the lowest 20 percent failed to complete DI school.

Conclusions

The results from these studies strongly confirm the positive findings of the developmental work. The recruiter selection composite is related to important aspects of recruiter performance (i.e., attrition and production); the DI selection composite is a significant and meaningful predictor of DI school success. Marines who scored in the lowest 20 percent on SAB predictors were consistently poor performers as recruiters and as students at DI school.

Recommendations

Based on the findings from these studies it is recommended that:

1.   SAB be implemented as one of the selectors used in assigning Marines to recruiter and DI duty.

2.   SAB be administered to all Marines at the time that they are being screened for reenlistment.

3.   SAB be reevaluated within 2 years following implementation.

4.   SAB be evaluated for its effectiveness in predicting performance in other specialized duty assignments, such as instructor, career counselor, and military police.

5.   SAB be considered for use in selecting recruiters for the Navy.

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INTRODUCTION

Problem and Background

The Special Assignment Battery (SAB) was constructed in response to requests from both the Marine Corps and Navy for development of objective procedures that would improve selection for the critical jobs of recruiter and drill instructor (DI) or company commander. Earlier research describing the development and validation of the SAB (Borman, Hough, & Dunnette, 1976; Standlee, Abrahams, & Rosen, 1978; Borman, Toquam, & Rosse, 1979; Standlee & Abrahams, 1980; Borman, Rosse, Toquam, & Abrahams, 1981) reported significant statistical and practical relationships between SAB scores and important aspects of recruiter and DI performance. However, this research relied either on data from predictive studies using relatively small samples of Marine Corps recruiters and DIs, or on concurrent validation studies employing both Navy and Marine Corps recruiters. Consequently, prior to implementation, Headquarters, Marine Corps (HQMC), requested additional analyses of SAB using either larger samples of Marines, or predictive validation designs.

Objective

The objective of the research reported here was to conduct analyses to confirm the findings from the earlier SAB developmental studies.

APPROACH

Two investigations of the SAB were planned: (1) a large-scale concurrent study employing virtually all Marine Corps recruiters who were already assigned to recruiting duty, and (2) a predictive study using Marines who took the SAB as part of the normal screening process for assignment to recruiter duty. In the course of the latter investigation it was discovered that a number of Marines who had been screened for recruiting duty were assigned instead to DI duty. This provided an opportunity to conduct a third validation--a predictive study validating the SAB against DI school performance.

Instrument

The SAB is composed of three parts. Part 1, the Strong-Campbell Interest Inventory, is a commercially prepared vocational inventory containing 325 items that are related to interests in jobs, school subjects, and various activities. Part 2, the self-description inventory, contains two adjective checklists and a self-description statement list. The respondent indicates whether each adjective or statement applies to himself or herself. Part 3, the background questionnaire, has 136 multiple-choice questions concerning the respondent's past activities and accomplishments. The SAB can be taken without a proctor and requires approximately 2-1/2 hours. A machine-scorable answer sheet is provided.

Scoring Keys

Currently, two selection keys have been developed from the SAB. The first is the recruiter potential selection composite (Recpot), which is composed of four subscales measuring: (1) selling skills, (2) human relations skills, (3) organizing skills, and (4) overall performance. Recpot was developed by Borman et al. (1979) to predict various aspects of recruiter job performance, including production. It was refined in a subsequent effort

(Borman et al., 1981). The second scoring key is the DI potential selection composite (Dipot) developed by Standlee et al. (1978) to identify Marines who would have a high probability of completing DI school. Although the attempt of Standlee et al. to construct a scale to predict DI job performance was unsuccessful, their work revealed a strong relationship between school performance and subsequent job performance, supporting the use of school performance as a meaningful interim criterion.

Analyses

The analyses for all three studies employed standard correlational techniques. Pearson product-moment correlations were computed between the SAB predictors and the continuous criteria. Biserial correlations were used with the predictors and the dichotomized criteria (e.g., completion of school or tour of duty). Additionally, empirical expectancy tables were constructed to demonstrate the relationship between various predictor variables and criteria of interest.

VALIDATION STUDIES

Concurrent Recruiter Study

Sample

For the concurrent recruiter study, SABs were administered in 1981 to 1635 Marines who were in recruiting assignments. Subjects who had less than 6 months on the job or who had incomplete data were eliminated from all analyses; a total of 473 were eliminated. In addition, 157 subjects were identified as career recruiters (MOS 8412) and were eliminated from the primary analyses because career recruiters are not selected for assignment with the same procedures as the noncareer recruiters (MOS 8411). Career recruiters are usually in supervisory positions and are selected on the basis of their past performance as 8411 recruiters. The remaining 1005 recruiters, those with MOS 8411 and at least 6 months on the job, comprised the sample used in this research.

Criteria

Two measures of job performance were generated: The first was a gross productivity measure--average monthly contracts written. Production data were extracted by each recruiter's immediate supervisor from monthly records maintained at the recruiter's office. Although this productivity measure may have been contaminated by several artifacts (geographic differences, competing duties, etc.), more refined measures were not available. The second criterion, obtained from the same supervisor, was a rating on a 3-point overall performance scale.

Results and Discussion

It is of interest to compare the correlational relationships obtained in this research (see Table 1) with those obtained in the development studies. Borman et al. (1981) gathered production data from October 1977 through March 1978 on a sample of 194 Navy recruiters. In contrast, the concurrent study used over a thousand Marine Corps recruiters who were in the field in 1981. Inspection of Table 1 reveals that the pattern of correlations is quite similar. Differences between corresponding correlations in the development study (shown in parentheses in the table) and the concurrent study are not significant for any component (the largest $z = 1.013$, $p = .156$), despite major differences

in the samples being compared. The similarity of results suggest stability over time, as well as generalizability of SAB scores across services.

Table 1

Means, Standard Deviations, and Correlation Coefficients for
Recruiters in the Concurrent Recruiter Study
(N = 1005)

Predictor	Mean	SD	Criteria		Rating
			Production[a]		
Selection Composite					
Recpot	72.8	45.2	.22**	(.27)	.20**
Subscale					
Human relations	18.3	10.8	.15**	(.23)	.15**
Selling skills	17.1	14.2	.23**	(.22)	.19**
Organizing skills	16.0	8.8	.09*	(.13)	.13**
Overall performance	21.4	17.8	.24**	(.26)	.20**

Note. Coefficients are Pearson product-moment correlations.

[a]Correlations in parentheses are from development study (Borman et al., 1981).

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

The relationships of Recpot with average production and with the ratings measure are examined in further detail in Figures 1 and 2. The most notable feature of Figure 1, an empirical expectancy chart showing average monthly production as a function of Recpot scores, is the low production rate for recruiters scoring in the lowest 20 percent on Recpot. Their average production, 2.31 for the 201 recruiters in this low-scoring group, is 20 percent below the average for all remaining recruiters (2.79), and 27 percent below the average for highest scoring group (2.94). Except for the top 20 percent, Figure 2 shows a similar outcome for supervisor ratings as a function of Recpot scores: The performance rating for subjects in the lowest 20 percent on Recpot is significantly lower than for subjects with higher scores.

As mentioned earlier, the concurrent study sample also contained an additional 157 recruiters with MOS 8412. While SAB was not designed to select 8412 recruiters, one might hypothesize that if Recpot is a valid measure of recruiter interest and potential then these career recruiters should, on the average, score higher than recruiters with MOS 8411. Comparison of the mean Recpot scores for these two groups provides some support for this hypothesis. The mean Recpot score for the 8412 recruiters was 81.8, a 9-point increase over the mean for 8411s. This difference is statistically significant ($\underline{z}$ = 2.37, $\underline{p}$ < .01, one-tailed test).
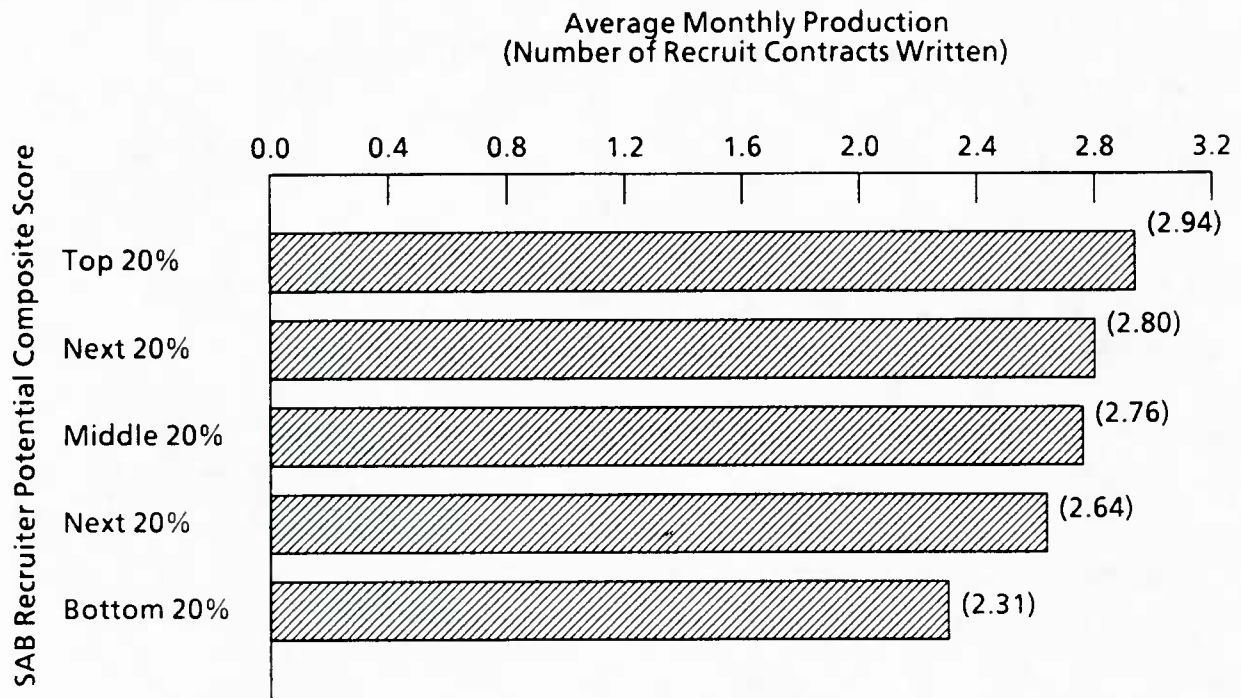
Average Monthly Production
(Number of Recruit Contracts Written)

Figure 1. Recruiter potential composite (Recpot) scores and average monthly production (concurrent study) (N = 1005).
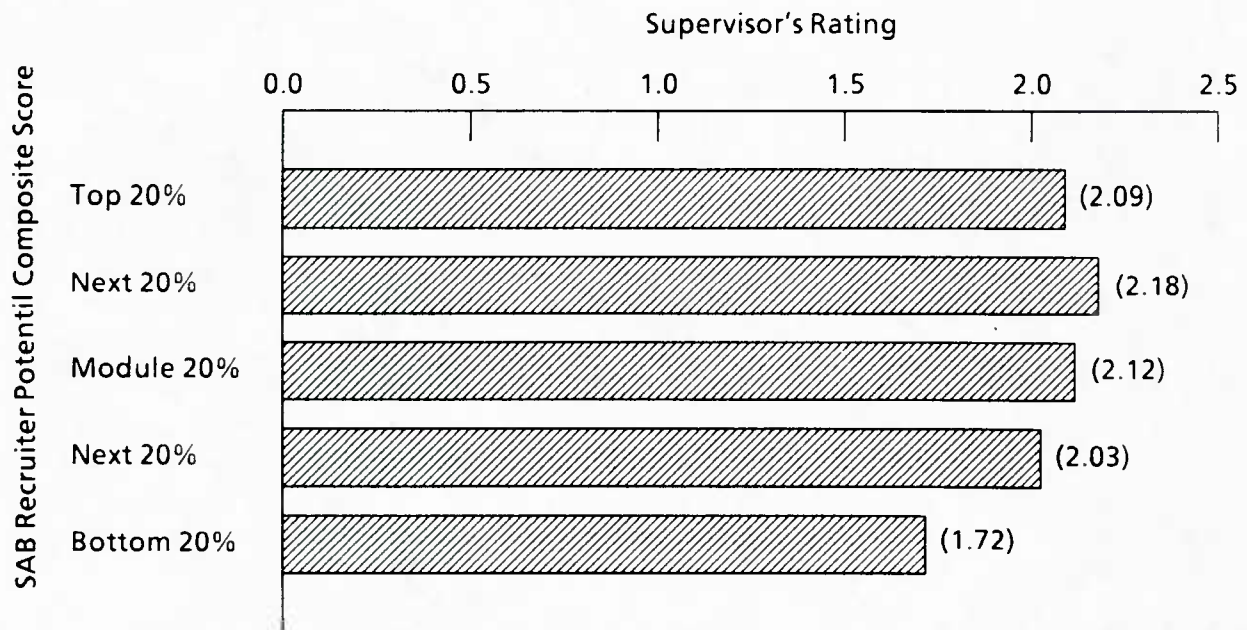
Supervisor's Rating

Figure 2. Recruiter potential composite (Recpot) scores and supervisors' ratings (concurrent study) (N = 1005).

Predictive Recruiter Study

Sample

In 1981 and 1982, HQMC directed that the SAB be administered to Marines who were being screened for assignment to recruiter duty, although scores were not made available for use in actual assignment. By 1983, 431 Marines were identified who had taken SAB and been assigned to recruiting duty. These 431 were tracked through recruiting school and then followed for at least a year of recruiting duty.

Criteria

Criteria for this study were obtained from the automated recruiter management system (ARMS) file supplied by HQMC. Two principle measures were extracted from the file: One was a production measure, the other was an indicator of successful or unsuccessful completion of tour. The production measure, net monthly production, was obtained by subtracting from gross production those recruits who left the service while in the delayed entry program or while undergoing basic training. The second measure, tour completion, indicated whether the recruiter had completed an assigned tour of duty (at least 1 year) or had been removed from recruiting duty for any of several pejorative reasons.

Results and Discussion

Of the 431 subjects who took the SAB and who attended recruiter school, 76 failed to complete school (see Table 2 for statistical characteristics of the samples). While these 76 Marines had lower SAB Recpot scores than those who completed recruiter school (54.4 vs. 61.7) the difference was not significant ($\underline{z}$ = .951, p > .10). Nor was the biserial correlation between Recpot and school completion or failure significant ($\underline{r}$ = .083, p > .05). While a significant relationship between Recpot and school performance would be an encouraging finding, the SAB was developed to predict performance of recruiters in the field and not to predict recruiter school performance.

Of the 355 subjects who completed recruiter school, 315 were located on the Marine Corps ARMS file. Correlations for the SAB components, including Recpot, against the production measure extracted from the ARMS file for this sample show a pattern quite similar to the development studies, with most correlations slightly higher (see Table 3). Figure 3 translates the correlations between Recpot and average production into an expectancy chart. As with the concurrent recruiter study, recruiters whose scores fall in the lowest 20 percent on Recpot produced significantly fewer recruits. There is only slight differentiation among the higher scoring subjects.

Among the recruiters in this study, 84 did not have normal rotation to their next tour. Seventy-three were relieved for various pejorative reasons, and 11 completed their active service. Figure 4 shows the distribution of these 84 losses as a function of Recpot score categories. Recruiters in the lowest quintile on Recpot had a loss rate of 36 percent, versus 21 percent for the total sample of recruiters. When the recruiters who failed to complete their tour of duty were examined further (see Table 4), the mean Recpot score for this group was 48.6, nearly one-half standard deviation below the mean of recruiters who completed their tour as recruiter. The group whose reason for leaving was end of active service (EAS) should not be considered as unsuccessful recruiters; however, their performance as recruiters was significantly below the average for Marines who completed their tour (1.8 recruiters per month vs. 2.3, SD = 1.0).

Table 2

Means, Standard Deviations, and Sample Sizes for the
Predictive Recruiter Study

Sample	Recpot[a]	
	Mean	SD
Of 664 applicants:	58.5	45.2
431 were assigned to recruiting school	60.4	48.4
233 were not assigned	55.0	47.2
Of 431 assigned to recruiting school:		
355 completed school	61.7	48.3
76 failed to complete	54.4	49.9
Of 355 who completed school:		
315 were located in field	61.6	48.1
40 were not located	62.5	47.4
Of the 315 located in field:		
231 had normal tour completion	66.4	44.6
84 did not have normal tour completion	48.6	53.6

[a]Recpot score range: -75 to +193.

Table 3

Correlation Between SAB Scores and Production

	Development Study[a] (N = 194)	Predictive Study (N = 315)
Selling skills	.22*	.23*
Human relations	.23*	.15*
Organizing skills	.13	.09
Overall performance	.26*	.24*
Recpot composite	.27*	.22*

Note. Coefficients are Pearson product-moment correlations.

[a]Borman et al. (1981).
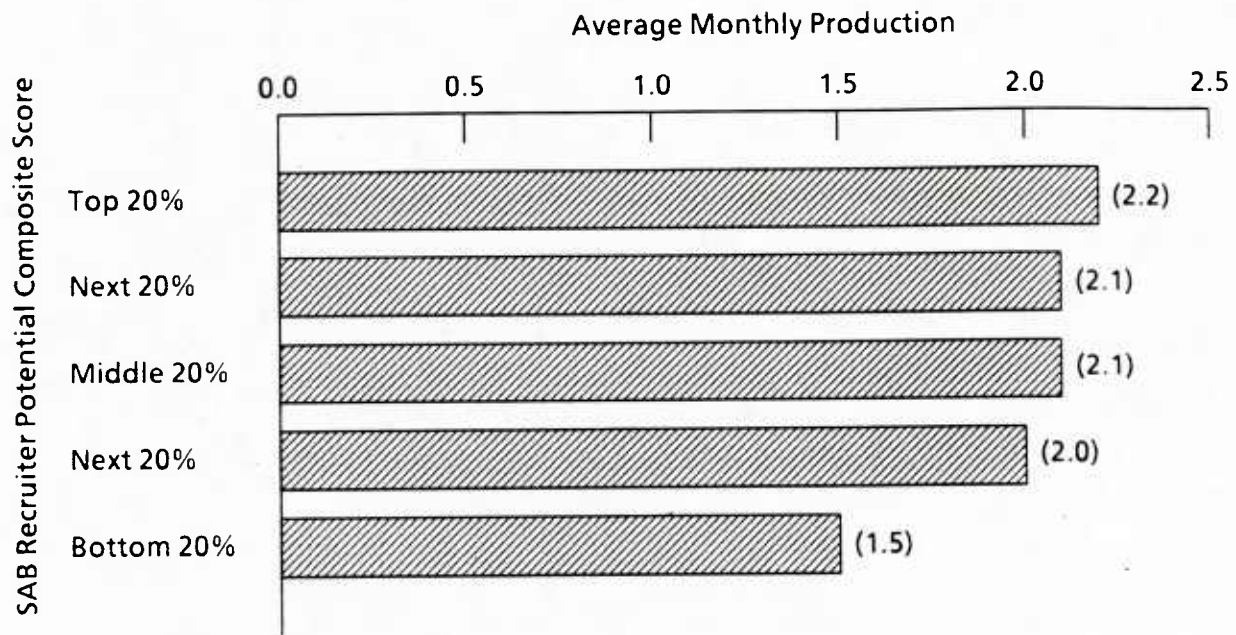*p < .01.

Average Monthly Production

Figure 3.   Recruiter potential composite (Recpot) scores and aver-
age monthly production (predictive study) (N = 315).
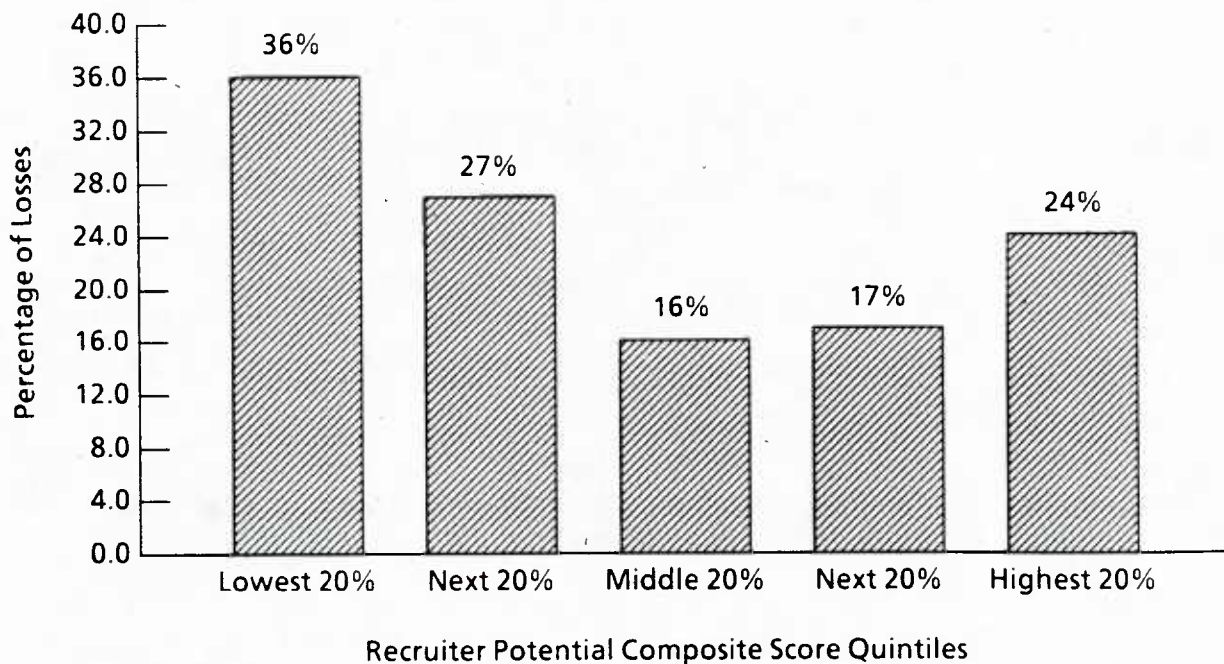

Figure 4.   Recruiter losses as a function of SAB scores (N = 315).

Table 4

Means and Standard Deviations for Recruiters in
Various Loss Categories (Predictive Study)

Category	N	Recpot Mean	SD
Relieved for good of service	25	36.0	48.6
End of active service	11	46.8	48.7
Relieved for cause	34	55.7	56.3
Other	14	55.4	43.0
End of tour	231	66.4	44.6
Applicant sample	664	58.4	45.2

Predictive DI Study

Sample

One hundred sixty-one Marines who took the SAB during recruiter screening were ultimately assigned, not to recruiter school, but to DI school. These subjects were tracked through completion of DI school.

Criteria

The main criterion for this study was completion of DI school. Class rosters from the DI schools at Parris Island and San Diego for 1981 and 1982 were matched against a file containing the names of the Marines who took the SAB in the recruiter screening program. For the DI trainees with SAB scores (N = 161), school performance data were obtained. DI field performance was not used as a criterion in this study because of the difficulty in gathering it and because previous research (Standlee & Abrahams, 1980) had demonstrated DI school performance to be a much better predictor of DI field performance than the SAB (r = .33 vs. .16).

Results and Discussion

As shown in Table 5, Dipot is significantly correlated with DI school performance, more strongly than any other component of SAB. The correlation for Dipot obtained in this study is remarkably similar to that obtained by Standlee and Abrahams (1980) (r = .324 and .325 respectively).

Table 5

Correlations Between SAB Scores and
DI School Graduation Status
(N = 161)

Predictor	Correlation With School Graduation[a]
Composite	
Recpot	.20
Dipot	.32**
Subscale	
Selling skills	.15
Human relations	.21
Organizing skills	.21
Overall performance	.15

[a]Coefficients are biserial correlations.
**p < .001.

An expectancy chart (see Figure 5) illustrating the relationships among Dipot scores and the proportion of Marines who succeeded at DI school presents the most notable findings for Marines with low Dipot scores: Almost half of those scoring in the lowest 20 percent left the school, a rate that is considerably higher than for any other score range. Despite the relatively small number of subjects represented in each 20 percent grouping (approximately 32) the results are quite regular and indicate a trend for increased probability of completing DI school as Dipot scores increase.

CONCLUSIONS

These studies provide strong confirmatory evidence for the earlier developmental work of Borman et al. (1979, 1981) on Recpot and for Standlee et al. (1978) on Dipot. The pattern of correlational results across all studies is positive and in agreement with the development work. Marines whose SAB scores fell in the lowest 20 percent consistently performed at significantly lower levels than higher scoring subjects. Recpot is clearly related to important aspects of recruiter performance (i.e., attrition and production), while Dipot shows a meaningful relationship to completion of DI school.
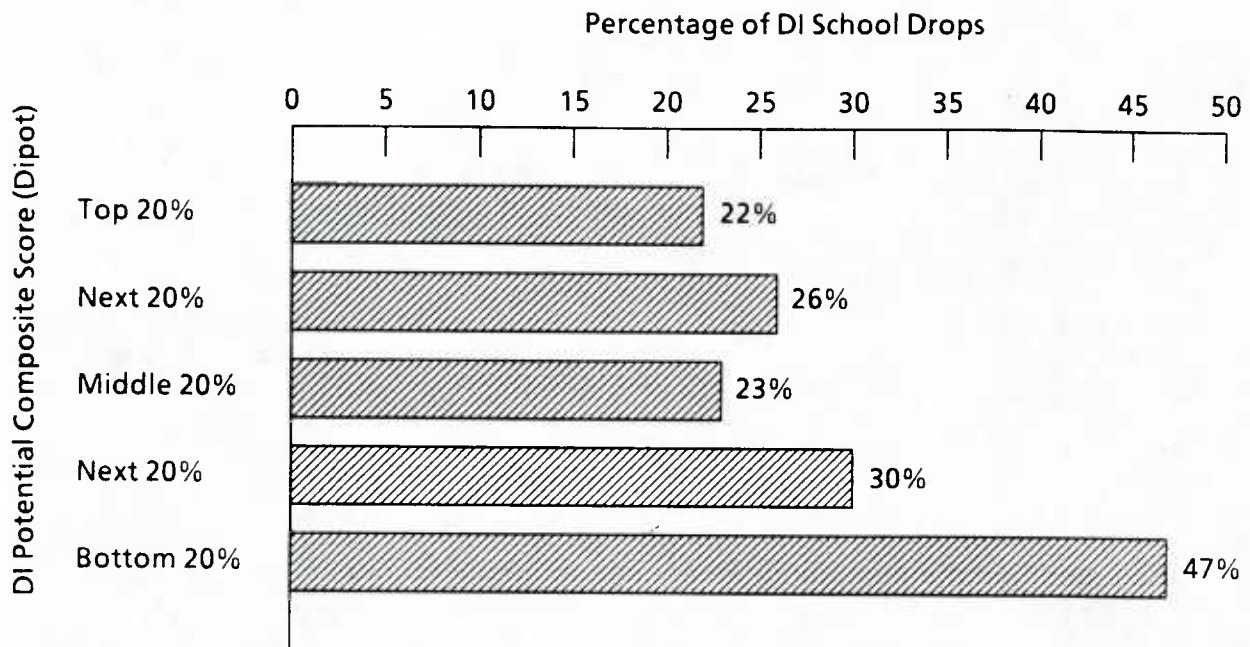
Percentage of DI School Drops

Figure 5. DI school dropouts as a function of SAB scores (N = 161).

RECOMMENDATIONS

It is recommended that the Marine Corps implement SAB as one of the selectors to be used in assigning Marines both to recruiting and DI duty. The data suggest that persons who score in the bottom 20 percent of the normative groups are likely to be unsatisfactory performers. Within constraints imposed by availability of personnel, it is recommended that Marines with scores in the lower 20 percent not be assigned to these duties.

The SAB should be administered to Marines before their actual screening for these jobs; this would reduce the tendency for them to distort responses in an effort to influence their chances for assignment. The most suitable times to administer SAB would be when Marines are attempting to reenlist, or just after they have reenlisted.

If the SAB is implemented operationally, the effectiveness of the battery should be reevaluated in approximately 2 years. All test scores, item responses, and school and field performance data should be retained to permit evaluation and refinement of the SAB. During this reevaluation an attempt could be made to develop improved selection keys for recruiter and DI. It would also be possible at that time to attempt to develop additional keys to assist the Marine Corps in selecting Marines for other specialized job assignments such as embassy duty, instructor, or career counselor.

Finally, it is recommended that the Navy Recruiting Command either (1) implement the SAB as an aid in selecting Navy recruiters, or (2) conduct additional research to verify the validity of the SAB for Navy applications. While the studies reported here do not necessarily imply validity for Navy subjects, the Recpot scoring key was originally developed using both Marine Corps and Navy recruiters. The results of these new Marine Corps studies attest to the value of Recpot and invite renewed consideration for Navy use.

REFERENCES

Borman, W. C., Hough, L. M., & Dunnette, M. D. (February 1976). Development of behaviorally-based rating scales for evaluating the performance of U.S. Navy recruiters (NPRDC Tech. Rep. 76-31). San Diego: Navy Personnel Research and Development Center. (AD-A022 371)

Borman, W. C., Rosse, R. L., Toquam, J. L., & Abrahams, N. M. (September 1981). Development and validation of a recruiter selection battery (NPRDC Tech. Rep. 81-20). San Diego: Navy Personnel Research and Development Center. (AD-A104 681)

Borman, W. C., Toquam, J. L., & Rosse, R. L. (May 1979). An inventory battery to predict Navy and Marine Corps recruiter performance: Development and validation (NPRDC Tech. Rep. 79-17). San Diego: Navy Personnel Research and Development Center. (AD-A069 371)

Standlee, L., & Abrahams, N. M. (March 1980). Selection of Marine Corps drill instructors (NPRDC Tech. Rep. 80-17). San Diego: Navy Personnel Research and Development Center. (AD-A082 966)

Standlee, L., Abrahams, N. M., & Rosen, H. (January 1978). Criteria for selecting U.S. Marine Corps drill instructors (NPRDC Spec. Rep. 78-5). San Diego: Navy Personnel Research and Development Center.

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