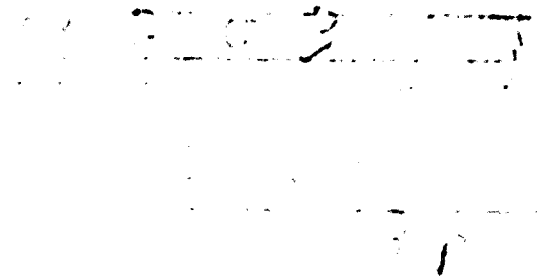


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Technical Research Note 148

**COMBAT PERFORMANCE OF EM
WITH DISCIPLINARY RECORDS**



U. S. ARMY PERSONNEL RESEARCH OFFICE

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Technical Research Note 148

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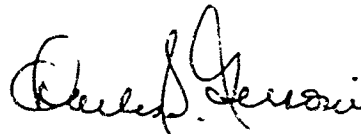
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Army Project Number
2J024701A722

Retention Standards E-12

June 1964

USAPRO Technical Research Reports and Technical Research Notes are intended for sponsors of R&D tasks and other research and military agencies. Any findings ready for implementation at the time of publication are presented in the latter part of the Brief. Upon completion of a major phase of the task, formal recommendations for official action normally are conveyed to appropriate military agencies by briefing or Disposition Form.

PREFACE

Current Army enlistment and induction standards include effective measures of potential for success in training and on the job. Supplementary techniques are needed for identifying, from among men who meet current input requirements, those who are unwilling to perform adequately or to conform to Army standards of behavior. Identification of potentially delinquent and unsatisfactory soldiers early in basic training--or better, prior to date of induction--would save the cost of their training and avert the embarrassment their behavior might cause the Army.

The RETENTION STANDARDS Task was established to develop means of predicting whether a man will be considered desirable for retention for his full term of service in the Army. The present publication reports on a portion of Subtask b, "Longitudinal studies to predict retention in the Army," FY 1961 Work Program.

The entire research task is responsive to requirements of Department of the Army R&D Project Number 2J024701A722, "Selection and Behavioral Evaluation," and to special requirements of the Deputy Chief of Staff for Personnel.

COMBAT PERFORMANCE OF EM WITH DISCIPLINARY RECORDS

BRIEF

Requirement:

To clarify the relationship between disciplinary behavior and combat performance--specifically to determine whether operational utilization of a set of valid measures designed to eliminate the potential troublemaker might not also eliminate a needed type of combat soldier in times of open conflict.

Procedure:

Combat ratings obtained on enlisted men serving in the Korean War were analyzed to compare the fighting effectiveness of men with precombat court-martial conviction and men with "clear" records. Analysis was performed separately for RA and US Army components. Background data and two personality tests were evaluated as predictors of a criterion based on type of discharge.

Findings:

Enlistees (RA) with precombat court-martial convictions were on the average poorer combat soldiers than were men with no such convictions. In the enlistee (US) sample, incidence of court-martial conviction was too small for satisfactory analysis.

The RA component had a larger percentage of other-than-honorable discharges than did the US component (17% vs 2%); and, among those receiving honorable discharges, a larger percentage of the RA men had records of court-martial conviction (20% vs 3%).

Utilization of Findings:

The study provided assurance that exclusion of the potential problem soldier would not also have the effect of reducing the Army's combat potential.

COMBAT PERFORMANCE OF EM WITH DISCIPLINARY RECORDS

CONTENTS

	Page
BACKGROUND AND PURPOSE	i
PROCEDURE	i
Sample	i
Criterion Variables	2
Predictor Variables	2
Statistical Analysis	3
RESULTS	4
Court-Martial and Combat Performance	4
Prediction of Combat Ratings	5
REFERENCES	8

TABLES

Table 1. Critical ratios between mean combat ratings of precombat offenders and nonoffenders	4
2. Number and percent of RA and US cases by criterion category	5
3. Correlation matrix for RA sample	6
4. Correlation matrix for US sample	7

COMBAT PERFORMANCE OF EM WITH DISCIPLINARY RECORDS

BACKGROUND AND PURPOSE

The RETENTION STANDARDS Task has been mainly concerned with early identification of soldiers who, while meeting current input standards, are likely to prove unacceptable to the Army. The criterion of acceptability adopted is essentially the type of discharge received. Disciplinary action in the form of court-martial was included in order to refine this criterion.

Indications from prior research are that stable individuals whose records are free of disciplinary action are the most effective combat soldiers. Such indications as have been reported, however, derive not from studies of men in combat but from studies of peacetime maneuvers (Katz and Willemin, 1959). Better knowledge of the relationship between disciplinary behavior and combat performance was needed to assure that operational utilization of a set of valid measures designed to eliminate the potential troublemaker would not also serve to eliminate a needed type of combat soldier in times of open conflict.

During the Korean War, measures of combat effectiveness of 4,600 enlisted men were obtained in Korea by a USAPRO research team between 16 May and 19 July 1951. Originally, these measures were used in validating instruments for combat selection. Background data, along with service records, were also collected--including records of court-martial conviction before and during combat. The data, which have been retained within USAPRO, appeared to offer suitable basis for comparisons of the combat and service behavior of offenders and nonoffenders.

In the present study, available data on the Korean War sample were analyzed with two objectives:

1. To compare combat performance of enlisted men with previous court-martial convictions and that of men having no court-martial convictions.
2. To obtain validity data for background variables and for two personality instruments administered to the Korean sample, using type of discharge and court-martial convictions as criterion measures.

PROCEDURE

Sample

The original Korean sample consisted of enlisted men in three regiments--5th Cavalry, 35th Infantry, and 38th Infantry. The units had been

in combat since the beginning of the Korean conflict, a period of about nine months--although individual replacements had been overseas for lesser periods. These replacements had been in service for different lengths of time and consisted of both enlistees (RA component) and inductees (US component). For the present study, sufficient data were available for 2291 of these men.

The 2291 cases constituted the sample for the validity analysis. For the central analysis of the study, the sample was reduced to a total of 660 cases by elimination of individuals who had received court-martial conviction during combat and of men for whom fewer than two combat performance ratings were available.

-Criterion Variables

Combat performance. Two separate ratings of enlisted men made by noncommissioned officers were available: Overall Combat Performance and Combat Aggressiveness. In each rating, a 15-point scale was used, position 1 representing the highest rating. The mean number of raters on each scale was 3.3. Rater agreement, measured in terms of the product-moment correlation between ratings given a ratee by his first and second raters, was $r = .46$ for aggressiveness; $r = .53$ for overall combat performance. Estimated reliability coefficients for a mean of 3.3 ratings (Spearman-Brown formula) were .74 for aggressiveness; .79 for overall combat performance. Mean ratings on the two scales had a correlation of $r = .86$. The measure of combat performance used for this study was the sum of the mean ratings on the two scales divided by two.

Type of discharge. Type of discharge was broken down into three acceptability categories for the correlational phases of this study.

1. Honorable discharge with no court-martial conviction.
2. Honorable discharge with one or more court-martial convictions.
3. Other-than-honorable discharge.

Predictor Variables

Education. Highest academic grade completed before entering the Army.

Age. Age at entry into the Army.

GT Score. Score on the General Technical Aptitude Area, an equally weighted composite of the Verbal and Arithmetic Reasoning tests of the Army Classification Battery.

Personal Inventory (PT 2401). An inventory consisting of MMPI-type items. Three separate keys were used:

1. A priori key. Items selected on a judgmental basis by Retention Standards Task personnel.

2. Classification Inventory key (TX 344). Items found most valid for prediction of combat proficiency and included in the Classification Inventory, CI-1 (PRT 3290).

3. API Key 2. Items taken from the Army Personality Inventory (PRT 703) and found most valid for predicting type of discharge.

Self-Description Blank (PT 2390). Items dealing with personal background, interests, and activities. Two keys were used:

A priori key. Items selected on a judgmental basis by task personnel.

Classification Inventory Key (TX 345). Items found most valid for prediction of combat proficiency and included in the Classification Inventory (PRT 3290).

Precombat court-martial convictions. Only cases having court-martial convictions occurring before the men entered combat were used. Cases having court-martial convictions during combat were eliminated from the offender-nonoffender comparison phase of the study primarily to control for rating bias that may have been present for men court-martialed during combat. Some offenses committed during combat may have resulted in disproportionately severe penalties. For example, going AWOL for short periods of time during peacetime may be a relatively minor offense; during combat such offense may call for severe punishment.

Component. In earlier studies within the Retention Standards Task, differences between RA and US soldiers on age, education, cognitive test scores, and on the discharge criterion were substantial (Klieger, deJung, and Dubuisson, 1962). On this basis, it was decided to analyze RA and US cases separately to determine if interrelationships between combat proficiency and disciplinary behavior differed as well.

Length of time in service. Since all inductees had entered the Army after the outbreak of the Korean War, they had been in the Army no more than 10 months at the time the ratings were made, whereas many men in the RA component were in service when hostilities began. To restrict the range of time in service, then, men who had entered the Army before October 1949, or who had over 18 months of service at the beginning of the rating procedure, were eliminated from the study.

Statistical Analysis

All analyses were conducted separately on RA and US component samples.

For the reduced samples of precombat court-martial and no court-martial cases, means and standard deviations on all variables were obtained. Critical ratios were computed between mean combat ratings of precombat offenders and nonoffenders.

Frequency distributions, means, and standard deviations of all variables were obtained for the total RA and US samples. In these samples, triserial coefficients of correlation were computed between the discharge criterion and all other variables. Intercorrelations were computed among all predictor variables.

RESULTS

Court-Martial and Combat Performance

In the RA sample, men with precombat court-martial conviction had poorer combat ratings than did men with no court-martial convictions. The mean difference in rating was significant within the .01 level of confidence. This finding lends support to the belief that the nonoffender is the better combat soldier and confutes the notion that men incurring Army disciplinary action make the best fighters. With respect to the US component, only three men in the sample were found to have precombat court-martial conviction, a circumstance which precluded any reliable findings. A summary of this phase of the study appears in Table 1.

Table 1

CRITICAL RATIOS BETWEEN MEAN COMBAT RATINGS OF PRECOMBAT OFFENDERS AND NONOFFENDERS

	<u>Cases with precombat court-martial conviction</u>		<u>Cases without precombat court-martial conviction</u>		<u>Critical Ratios</u>
	<u>N</u>	<u>Mean Rating</u>	<u>N</u>	<u>Mean Rating</u>	
RA	20	8.10	325	6.87	3.04*
US	3	7.97	312	7.71	0.22

*Significant within the .01 level of confidence.

In a comparison limited to the nonoffender groups, the RA component had a higher mean rating in combat performance than did the US component, a reversal of previous findings (Katz and Willemin, 1959) which may be explained by the fact that through circumstances of draft and mobilization, the RA men were the more seasoned soldiers.

Distributions of cases over the three criterion categories were substantially different for RA and US components (Table 2). The middle category included 20.4% of the total RA cases, as compared to only 3.4% of the total US cases. Marked difference between RA and US component was evident in the lowest criterion category as well. RA-US criterion differences in the present study were in the same direction as had been

found in other Retention Standards studies (Klieger, Dubuisson, and Sargent, 1962), the RA component having a larger percentage of cases in the lower criterion categories than US component. The extreme distribution on criterion category for the US cases, as shown in the below table, greatly reduced the reliability of obtained results from analysis of the US sample.

Table 2

NUMBER AND PERCENT OF RA AND US CASES BY CRITERION CATEGORY

Criterion Category	RA		US	
	N	%	N	%
Honorable discharge-no court-martial convictions	394	62.4	812	94.6
Honorable discharge-one or more convictions	292	20.4	29	3.4
Other-than-honorable discharge	<u>217</u>	<u>17.2</u>	<u>17</u>	<u>2.0</u>
Total	1433	100%	858	100%

Prediction of Combat Ratings

As part of the broader purpose of the Retention Standards Task--investigating variables which may contribute significantly to prediction of unacceptable behavior in the Army--predictor equations were derived between the type of discharge criterion and certain variables.

All coefficients of correlation (triserial r) between the criterion and predictor variables were low in magnitude for the RA sample (ranging from .03 to .20). Among the highest of these coefficients were GT score (.19), the a priori key of the Personal Inventory (.20), and years of education (.17). The coefficient of correlation for the combat rating was .15. For the US sample, five variables were moderately high in predictive effectiveness (education, GT score, and the three keys of the Personal Inventory). Again, note that the small number of cases in the lowest criterion category tends to reduce the reliability of these values. However, the magnitude and direction of the coefficients of correlation for education and GT score were comparable to previous findings in Retention Standards research on US samples. All correlation coefficients are presented in Tables 3 and 4.

Table 3

CORRELATION MATRIX FOR RA SAMPLE^a

Variables	Correlation Coefficients						
1. Discharge	<u>1</u>						
2. Combat Rating	.15	<u>2</u>					
3. Education	.17	.08	<u>3</u>				
4. Age	.14	-.04	.11	<u>4</u>			
5. GT Score	.19	.14	.47	.05	<u>5</u>		
6a. A priori Key, Personal Inventory	.20	-.03	.00	.14	.07	<u>6a</u>	
6b. CI Key, Personal Inventory	.08	.29	.19	-.04	.27	.16	<u>6b</u>
6c. Key 2, Personal Inventory	.09	.32	.24	-.07	.31	.15	.95 <u>6c</u>
7a. A priori Key, Self-Description Blank	.03	.05	.20	.00	.07	.05	-.03 <u>7a</u>
7b. CI Key, Self-Description Blank	.13	.31	.19	.04	.30	.19	.57 <u>7b</u>

^aAll correlations are directly interpretable. For several variables lower scores were indicative of better performance. Signs were reversed accordingly.

Table 4

CORRELATION MATRIX FOR US SAMPLE^a

Variables	Correlation Coefficients				
1. Discharge Criterion	<u>1</u>				
2. Combat Rating	.10	<u>2</u>			
3. Education	.37	.01	<u>3</u>		
4. Age	.10	-.02	-.05	<u>4</u>	
5. GT Score	.33	.18	.53	.01	<u>5</u>
6a. A priori Key, Personal Inventory	.31	.07	.22	.10	.23 <u>6a</u>
6b. CI Key, Personal Inventory	.40	.24	.30	.03	.39 .22 <u>6b</u>
6c. Key 2, Personal Inventory	.33	.27	.33	.06	.44 .25 .95 <u>6c</u>
7a. A priori Key, Self-Description Blank	-.20	.09	.13	.04	.05 .01 -.05 -.03 <u>7a</u>
7b. CI Key, Self-Description Blank	.25	.21	.17	.07	.26 .34 .54 .56 -.03 <u>7b</u>

^aAll correlations are directly interpretable. For several variables lower scores were indicative of better performance. Signs were reversed accordingly.

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