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SUMMARY OF ARI RESEARCH ON MILITARY DELINQUENCY

D. B. Bell, et al

Army Research Institute for the Behavioral and Social Sciences
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June 1975

Research Report 1185

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and
R F Holz, Work Unit Leader

SOCIAL PROCESSES TECHNICAL AREA

U. S. Army

Research Institute for the Behavioral and Social Sciences

June 1975

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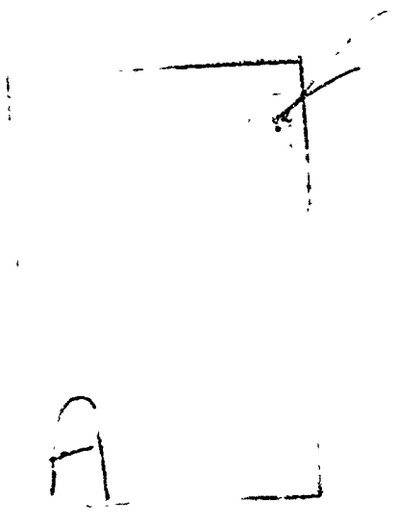

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Most ARI research on military delinquency has focused on predicting, at the point of entry, those personnel most likely to commit delinquent acts within a fixed time period (e.g., by the end of Basic Combat Training). Across the variety of investigations which focused on various types of delinquency some consistent findings emerge. Component of service (i.e., volunteers vs. draftees and several closely associated variables--age at entry, level of education, and mental ability--are associated with delinquent acts; such background data and peer ratings provide the best

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20. predictors. Attempts to develop a more precise profile of the military delinquent have not been very successful, and programs aimed at rehabilitation of potential delinquents have actually proved counterproductive. All of these outcomes suggest that future research should concentrate more on the context in which delinquency occurs and less on the characteristics of those who commit delinquent acts.

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FOREWORD

The Social Processes Technical Area, established October 1972 as part of the Army Research Institute for the Behavioral and Social Sciences (ARI), is concerned with problems of social dynamics and interactions to help soldiers better adjust to the modern volunteer Army, to provide field commanders with techniques to increase unit competence, and to provide information to headquarters commanders on which they can most appropriately base their decisions. Programs in the Technical Area deal with systematic research over wide areas and with immediate specific problems, in this case continuing to seek the underlying causes of military delinquency and develop instruments to screen recruits for potential military delinquents, problems previously addressed by ARI's Retention Standards Task and Selection and Behavioral Evaluation Project, Military Selection Research Division.

With every change in induction standards since the end of World War II, questions concerning the effects on the Army's enlisted personnel system have been addressed by ARI's continuing program on selection, classification, management, and utilization of Army personnel. In response to a requirement from DCSPER, part of the research focuses on early identification of soldiers likely to become discipline problems.

The present publication summarizes ARI research since 1959 on military delinquency. The program has been primarily an applied effort to furnish information and evaluative instruments to the Army, basic technological research was also included for the development of the measuring instruments, procedures, and appropriate designs--the fundamental tools required to perform sophisticated research in a difficult problem area. Research is conducted under Army RDTE Project 2Q163101A752, "Drug Abuse and Discipline," FY 1974 Work Program, and is responsive to special requirements of the Office of the Deputy Chief of Staff for Personnel of the U.S. Army.

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SUMMARY OF ARI RESEARCH ON MILITARY DELINQUENCY

BRIEF

Requirement

To develop predictive instruments for early identification of potential military delinquents, to initiate and evaluate delinquency prevention programs, and to explore the underlying causes of delinquency in the Army.

Procedure

In a series of investigations from 1959 to 1975, a wide range of predictive variables of Army personnel (e.g., peer ratings of combat aptitude; data on personal background, personality, or military environment) have been evaluated against various indices of subsequent delinquency (e.g., AWOL, non judicial punishment, court-martial, unfavorable discharge) to determine whether any of these variables were sufficiently predictive to be useful for screening out probable future delinquents. Most of the investigations focused on men in Basic Combat Training (BCT).

Field experiments were conducted in 1972 and 1973 in BCT to evaluate a system for early identification and preventive treatment of new men with potential discipline problems. About 10% of each sample group were identified as discipline risks by a temperament-profile test or a background questionnaire and were referred to the company commander for counseling interviews, another 10% were randomly selected, as controls, for interviews. Data on discipline problems collected at the end of BCT were used for evaluation.

Findings

Certain variables have consistently been found to be associated with military delinquency: in the early investigations, volunteers were more likely to get in trouble than draftees; throughout, the most predictive variables have been age at entry, education, mental ability, peer ratings of combat aptitude gathered in BCT, and a history of conflict with authority. However, these variables have not proved sufficiently predictive, separately or together, to enable an effective operational screening instrument to be developed.

Results of the field experiments indicated that identifying a man as a discipline risk actually increased the chances of his becoming one.

Utilization of findings

While the idea that potential troublemakers can be identified before they enter the service is appealing, data do not support the practicality of such an approach. Manipulation of screening standards to reduce military delinquency is possible only at the cost of rejecting large numbers of good men. Therefore, the search for predictive individual variables should probably end. The Army is better able to change aspects of a soldier's life situation and environment than his background, discovering what factors within the Army social structure and environment cause some potential delinquents to become good soldiers and some potentially good soldiers to become delinquent seems more likely to lead to practical programs.

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SUMMARY OF ARI RESEARCH ON MILITARY DELINQUENCY

Military delinquency has been under investigation by the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) for a number of years. This report discusses the Institute's previous, current, and future research in this field. From the beginning, a practical approach has been sought. Initial attempts to identify potential delinquents have been complemented by various plans and programs to help such individuals develop in more positive directions, and these programs, in turn, evaluated. Since 9'0, research has been directed a' improving the prediction and reduction of delinquency among men in Basic Combat Training (BCT) and men in active units. The most recent work has led to recommendations and plans for future research.

HISTORICAL BACKGROUND

Much early delinquency research was concerned with identifying soldiers whose performance was likely to be unacceptable (i.e., punishable by court-martial or some form of undesirable discharge). Other early research focused upon differentiating between ordinary troops and the men (a) most likely to be sentenced to post-trial confinement in Army stockades or (b) most likely to experience early discipline failure (i.e., punishment under the provisions of the Uniform Code of Military Justice (UCMJ) and/or AWOL prior to completion of individual training). These efforts were primarily intended to improve screening standards, although a secondary objective was the development of an instrument which could be used to refer high-risk men to some form of special training in order to avert a more serious outcome.

Unacceptable Performance

Seven ARI reports, .9 9-19 , provide data on the predictive validity of more than a dozen variables against common performance criteria in five separate samples ranging in size from ' 0 to over ,000 men. The common performance criteria are determined by three categories of service record: (.) clean Army record, ( ) retained but with court-martial conviction, and (') unfavorable separation. (Data from the one study not employing these criteria[1] were re-analyzed against them for comparability with the other studies.) When reporting correlational data, most of the researchers considered all three criteria (a triserial correlation); some preferred to collapse the criteria into clean records vs. records of court-martials or unfavorable separations (a biserial correlation).

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[1] Klieger, W. A., and Dubuisson, A. U. Civilian and military factors as predictors of Army failure. ARI Research Memorandum '0- , November .9' 0.

Katz and Willemin[2] studied the relationship between performance and peer ratings of combat aptitude. The design called for three peer ratings (gathered during the th, th, and 0th weeks of Army service) and a measure of acceptable performance (gathered during the 20th month of service). Two types of samples were used, a longitudinal sample containing all four measures (N = 9) and three cross-sectional samples. The cross-sectional samples (N = 9 , 1,9 and ,0 0 for the th, th and 0th weeks, respectively) consisted of men on whom a given week's peer rating and the criterion data, but not all the subsequent peer ratings, were available. All the men were in combat Military Occupational Specialties (MOS), from a group of ,10 men assigned to an experimental division in BCT at Fort Riley, Kansas in 19 .

In the longitudinal sample the triserial correlations between peer ratings and the criterion data measure of acceptability increased from . to . as the time between the ratings and the measure of acceptable performance grew shorter. In the three cross-sectional samples, the correlations remained about the same: .9, .9, and .9, for the three time periods. Although the authors do not discuss reasons for these findings, the criterion may have influenced the ratings. For example, men who were adversely separated from the service would be more likely to appear in a cross-sectional sample. Within the longitudinal sample, the later ratings provided opportunity for observation of delinquency. Despite the possibility of criterion contamination, peer ratings appear to be good predictors of current and future acceptable performance.

Klieger and Dubuisson[3] studied the relationship of 19 variables to a five-category definition of performance: (1) honorable discharge with and (2) without court-martial, (3) general discharge with and (4) without court-martial, and ( ) undesirable discharge. The research sample consisted of ,09 men in BCT at Fort Leonard Wood, Missouri who had been part of an earlier investigation.[4] Seven predictor variables were found to be significantly related to the collapsed criteria utilized in comparing the early studies. Grade at discharge is the most strongly related to acceptable performance, since reduction in grade is a frequent court-martial penalty and early separation from service precludes rising in grade. The remaining significant variables, in order of their importance, were: component of service i.e., enlistee or draftee), educational attainment high school graduate vs. non-graduate), race, type of civilian occupation, number of physical complaints which could have a psychosomatic explanation, and conviction of a felony.

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[2] Katz, A. and Willemin, L. P. Relationship of predictor and criterion ratings to personnel actions reflecting acceptability and promotability of Army enlisted men. American Psychologist, 19 9, 1 (7), (abstract).

[3] Klieger and Dubuisson, 19 0, op.cit.

[4] Morton, Mary A., Goldstein, L. G., Houston, T. J., and Bayroff, A. G. Predicting proficiency of enlisted men of limited ability. ARI Technical Research Report 1099. February 19 . (ADI 0)

A second report[5] on men with complete data (N = 1780) from the Fort Leonard Wood sample yielded biserial correlations between eight predictor variables and acceptable performance ranging from .31 to -.03. In order of importance the variables were Armed Forces Qualification Test (AFQT) percentile score, scores on the written end-of-BCT test, age at entry, scores on the end-of-BCT performance test (the "stakes" test), average cadre rating (PRT 2862) at the end of BCT (the cadre rating), level of civilian education, number of psychosomatic complaints, and presence or absence of physical limitations. A multiple correlation of .46 could be obtained by combining AFQT percentile score, age at entry, the stakes test, and the cadre rating. However, many of these measures are not available until after BCT. A more practical predictor for screening was a combination of AFQT percentile score and age at entry, which yielded a multiple correlation of .41.

The Fort Riley experimental division from which Katz and Willemin[6] drew their sample was also analyzed by Klieger, deJung and Dubuisson;[7] 1,771 men--in both combat and non-combat MOS--for whom complete data were available were investigated. The most predictive measure of acceptable performance was the peer rating of combat aptitude gathered in the th week of BCT (r_{bis} = .42). Other predictors which had at least a .30 correlation with the two-category version of acceptable performance included: level of civilian education, general mental ability--as measured by the General Technical GT) Aptitude Area on the Army Classification Battery (ACB)--and a test of the degree of interest in masculine-type outdoor activities. Age at entry and the remaining paper-and-pencil instruments were less predictive. A major finding--that not all measures were equally predictive among subsamples comprising various combinations of race, component of service, and combat or non-combat MOS--suggests that there is a good deal of interaction among the predictor variables. The interactions also suggest that the variables associated with delinquency are not the same for all subgroups in the sample. Therefore, better predictions could probably be obtained by examining <u>patterns</u> of variables than by looking for single factors.

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[5] Klieger, W. A., Dubuisson, A. U., and deJung, J. E. Prediction of unacceptable performance in the Army. ARI Technical Research Note 123. June 1961. (AD 263 742)

[6] Katz and Willemin, 1959, op. cit.

[7] Klieger, W. A., deJung, J. E., and Dubuisson, A. U. Peer ratings as predictors of disciplinary problems. ARI Technical Research Note 134. July 1961. (AD 29 1[illegible])

A different approach was used in an investigation of background characteristics, type of enlistment, and mental ability as predictors of subsequent acceptable performance.[8] The sample was drawn from men in reception stations during a one-year period. In order to assess the role of mental ability, the sample (N = [illegible]) was drawn to reflect the distribution of mental ability in the United States population (i.e., [illegible]% of the sample were in mental categories I through III--the more intelligent group--and [illegible]% in categories IV and V--the less intelligent group). Since the usual Army selection procedures eliminate men in mental category V and severely limit the number of category IV men accepted, results of this investigation are not likely to be duplicated. Within this sample the component of service, mental category (I-III vs IV-V), and mental category within component of service all proved to be significantly related to acceptable performance. The biserial correlations between ACB subtest scores and acceptable performance ranged from .37 to .19 with most of the coefficients in the .30s. The correlation of AFQT percentile scores with acceptable performance was .[illegible]. The correlations of education, preservice criminal convictions, and preservice medical complaints were .37, .2[illegible] and .06, respectively. These findings supported the idea that screening for mental ability did reduce the delinquency problem in the Army. The authors also suggested that preservice criminal behavior and age at the entry be examined more closely, particularly for those in the lower mental ability groups.

One of the continuing concerns of the Army has been that the elimination of delinquents might also eliminate men who, in time of war, would make the best soldiers. This question was addressed directly by research undertaken by Dubuisson and Klieger.[9] The sample for the investigation consisted of [illegible],291 men from three regiments in combat in Korea. For the analysis of combat effectiveness, the elimination of men who had been court-martialed during the conflict, or for whom adequate combat data were not available, reduced the sample to [illegible]0 men. Enlistees with precombat court-martial convictions received poorer combat performance and combat aggressiveness ratings from their noncommissioned officers than those who had no such convictions. The number of draftees with precombat court-martial convictions was too small to be satisfactorily analyzed.

A second question addressed, using all 2,291 in the sample, was the prediction of acceptable performance for enlistees and draftees. Two findings were immediately apparent: first, enlistees were more likely than draftees to give unacceptable performance; second, acceptable performance was more difficult to predict among enlistees than among draftees (i.e., the average triserial correlation for the 9 predictors were .1[illegible] and .[illegible] in the enlisted and drafted samples, respectively).

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[8] Klieger, W. A., Dubuisson, A. U., and Sargent, L. L. Correlates of disciplinary records in a wide-range sample. ARI Technical Research Note 1[illegible]. August 19[illegible]. (AD [illegible])

[9] Dubuisson, A. U., and Klieger, W. A. Combat performance of EM with disciplinary records. ARI Technical Research Note [illegible]. June 19[illegible]. (DDC [illegible])

The best predictor for the enlistees was the a priori key (i.e., the psychopathology key) of the Personal Inventory (PT 2401), a personality test, followed closely by a measure of mental ability, i.e., the GT score from the ACB. The best predictor for the draftees was a different key from the Personal Inventory--the Classification Inventory, which is used to select troops for combat MOS. The second best predictor for the draftees was level of civilian education. Differences in the significant predictors for the two samples were not discussed.

The final report in this series[10] involves the prediction of unacceptable performance in a peacetime Army. Three thousand men were given a battery of paper-and-pencil instruments at the time they entered the Army. The criterion data were gathered two years later. Incomplete data resulted in the elimination of all but 779 enlistees and 1,103 draftees. Again, enlistees proved more likely than draftees to give unacceptable performance. In fact, the draftees with unacceptable performance were so few that no further analyses were conducted on that sample. The most valid individual predictors of enlistee discipline failure were the newly developed Personal History Form, OA-1 (PT 3[illegible]6); the Army Personal Inventory, S-1b (PT 30[illegible]); level of civilian education; age at entry; and total score on the AFQT. A cadre rating of potential for becoming a "trouble maker" had a relatively low validity coefficient, but it did contribute to the level of the multiple correlation which could be obtained by combining several measures. Two multiple correlations were developed by randomly dividing the enlistees into two subsamples. The magnitude of these correlations (r = .1 and .[illegible]) was about the same in each sample, but the variables which contributed to the correlation differed considerably for the two subsamples. These findings again suggested the difficulty of predicting delinquency even among a relatively homogeneous group: enlisted troops.

Although the research in this series was directed towards a common goal, the studies differed in methodologies and variables. Further, the samples, most of which were drawn for some other purpose, differed markedly from one another. Nonetheless, some results stand out. First, unacceptable performance was difficult to predict. The highest correlation for a single variable or a combination of variables was in the low .0s. Prediction became more difficult when a sample was divided into subsamples of enlistees and draftees.[11] Second, enlistees were more likely than draftees to give unacceptable service,[12] partly because of the differences in age at

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[10] Dubuisson, A. U., and Sargent, B. B. Prediction of disciplinary behavior in a two-year follow-up sample. ARI Research Memorandum [illegible]. October 19[illegible].

[11] Dubuisson and Klieger, 19[illegible], op. cit.

[12] Klieger, deJung, and Dubuisson, 19[illegible], op. cit.; Klieger, Dubuisson, and Sargent, 19[illegible], op. cit.; Klieger and Dubuisson, 19[illegible]0, op. cit.; Dubuisson and Klieger, 19[illegible], op. cit.; and Dubuisson and Sargent, 19[illegible], op. cit.

entry and level of education. Third, peer ratings of combat effectiveness appeared to be good predictors, particularly if they were administered fairly late in service.[13] Finally, although personality instruments did prove to be related to the criterion, the best paper-and-pencil instrument (the OA-1) focused upon the individual's background.[14]

Confinement to a Stockade

Fuchs attempted to determine how men confined to Army stockades differed from other enlisted men in the Army at the same time.[15] His stockade sample consisted of approximately 10,000 men who were in Army stockades for the first time during 19[illegible], had been sentenced to confinement, and whose sentence had been upheld by at least one reviewing authority. The control sample (N = [illegible],000) was randomly selected from men whose records appeared on the Enlisted Master Tape Record. The significance of the six predictor variables reported can be computed; all were significantly different from chance (i.e., the percentage difference analyses yielded Z ratio statistics for differences between proportions[16] which ranged from [illegible]). The two most important variables differentiating the two samples were level of civilian education and age. The other variables were, in order of their importance, race, component of service, length of service, and mental category on the AFQT. Based on this analysis, the "typical" new stockade prisoner would be a high school drop-out, less than 19 years old, black, an enlistee with less than one year of service who scored in mental category IV on the AFQT. Although this description from Fuchs'[17] data provided valuable information on the types of persons most likely to be confined to Army stockades, the level of validity obtained was not sufficiently high to be useful for administrative purposes.

Early Discipline Failure

Larson and Kristiansen attempted to determine whether discipline failure could be predicted early in Army careers[18] --an important question,

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[13] Katz and Willemin, [illegible], op. cit.

[14] Dubuisson and Sargent, [illegible], op. cit.

[15] Fuchs, E. F. Characteristics of stockade prisoners--Summary of major findings. ARI Research Study [illegible]. March [illegible].

[16] Guilford, J. P. Fundamental statistics in psychology and education. McGraw-Hill, [illegible].

[17] Fuchs, [illegible] op. cit.

[18] Larson, E. E. and Kristiansen, D. M. Prediction of disciplinary offenses early in Army service. ARI Technical Research Note [illegible]. April [illegible]. (AD [illegible])

not only for screening but also for establishing any special training program or other rehabilitation for soldiers who would otherwise get into trouble. The study began with the administration of the Background and Opinion Questionnaire (BOQ-1)[19] to 4,123 men who were in reception stations during a given week in 1967. The instrument consisted of four scales: the Psychopathic Delinquency (PD), Neurotic Delinquency (ND), Subcultural Delinquency (SD), and Overall Acceptability (OA) scales. The first three were based on civilian delinquency research;[20] the fourth was derived from previous ARI research.[21] In addition to the BOQ-1, background data were gathered on age at entry, race, level of civilian education, mental ability as measured by the AFQT, and component of service.

Delinquency criterion data gathered following BCT and Advanced Individual Training were available for only 1,999 of the men in the sample. Based on that information, men were divided into two groups, offenders and non-offenders. Offenders were men who had been (1) given an Article 15, (2) AWOL at the time of data collection, (3) court-martialed, (4) punitively discharged, (5) undesirably discharged, or (6) given an undesirable discharge which was still pending. The non-offenders did not experience any of these adverse actions.

The relationship between the predictor variables and the delinquency criterion was uniformly low. The three best predictors, OA and PD scales and the number of years in school, had point biserial correlations of .16, .11, and -.10, respectively. While the OA was found to be the best predictor, it had too low a level of validity to be used either for screening or for selecting individuals for special programs.

DELINQUENCY REDUCTION IN BASIC COMBAT TRAINING

More recently ARI has initiated or evaluated four paper-and-pencil instruments designed to predict military delinquency and two programs designed to reduce discipline failure in BCT. The instruments were (1) the Taylor-Johnson Temperament Analysis, or TJTA,[22] (2) the Background

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[19] Kristiansen, D. M., and Larson, E. E. Development of a Background and Opinion Questionnaire for predicting military delinquency. ARI Research Memorandum 68-4. October 1967.

[20] Quay, H. C., and Peterson, D. R. The questionnaire measurement of personality dimensions associated with juvenile delinquency. Unpublished manuscript. NIH grants M-990. and M-[illegible]. Undated.

[21] Rosenberg, F., Brown, E., and deJung, J. Development of a background data questionnaire for identifying military delinquents. ARI Research Memorandum 68-10. 1968.

[22] Taylor, M., Morrison, L. P., Morrison, W. L., and Rommser, R. C. Taylor-Johnson Temperament Analysis manual. Los Angeles: Psychological Publications, 1967.

and Opinion Questionnaire-[illegible], or BOQ-[illegible],[23] (3) the Early Experience Questionnaire, or EEQ,[24] and (4) the Demographic Questionnaire, or DQ.[25] Two of these instruments, the TJTA and BOQ-[illegible], were also used in the two programs for delinquency reduction which ARI evaluated.

The AWOL Syndrome Approach

In the fall of 19[illegible], the Office of the Deputy Chief of Staff for Personnel, Department of the Army, requested an evaluation of the effectiveness of a new system for reducing discipline problems in BCT.

The system had been developed by Army Chaplain, CPT Berbiglia, based on his experience with stockade prisoners at Fort Bliss, Texas. Berbiglia noted that soldiers confined for AWOL offenses showed a distinctive pattern of scores on the TJTA, describing themselves as nervous, depressed, quiet, inhibited, hostile, or impulsive. Extreme scores on four or more of these six traits constituted what Berbiglia called the "AWOL Syndrome."[26]

At Fort Polk, Louisiana, Berbiglia initiated a program to reduce AWOL and other discipline failures. New trainees were screened by the TJTA, and those who exhibited the AWOL Syndrome were interviewed by their company commanders. Subsequently they were referred to Berbiglia, who provided counseling and referral, when appropriate, to additional services on post (e.g., finance officer, legal officer, Red Cross, Community Service, mental hygiene). Discipline failure seemed to decrease, although statistics were not available to confirm the results or to determine which aspect of the program was responsible for the observed effects.

ARI evaluated a modified program at Fort Polk, in which the company commanders provided the interviewing, counseling, and referral functions.

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[23] Bell, D. B., Bolin, S. F., and Houston, T. J. Development of the Background and Opinion Questionnaire-[illegible]. ARI Research Memorandum [illegible]. December 19[illegible].

[24] Bell, D. B., Kristiansen, D. M., and Seeley, L. C. Initial considerations in the development of the Early Experience Questionnaire (EEQ). ARI Research Memorandum [illegible]-10. July 19[illegible].

[25] Rollier, R. L. Fort Leonard Wood AWOL and Desertion Study (FLWADS) Phases I and II. October 19[illegible].

[26] Berbiglia, J. C. The AWOL Syndrome supplement 3: Taylor-Johnson Temperament Analysis manual. Los Angeles: Psychological Publications, 1971.

One-third of the men were treated by the AWOL Syndrome approach; one-third by a similar strategy using the Background and Opinion Questionnaire (BOQ-[illegible]), and one-third were controls. Among the control groups, 10% were randomly selected for company commander interviews. All the men were tested with both the TJTA and BOQ-[illegible], but only the two-thirds in the experimental groups were scored at the time of testing. Controls were scored independently at the end of [illegible] weeks of training.

Six months of training data in [illegible] companies produced at least 1,500 cases in each of the three sample groups, complete with official discipline data and ratings obtained at the end of training. For analysis, men were divided into three categories: (1) those whose actions resulted in AWOL or any recorded punishment under the UCMJ, (2) those who were rated by their platoon sergeants as insubordinate or recalcitrant but had no official record, and (3) those who had no such punishment or rating. These three categories were called "official," "marginal," and "clean," respectively. For some analyses, all three categories were used; for estimates of the relative strengths of relationships (measured by tetrachoric correlations) the marginal and official categories were combined.

Contrary to earlier held views, the analyses showed that the TJTA was neither a valid predictor of discipline failure[27] nor of AWOL.[28] Moreover, referring men to their company commanders on the basis of their scores on the TJTA actually increased delinquency rates.[29]

These findings for the TJTA have been supported by other investigators. A study at Fort Leonard Wood,[30] similar but without a control group, showed a low but statistically significant relationship between the TJTA and AWOL (phi = .0[illegible]) among BCT troops. The TJTA was not related to AWOL in the control sample at Fort Polk. Fraas and Fox,[31] in a separate study, were unable to cross-validate Berbiglia's finding of a specific syndrome among AWOL prisoners.

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[27] Bell, D. B, Bolin, S. F, Houston, T. J., and Kristiansen, D. M. Predictions and self-fulfilling prophecies of Army discipline. Proceedings of the [illegible]st Annual Convention of the American Psychological Association, 19[illegible], [illegible]43-744.

[28] Bell, D. B., Kristiansen, D. M., and Houston, T. J. An evaluation of two systems for reducing discipline failure in BCT. ARI Technical Paper, in preparation.

[29] Bell et al., 19[illegible], op. cit.; Bell et al., in preparation, op. cit.

[30] Rollier, 19[illegible], op. cit.

[31] Fraas, L. A., and Fox, L. J. The Taylor-Johnson Temperament Analysis "AWOL Syndrome": A further evaluation. Fort Riley, Kansas: U.S. Army Correctional Training Facility, 1972.

On the basis of current research, the TJTA does not appear to be related to discipline failure or to AWOL when the scores on the TJTA are not known to either the cadre or the trainees. Although Berbiglia may well have reduced discipline failure, the same results are not achieved when his procedures are followed by the on-line BCT cadre.

The Background Information Approach

The BOQ-[illegible]. In the BCT delinquency-reduction program the BOQ-[illegible] was designed to (1) select individuals for the program and (2) provide commanders with assistance in interviewing participants. To fulfill the first function, the instrument had to be a valid predictor of the men most likely to experience discipline failure and thus need a special program. To fulfill the second, the questions and responses appearing on the form followed a logical order that could be used as a structured interview guide.

Twenty-two of the [illegible] items of the BOQ-[illegible] were drawn from previous research instruments[32] and were scored dichotomously. The remaining three items were unscored fillers. In studies at Fort Polk[33] and Fort Knox,[34] the scoring system was modified to reflect previous ARI findings that young dropouts--men who did not graduate from high school and who joined the Army prior to their 19th birthdays--ran a higher risk than others of getting into trouble.[35] By the adoption of different cutting scores for the young dropouts (YDOs) and other men, approximately [illegible]% of the YDOs and [illegible]% of the non-YDOs were placed in the high risk group.[36]

Although the overall scoring system was designed to place 10% of the BCT soldiers in the high-risk group, the actual number of men was greater:

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[32] Kristiansen and Larson, 19[illegible], op. cit.; Rosenberg, Brown, and deJung, 19[illegible], op. cit.

[33] Bell et al., [illegible], op. cit.

[34] Bell, D. B., Kristiansen, D. M., and Houston, T. J. Predictions and self-fulfilling prophecies of Army discipline: A follow-up evaluation. Paper presented at American Psychological Association Annual Convention, New Orleans, August 19[illegible].

[35] Fuchs, 19[illegible], op. cit.

[36] Bell, Bolin, and Houston, 19[illegible], op. cit.

[illegible]% at Fort Polk and [illegible]% at Fort Knox. The higher figure at Fort Knox was the result of the early phases of the Army's conversion to an all-volunteer force, which increased the proportion of young dropouts, by the time of the Fort Knox study.

The BOQ-[illegible] was validated at both Fort Polk and Fort Knox against the same three-category criterion that was used to validate the TJTA. YDO scoring of the BOQ-[illegible] yielded a statistically significant prediction for both "marginal" vs. "clean" and "official" vs. "other" (chi square partitions) at both installations. The tetrachoric correlations obtained for these data were in the moderate range (r_{tet} = .[illegible]0 and .[illegible]7 for Fort Polk and Fort Knox, respectively).

YDO scoring of the BOQ-[illegible] resulted in valid predictions, but it did not give the best prediction possible from the variables of education, age at entry, and BOQ-[illegible] scores. It was more valid than either YDO alone (r_{tet} = .[illegible]) or BOQ-[illegible] scores alone (r_{tet} = .[illegible]); however, a better prediction could be obtained from high-school graduation (r_{tet} = .[illegible]). Because it is simpler to determine a soldier's level of civilian education, and this measure is more valid, the continued use of the BOQ-[illegible] as a predictor of delinquency is questionable. The BOQ-[illegible] may still be a useful research tool if it proves to add to the predictive validity of high-school graduation.

The BOQ Approach. The BOQ approach to reduction of delinquency in BCT was similar to the AWOL Syndrome approach. Scoring of the BOQ-[illegible] in the experimental groups at Fort Polk and Fort Knox yielded high-risk groups subsequently referred to company commanders for interview. The BOQ-[illegible] itself was used as the basis of structured interviews. Each commander at each installation was provided with instructions on how to conduct the interviews [illegible] and [illegible]. The researchers taught basic interviewing/counseling skills to the commanders by methods which included live demonstrations and critical observations of the commanders' attempts to apply the new techniques. However, because of the large numbers and constant turnover of the commanders, this training aspect of the program was largely ineffective.

The BOQ program operated in different contexts at the two posts. At Fort Polk, the program was part of a large, on-going delinquency-prevention effort centered on the TJTA. At Fort Knox, the BOQ was the only on-going organized program.

Referral for interview was also handled differently at the two posts. At Fort Polk, referrals were made through a list of names that made it obvious which men were in the control group and which were in the experimental groups. Since part of the experimental effect might be due

to labeling alone, masking the identities of control and experimental subjects was attempted at Fort Knox.

The BOQ approach was counterproductive at both installations. The proportion of men who were coded as part of either the "official" or "marginal" group was 10% higher among those referred for interview than among those with similar scores on the BOQ who had not been referred.[37]

Although the outcome using the BOQ approach is known, the process which produced it is not. It is quite likely that the lack of training for the commanders worked against the prospects of achieving success with the BOQ approach. Some evidence exists that the commanders did not follow the procedures outlined in the instructions for conducting BOQ interviews.

In both the AWOL Syndrome and BOQ approaches at Fort Polk the labeling process may have led to scapegoating--in which commanders were more likely to punish men adversely labeled as high risks, or to self-fulfilling prophecy--in which both commanders and those adversely labeled accepted the labels and acted accordingly. These explanations may also apply to the Fort Knox program since evidence exists that the masking procedure did not work.

In summary, the BOQ-7 was used at two BCT posts to predict discipline failure. At both installations, the instrument showed a moderate level of validity against the delinquency criteria. Its use as part of a delinquency prevention program was less successful; at both installations, identification of men for company-commander interview led to an increase in delinquency. The best explanation of the adverse results was that labeling of men as potential delinquents led to scapegoating or self-fulfilling prophecy effects.

The Early Experience Questionnaire

During the fall of 197[illegible], the Secretary of the Army asked for a review of Army standards for admission of enlisted personnel, in order to determine whether these standards could be changed to admit more men to the service and yet, if possible, maintain and improve their quality. The Secretary was particularly concerned that standards were relying too heavily upon cognitive factors; he wanted some way to allow certain assets such as high motivation to compensate for deficiencies such as lack of formal education.

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[37] Bell, Christiansen, and Houston, 197[illegible], op. cit.

ARI responded with two lines of research. The first combined the selection factors of age, education, mental aptitude, and criminal behavior into a single index called the Military Aptitude Predictor (MAP). The second developed additional instruments and procedures that could be added to the MAP to broaden the screening standards and make them less dependent upon cognitive factors. The EEQ (PT 012R) was developed as a part of this research. It was a short multiple-choice instrument designed to screen out, at the point of entry, men who had high potential for experiencing adverse disciplinary actions early in their Army careers. It was based upon previous ARI research which had shown that preservice experiences were the best predictors of discipline failure in the first tour of service. The initial norming and validation sample consisted of ,. men in reception stations at Forts Dix, Jackson, Ord, and Leonard Wood during March 19'.

An index of early failure was developed which included men who had been discharged from service (for whatever reason) or who had been punished under Article 1 of the UCMJ prior to completion of BCT. This criterion was applied to the ... non-prior service men at Fort Leonard Wood. Thirty-one of these men had experienced early failure: 17 had been discharged, and 1. had been punished prior to completion of BCT. A cutting score of . or more on the EEQ yielded a moderate level of validity (r_{tet} = .'0) for the EEQ against the early-failure criterion.[38]

Unpublished data from the part of the total sample for which there is complete data (N = ., ') indicates that the EEQ does predict delinquency. In these data, the criterion had the two categories, delinquent--those who were AWOL, given an Article . or were court-martialed--and non-delinquent. A cutting score of .0 or more on the EEQ yielded a tetrachoric correlation of .'9 against this delinquency criterion. On the basis of these findings, the EEQ appears to be a better predictor of early failure than the BOQ-' . However, neither instrument can be effectively used by itself as a means of eliminating problem soldiers at the point of entry, unless the Army is also willing to screen out large numbers of men with false positive scores who would not experience discipline failure.

The Demographic Questionnaire

The Demographic Questionnaire (DQ) was developed by two Army psychologists working at Fort Leonard Wood. The impetus for its development was the generally disappointing results of the post's delinquency prevention program based upon the AWOL Syndrome approach. The new instrument, consisting of 2 items in a true-false format, addressed: (1) AWOL,

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[38] Bell, Fristiansen, and Seeley, 19'., op. cit.

(2) psychiatric disorders, (3) financial problems, (4) medical-physical problems (5) religious-moral problems, and (6) critical problems associated with the possibility of using drugs or harming oneself or others. Pilot testing, clinical judgment, and previous experience with similar items were used to develop an empirical key for 7[illegible] of the 91 items.

Substitution of the DQ for the TJTA in the post's delinquency prevention program resulted in a low validity for the prediction of AWOL (phi = .20) and a moderate validity (phi = .30) against a criterion of adverse separation from the service under Chapters 9, 10, 13 or 14 of Army Regulation [illegible]-200.[39] The results for the prediction of AWOL are identical to those obtained under the same testing conditions elsewhere using the TJTA.

In March 197[illegible], [illegible] non-prior-service trainees were given both the DQ and the EEQ prior to starting BCT and were evaluated against a common criterion [illegible] weeks later. The analyses of that experiment, although not completed, provide some information. First, the DQ shares many items with the TJTA and BOQ-72. Content analysis of the DQ shows that 43 of its items are identical or quite similar to items of the TJTA or BOQ-72. Second, the items of the DQ appear to be subject to a response bias, i.e., 90% or more of the respondents answered 9 of the questions in the same way. Third, the factor structure of the instrument is quite different from that suggested by the six topic areas listed above. Finally, the instrument and at least some of its items are predictive of discipline failure.[40]

FACTORS IMPACTING ON DISCIPLINE

During 197[illegible] and 197[illegible] ARI was also engaged in a broadly based research effort designed to assess the social-psychological factors underlying the idea of discipline in the Army. Portions of that research addressed the question of the efficacy and utility of predicting individual delinquency in the Army on the basis of a large set of predictor variables.

Research Effort

While much of the earlier research on discipline had focused on specific background characteristics, personality characteristics, or situational variables as related to disciplinary behavior on a fragmentary

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[39] Rollier, R. L. Briefing on the Fort Leonard Wood AWOL and Desertion Study, presented to General DePuy at Fort Leonard Wood, [illegible] July 197[illegible].

[40] Bell, D. B. Development of the Demographic Questionnaire (DQ). ARI Research Memorandum, in preparation.

basis, this broader research attempted to integrate these different predictors, so as to increase the predictability of disciplinary problems, and to discuss the implications of the findings as they relate to the Army's ability to improve discipline within the force.[41]

Data were collected by an anonymous, self-administered questionnaire from a sample of [illegible] enlisted men and noncommissioned officers stationed in the continental U.S., Alaska, and West Germany during [illegible].

Respondents were asked to answer a number of questions concerning their attitudes toward authority figures, as well as their educational background, relations with parents, racial ancestry, and other standard social background questions. The criterion measures for regression analyses consisted of three sets of self-report information on: (1) reported number of AWOLs, (2) incidence of general delinquency in the Army (frequency of assaults, thefts, destruction of property, drunkenness), and (3) incidence of resistance to authority (frequency of insubordination, refusal to follow orders, drug possession and use).

In order to facilitate analyses of the data, all of the predictor variables were divided into two sets: those having to do with each individual's history and personal tendencies--non-environmental factors which the Army might be able to use in personnel selection but otherwise has no power to control--and those having to do with conditions in the individual's military environment after his entry into the Army.

The non-environmental predictor variables were further divided into two groups: those having to do with the respondent's social background before entering the Army, and those having to do with his basic personality.

Results

The following social background variables--extent of preservice delinquency, number of school expulsions, number of civilian arrests, and difficulties in holding a job--were most predictive of self-reported AWOL behavior in the sample studied. Specifically, these variables were found to account for [illegible] of the variance of AWOL in the sample ([illegible]). Personality variables, on the other hand, accounted for less than [illegible] of the explained variance of AWOL behavior ([illegible]). This latter finding supports earlier research on the ineffectiveness of personality instruments as screening instruments. Situational variables--in this case job satisfaction in the Army, financial problems, and the presence of perceived racial discrimination--accounted for only [illegible] of the explained variance in AWOL behavior.

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[41] Bauer, R. G., and Holz, R. F. Assessing the state of discipline in the U.S. Army. ARI Technical Paper, in preparation.

In terms of predicting general delinquency, the second criterion measure, the only meaningful predictors found were those relating to reported preservice delinquency and number of civilian arrests. These two variables accounted for .1% of the explained variance of general delinquency among the sample (r = . 9). Neither personality nor environmental variables were found to have a demonstrable effect on the occurrence of general delinquency.

With regard to the third criterion measure, resistance to authority, the social background variables of preservice delinquency, number of civilian arrests, and number of school expulsions were found to account for .7% of the explained variance (r = . 9). The environmental variables of job satisfaction, sexual satisfaction, and satisfaction with living quarters were found to account for only .4% of the explained variance in resistance to authority (r = .2)

DISCUSSION

Behind much of the research on military discipline and delinquency has been the objective of developing screening instruments that would differentiate between the successful and unsuccessful soldier. While the idea that potential troublemakers can be identified before they enter the service is appealing, the data do not support the practicality of such an approach. Over 30 years of research have been conducted on screening instruments; perhaps it is time to consider discipline research from a different perspective. Specifically, the search for variables within the individual, particularly personality or social background variables that could predict disciplinary problems, should probably end. Developing correlates of delinquency and discipline based on the social structural/situational model functioning within the Army itself seems more likely to lead to practical programs.

This approach will not be popular; it will require changes not only in recruitment but training and retention as well. The necessity for a change in perspective, however, is suggested not only by the data reported but by the system of voluntary military service now in operation. Under a system of voluntary service the Army will continue to compete with other organizations for a limited number of men. If a professional Army is to be forged, the organization must be willing to undergo change--however difficult that change may be.

FUTURE RESEARCH EFFORTS

At present, a number of research efforts have been planned to capitalize upon the findings of the research reviewed in this report. The principal research which has a direct bearing upon delinquency is a longitudinal analysis of achievement and failure patterns among new soldiers which is scheduled to begin in 19[illegible] and to continue for three

years. The purpose of the research is to determine whether distinct patterns of achievement and failure exist among first-term soldiers; if so, whether such patterns can be predicted early in the career, and what factors contribute to their existence. The study involves merging data from three sources and conducting appropriate analyses of the resulting longitudinal files. The data sources are (1) the earlier Fort Polk-Knox experiments, (2) a longitudinal study of socialization and adjustment to the Army[42] and (3) administrative data from the Enlisted Master Tape Record collected monthly for all new soldiers entering the Army since June 19[illegible].

The planned effort has several advantages over previous delinquency studies. First, its focus is larger. Not only are various types of achievement included, but also there is a good deal of variety in the types of delinquency data available. Second, the research involves a larger, more representative sample than has been used previously. Third, because the majority of the data are administrative rather than experimental in nature, there should be considerably less data attrition. Finally, the use of multiple observations, rather than cross-sectional or single follow-up criteria, should add a new dimension to what is known about delinquency in the Army.

The research effort will focus, therefore, on a multiple set of issues concerning disciplinary problems in the Army. While some of the data may be found to affect the recruitment of personnel, other data will, in all probability, reveal the differential impact of training and situational factors on the performance of the soldier. Viewing the question of discipline from a broader, interactive perspective should improve policy decisions that affect the maintenance of the combat readiness of soldiers in a peacetime Army.

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[42] Holz, R. F., and Goodstadt, B. Socialization and adjustment of Army personnel. ARI Research Report, in preparation.

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