The Detection of Incipient Army Criminals

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THE SELECTIVE SERVICE SYSTEM IN operation during the late war delivered selectees to the Armed Forces Induction Stations, where they were examined to determine whether they met the War Department standards for induction. Failure of a selectee to meet prescribed standards resulted in rejection. Such action was based essentially on the assumption that unqualified selectees could not serve a useful purpose in the Armed Forces, but that qualified selectees could.

The standards were roughly of three kinds: physical, mental, and moral. Examinations in all three fields were at first made by medical doctors, but as personnel needs became more acute and finer discriminations became necessary, nonpsychiatric mental examinations became the specific responsibility of professional psychologists. Responsibility for moral examinations, however, was never clearly delegated to specialists in this field.

As the war progressed it appeared that induction station screening procedures were, in general, fairly satisfactory in the physical and mental fields; but the Army prison population increased rapidly. Overcrowding in disciplinary barracks and rehabilitation centers became worse and worse, despite the regularly increasing number of such installations—a state of affairs indicating that screening procedures to prevent the induction of these men were not entirely satisfactory.

The situation was further complicated by a War Department provision that Selective Service registrants with other than honorable discharges from the Armed Forces, registrants currently undergoing confinement, and registrants with prison records might be inducted after approval of the Service Commander had been secured. In the 7th Service Command the responsibility for granting this approval was delegated to the Personnel Division in the Service Command headquarters.

The difficulty was most acute in connection with applications for induction from registrants currently undergoing confinement. At first the short, running case histories accompanying these applications were evaluated subjectively and applications either approved or disapproved accordingly. These case histories varied widely in completeness, and some were much more persuasive than others. This element of persuasiveness was one with which it was particularly difficult to deal. Finally, under special War Department authority, the development of improved procedures was undertaken.

From an address delivered at the annual meeting of the American Educational Research Association, Atlantic City, New Jersey, March 3, 1947.

A Preliminary Procedure

A search of the literature revealed that several studies had been made by sociologists in predicting success in the probation and parole of civilian prisoners. From published data a Case History Check Sheet was constructed for preliminary use in evaluating the case histories submitted with applications from corrective and penal institutions. By means of this sheet and the accompanying parole violation expectancy table, a running case history could be evaluated quantitatively. It was assumed that a potential parole violator would also be a poor Army risk. This device was found to be a great improvement over the unaided subjective evaluations made previously; but inasmuch as it was based on data from a civilian population and its use rested on an unverified assumption, and because it was not well adapted to routine induction station use, steps were taken to develop a still more satisfactory procedure.

In using the Check Sheet it was noted that half or more of the items included pertained to circumstances and conditions of life *prior* to imprisonment. Since these items had been shown to have a significant predictive value in relation to parole violation *after* a term in prison, a more comprehensive list of such items could be employed in the contemplated device. Eventually a psychological rather than a sociological procedure was decided upon, *i.e.* judgment was to be based upon the reactions of the selectee himself made on the spot. Analysis of the psychological principles involved indicated that nothing would be lost and much might be gained by using items having a sociological connotation.

Psychological Principles Involved

Maladjusted, antisocial behavior in an adult is learned behavior, constitutionally permitted but not so caused. Such behavior was learned and became habitual through the mechanism of trial-and-error responses to recurrent, emotionally charged, stimulus situations. In the 18–20 years leading into adulthood, behavior patterns become firmly established and cannot be shed at will; they must be unlearned. Unlearning and relearning may require the presence of remedial situations as potent and as long standing as were the originals.

With respect to these circumstances of life, variation must be considered. Furthermore, concomitant variation

among the following factors is probable: (a) occurrence of unfavorable stimulating situations up to a given date, (b) seriousness and extent of maladjustment, (c) chances for prompt imprisonment, and (d) chances for prompt rehabilitation or spontaneous readjustment. If concomitant variation among these factors is a fact, status in one can be estimated when it is known in another. For example, a measure of (a) can be used to estimate (c). This particular relationship was relied upon in developing the improved technique. More specifically stated, it was assumed that selectees arriving at an induction station with a self-related history of experiences characteristic of Army prisoners, but not of normal operative personnel, may be expected to become prisoners promptly. Inasmuch as they would then serve no useful purpose, rejection would be the indicated action.

Developmental Technique

The technique employed to develop and calibrate this measuring instrument was relatively simple. From a survey of the literature a comprehensive list of descriptive items were assembled and arranged in multiple-response, single-choice form. The following examples illustrate the form of these items:

1. The number of members in my family that have been sent to a mental hospital, prison, or other institution are—
   a. none
   b. one
   c. two
   d. three or more
2. In the past 5 years I have been in trouble from fighting—
   a. not once
   b. once
   c. twice
   d. three or more times
3. As a child my parents were—
   a. always very strict with me
   b. usually very strict with me
   c. seldom very strict with me
   d. never very strict with me

Available evidence indicated that each of the items so assembled was significant in relation to social adjustment or maladjustment.

Responses to items in this experimental form, called the Biographical Case History, were secured from two contrasting criterion groups of Army personnel. The first consisted of 1,177 general court martial prisoners, inmates of the U. S. Disciplinary Barracks at Fort Leavenworth, Kansas, and the Rehabilitation Center at Camp Phillips, Kansas. The second group consisted of 1,050 enlisted men from the operative personnel of reception centers in the 7th Service Command.

The number making each response, in each criterion group, was determined. These numbers were converted to proportions, and, by comparing proportions of each criterion group, item by item, the 67 items showing the largest differences were selected to constitute the final form. Among these 67 items the smallest difference between proportions was .141. The standard error of this difference was .020, the critical ratio thus being about 7. Each of the remaining 66 items had even greater discriminating power. As usually considered, this is internal evidence of validity.

External evidence was also obtained. From the proportion of cases in the two criterion groups making each reply, a scoring key was so arranged that a credit of one point was allowed for each reply characteristic of normal soldiers but not of prisoners. A group of 1,366 prisoners (1,117 general and 249 garrison) was separated into two divisions, one consisting of 580 first offenders and the other of 786 recidivists. Statistics from these two divisions are given in Table 1. From these statistics the difference between the two means and its standard error are found to be 6.43 and .48, respectively, giving a critical ratio of about 13.

TABLE 1

Measurement Statistics on Army Prisoners Separated Into Two Divisions

Group	Cases		Mean score	S.D.
	No.	Proportion		
First offenders	580	.424	34.45	8.83
Recidivists	786	.576	28.02	8.81
Total	1,366	1.000	30.75	9.37

It is assumed that maladjustment varies from little or none, through an amount causing the first offense, into a greater amount causing repeated offenses. The two divisions of prisoners therefore represent two segments on a continuum. If it is further assumed that the distribution of maladjustment in the prison population approximates the normal curve, then obtained measures of maladjustment can be correlated with the criterion, using the formula for biserial r. Believing that these two assumptions are warranted, such a coefficient was derived from the data given above. The correlation is .428, its standard error, .029, and the critical ratio, almost 15.

This is a rigorous test of validity, because the range of maladjustment in the prison population is restricted to a small fraction of the range existing in the total population. Subsequent information indicates that the spread between the means in the normal and prison population is about equal to the spread in school achievement between the means of three school grades. Furthermore, the instrument must measure (as it does) over a total range approximately equivalent to an 8- or 9-grade range in school achievement. Therefore, if the validity coefficient in the restricted range were corrected for the total range within which the instrument must be used, it would be unusually high.

Calibration

Several questions had to be answered before standards could be constructed with dispatch. One question was: Must second and independent samples be drawn for calibration purposes? To answer this question, second, independent, but smaller samples were actually drawn, and means and standard deviations from the two samples were compared to see whether they differed significantly. The statistics are given in Table 2. Both critical ratios pertaining to the means are less than 2.0, and both pertaining to the standard deviations are less than 1.0. Thus, by the usual criterion for the significance of differences, it appeared unnecessary to draw second independent samples for standardization purposes.

TABLE 2

Measurement Statistics on Two Samples Each of Normal Operative Soldiers and Imprisoned Soldiers

Item	Mean	S.D.
Operative soldiers		
Sample 1 (1,050 cases)	47.65	6.79
Sample 2 (116 cases)	48.58	6.86
Difference	0.93	0.07
Standard error of difference	0.67	0.47
Critical ratio	1.9	0.1
Imprisoned soldiers		
Sample 1 (1,177 cases)	30.24	9.30
Sample 2 (130 cases)	31.85	8.85
Difference	1.61	0.45
Standard error of difference	.82	0.58
Critical ratio	2.0−	0.8

The second question to be answered was: Do standards based on normal operative personnel in the Army apply sufficiently well to selectees arriving for induction? To answer this question, measures were secured from a cross-section sample of arriving selectees and comparison made, as before, between the means and standard deviations in the two groups (Table 3). The difference of 1.5 points between the means, although statistically significant, was considered unimportant operationally in relation to the difference of 17.4 points between the means of operative and imprisoned personnel. The standard deviations were almost identical. For calibration purposes the two samples were combined (1,581 cases).

TABLE 3

Measurement Statistics on Normal Operative Soldiers and Selectees

Item	Mean	S.D.
Operative soldiers (1,050 cases)	47.65	6.77
Selectees (531 cases)	46.10	6.79
Difference	1.55	0.02
Standard error of the difference	.36	.25
Critical ratio	4.3	.0+

The third question to be answered was akin to the second: Do standards based on general court martial prisoners apply sufficiently well to garrison prisoners also? Measures were secured from a group of garrison prisoners, including both the sentenced and the unsentenced, and means and standard deviations were compared as before (Table 4). Since both critical ratios are less than 3, the differences were considered insignificant, and the two samples were combined for calibration purposes. For the normal group (1,581 cases), the mean was 47.13 and the standard deviation 6.81; for the imprisoned group (1,426 cases), the values were 30.42 and 9.51, respectively.

TABLE 4

Measurement Statistics on General Court Martial Prisoners and Garrison Prisoners

Item	Mean	S.D.
General prisoners (1,177 cases)	30.24	9.28
Garrison prisoners (249 cases)	31.27	10.46
Difference	1.03	1.18
Standard error of the difference	.71	.51
Critical ratio	1.5	2.3

In view of the constant military use of the term "calculated risk" and in view of the necessity for always either accepting or rejecting a selectee for induction, calibration took an unusual form. From the data given above, a pair of probabilities was derived for each possible score: (1) that a selectee would become a normal operative soldier and (2) that he would become an Army prisoner. Although these probabilities are the proportion of cases lying in the tails of the two distributions beyond a given score, the proportion in the lower end of the operative distribution and in the upper end of the prison distribution was taken. Thus, the higher the score, the greater the probability that the examinee should be classified as a prospective operative soldier and the less that he is an incipient Army criminal, and conversely.

Each pair of probabilities was further converted to a base of 1.00; that is, if the pair of chances were 16 to 16, it was considered equally appropriate to say that this represents a .50-.50 chance. Whatever pair is taken in this case, the sum is always 1.00. This is the underlying procedure followed when one has an equal admixture of successes and failures in a single normal distribution of such scores that high is predictive of success, and low of failure. In such a distribution the chances are .50-.50 at the median, .25-.75 at the upper quartile point, and .75-.25 at the lower quartile point.

With calibration in the form of paired probabilities related to two contrasting criterion groups, the critical score may always be set in accord with the amount of risk considered appropriate at the moment. Such a continuum rests squarely upon the criterion and is not merely connected with it loosely through a supplementary validity coefficient. With such a continuum the criterion becomes functional, not merely descriptive.

Utilization

Records were examined concerning the use of the Biographical Case History in the 7th Service Command during the 18-month period, March 24, 1944–September 24, 1945. The records indicate that 4,278 selectees with previous criminal records were examined. Of these, 57 per cent, or 2,438 cases, were rejected for failure to meet the moral standards for induction. The average raw score for these rejects was between 33 and 34. The pair of percentages for score 34 is 92:8. That is, one could expect 92 per cent (2,243), had they been inducted, to become moral casualties and be imprisoned.

In addition to these men, 356 made application to the Service Commander for a prior moral waiver. Of these applicants, 168 were rejected. Their average raw score was 28. Reasoning as above, 99.6 per cent probably would have become moral casualties had they been inducted. Adding these to the previous figure gives a total of 2,410 incipient Army prisoners kept by the 7th Service Command from entering the Army during this 18-month period.

Case records of moral casualties in Army prisons indicate that most of their stay in the Army represents a loss. It has been estimated that the cost of each psychiatric casualty, from inception to cure or death, in World War I averaged $30,000. Many of the elements of cost in moral casualties are the same as in psychiatric casualties.

Case records of general prisoners show rather uniformly a series of minor offenses leading eventually to a serious offense and a general court martial. If these men get into theaters of operation, they cannot be depended upon to accomplish a mission. Their failure causes the destruction and waste of material and equipment and the loss of other lives. Thus, the money spent on them routinely for induction, transportation, food, clothing, shelter, medical care, training, and equipment is sheer loss. An estimate of $1,000 each from this source is considered extremely conservative. To this must be added the cost of their apprehension, transportation, trial, confinement, and all other matters incidental to their offenses. A cost estimate of $1,000 each from this source is also considered very conservative.

Even so, at $2,000 each, the estimated money saving to the Army through the use of the Biographical Case History over an 18-month period in only one of the nine service areas, is almost $5,000,000. If the average cost of a moral casualty turns out to be equal to the cost of a psychiatric casualty ($30,000 instead of $2,000 each), this estimate would rise to over $67,000,000.

Implications

Dealing scientifically with the problem of crime resulted in monetary benefits to the Armed Forces. Similar benefits may be secured in civil life. Business and industry, for example, would find it equally profitable to avoid the employment of incipient criminals. The Biographical Case History used in induction stations can be converted to a quantified personal history sheet and used in employment offices. With it, psychologists can select morally qualified personnel for business and industry, taking whatever chances are deemed appropriate under the circumstances. Furthermore, through use of appropriate criterion groups and statistical procedures an instrument may be devised for detecting persons predisposed toward a particular type of crime. Certain types of crime are crucial in connection with certain jobs. It is quite undesirable, for example, to hire incipient embezzlers as cashiers or pilferers as watchmen.

Selection of all kinds, however, is merely a procedure enabling one portion of society to avoid the cost of crime. If crime exists, so does its cost. If a portion of society avoids this cost, the burden is increased for the remainder. The problem is prevention, not avoidance. But prevention is the negative side of the case. Stated positively, the problem is that of promoting moral living.

The field of morality lies in the twilight area between saintliness and crime. In the study here reported certain circumstances of living were found to be antecedent to crime. If these antecedents are removed, is crime prevented? If the antecedents of saintliness were discovered and more abundantly provided, would morality be increased? From present knowledge about cause and effect, the answer to both questions appears to be "yes." An effective program of action, therefore, would operate in two directions: (1) to eliminate circumstances of living that lead to crime and (2) to provide more abundantly those circumstances of living that lead to greater morality.

Three of the principal agencies concerned are the schools, the churches, and the social welfare agencies. With a device such as the Biographical Case History, schools can detect incipient delinquents and at the same time discover the particular patterns of living that are causing delinquency in individual cases. In cooperation with the churches and social welfare and other agencies, steps can be taken to alleviate these circumstances. Of the three agencies mentioned, however, the churches have the greatest opportunity.

The scientific method is universally applicable. It is a problem-solving procedure that may be applied in any field where problems exist. In physical science this procedure has yielded atomic energy and vastly increased the destructiveness of war. With less funds than are now spent on physical science, social science can accomplish equally great things, at greater present profit for society. If incipient criminals of lesser grade can be detected and the inciting circumstances of living removed, it should also be possible to detect incipient war criminals and remove the causes of war. Furthermore, in the continuous climate of peace that can be provided by social science, physical science can serve constructive ends unceasingly.