A Study of Personality of Defectives With a Social Ratings Scale

By S. D. Porteus

It cannot be too strongly emphasized that the community is interested in the mental defective not merely as an intellectually deficient person but as a potential or actual social inefficient. No argument for the provision of the means of special education of deficients, for instance, would be effective if it were not for the claim that special education renders the defective industrially and socially more competent. If the special schools fail to substantiate this claim they must be regarded as an expensive educational luxury.

The final criterion of feeble-mindedness being social inefficiency, the inability of psychologists to agree upon a definition of mental defect, in terms of definite age limits, affects but little the practical treatment of the problem. The attempt to fix definite age limits of normality was certainly justified. But the proposed twelve year Binet age level was a sieve with a mesh so small that, although the sorting out of the defectives proved to be a beautifully simple matter, it unfortunately segregated also great numbers of normal individuals. Unhappily for other theories, a nine or ten year Binet age is a measure so wide that it allows too many defectives to slip through. That the attempt to evolve a psychological definition without reference to a social criterion has failed is almost a tragedy. It would have so simplified our ideas of the apparent complexity of the relationship of human personality to society, if by means of a half hour's Binet examination we could have predicted with surety the potential social efficiency or inefficiency of each individual child.

It may not be altogether a waste of time to restate some of the difficulties which are inherent in this problem of a psychological definition of mental defect, and which constantly arise to disturb the

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theorist in mental age limits. The first is that what we call “mental age” is not a scientifically measured amount like chronological age but merely a somewhat rough and approximate statement of an individual’s performance in a compote of tests, when this performance is compared with the somewhat rough and approximate average of performance of a number of individuals of similar age.

Secondly, even assuming that the mental age as obtained is reasonably correct, the fact that two individuals have identical mental ages does not mean that there exists a very marked similarity between them. On account of the immensely wide variability of mental phenomena it is doubtful whether mental age is nearly as significant as chronological age, and, unfortunately, the higher the mental age the less the psychological equivalence. For all practical purposes, defectives of eight year mentality differ as much among themselves as they differ from seven year defectives. Twelve year defectives—and unhappily for the ten year normality level theorist there are such—differ as much among themselves as they differ from ten year defectives. Individually they have widely different dispositions, temperaments, dominant interests, moral traits, emotional control, industrial abilities and hence power of social adaptation.

Finally, a ten year defective is not the same as a ten year normal child. This observation is not of practical importance because no one attempts to treat a defective like a normal child. There is, of course, a world of difference between an idiot of two years' mentality and a normal child two years old. This self-evident fact is only mentioned to show what little practical reference the equivalence of mental age really has.

The psychologist in the field is not only hampered by the imperfections of his diagnostic instruments but is also restricted by the nature of the work he is called upon to perform. He has borrowed from medical practice the term “clinical” to describe his work, but in some ways the forced loan more resembles a theft. Clinical experience not only means observation and diagnosis but is closely related to treatment. The medical clinician makes his diagnosis and indicates treatment, either by operation or other means. If the diagnosis is wrong the clinician has an opportunity to discover the fact and to profit by his mistake. The mental clinician on the other hand observes, examines, diagnoses and recommends with rare opportunities to discover whether his diagnoses are correct or his recommendations effective. He might have to wait ten years to discover whether his
social prognosis is justified. He is decidedly handicapped because he so rarely sees his own mistakes. It took a war-time examination of a million and a half recruits to teach clinical psychologists one diagnostic lesson, but it is too much to expect such things to occur very often.

Too often the clinical psychologist is without actual first-hand acquaintance with the educational training of defectives, which he presumes to recommend. It is quite possible that he has obtained his knowledge of defectives not in an institution for the feeble-minded but in a university. To those who clamor for help in the treatment of the defective in the school, in the reformatory, or in the community, such clinicians may offer at best a psychological stone. It is barely possible that the clinician may not have had actual experience in the process of standardizing mental tests with large numbers of cases and under varying social conditions, and has not thus been made painfully aware of the many pitfalls and sources of error that such tests present.

As an unhappy consequence of these hindrances to better knowledge but principally because the people who are devising the tests have not had the opportunity of long experience in observing and training defectives, we are left with a lamentable lack of standards for measuring our own work. We use this set of tests because we have been taught to use it or because it "works"—in other words, because in so many cases it agrees with our own somewhat hazy preconceptions as to what the subject ought to do.

On the other hand, we may avoid the appearance of narrow range testing by using a great variety of performance tests, none of which we are able to interpret adequately and whose verdict, if considered separately, would make diagnosis more difficult than before. Usually, we have a sheet anchor in the form of a set of tests by which we measure all the others, accepting all the tests that agree with this standard and disregarding all the rest. This, we have been given to understand, was the method adopted in the choice of tests for individual examination in the army testing. All those which correlated very highly with an estimate of general intelligence, in this case Stanford Binet or Point Scale, were chosen. This was a perfectly reasonable method if the object were to discover a series of tests that could be substituted for a Binet examination, but entirely unjustifiable if the object were to correct a Binet verdict. The matter of interpretation of test results is an important one. It is very easy to devise tests, but a
very difficult task, involving years of experience and observation before the test can be correctly interpreted. To the making of tests there is no end, but the amount of thoroughgoing comparison of test-results with experience is pitifully disproportionate.

There are psychologists who frankly disregard the use of standardized test material and prefer to rely on their own expert judgment of the subject, as he reveals himself in his attempt at successful adjustment to a new task. The success of this method depends entirely upon the examiner's wisdom and experience, but it takes a long time to acquire this experience, and, moreover, it cannot be communicated nor statistically evaluated. Dependence upon expert judgment without objective demonstration would not add materially to the general knowledge on the subject. A good examiner will do a great deal with a poor test, but he will do a great deal better if his subjective impressions are corrected or reinforced by the use of tests of proven value.

In order, however, to prove the value of tests, one must have something to prove them by. The only touchstone of validity is agreement with experience, and experience gathered as the result of long continued and methodical observation. No number of loud asseverations to the contrary, mental tests have not come to stay unless this comparison with methodical observation has been made. Only thus are we able to know the meaning of test results and to provide a short cut to the understanding of the individual child and a surer ground upon which to base our predictions of his social potentialities. We are so prone to accept the new and epoch-making uncritically that even the Binet Scale with its many hundred thousands of individual applications is still in many cases uncertain of interpretation. To know that its verdict is right in 80 per cent. of cases means very little, if in 70 per cent. of those cases we do not need the verdict of mental tests. This method of proof is like judging marksmanship by considering only the marks on the target. We require to know at what distances the marksman stood when firing. It may be quite plain that a great number of shots have hit near the center of the target, but it is possible that the marksman was only accurate at very short distances and very inaccurate at an ordinary range. In the diagnosis of the imbecile or low-grade case the Binet or any other test aims at very close range, so that both the imperfection of the diagnostic instrument and the unreliability of the diagnostician are not easily apparent. Diagnosis of the high-grade case is, however,
equivalent to a long-distance shot, and it is in such cases that the aim of mental tests is least effective.

The whole difficulty of the task of test interpretation lies in the fact that behind so-called “mental age” stands the personality of the individual. The psychiatrist is entirely right in his emphasis on the fact that right social adjustment depends upon the whole individual make-up, rather than the mentality. A writer in a recent medical journal complained that his fellow-physicians treated the patient only below the eyebrows. With equal truth it may be said that the psychologist too often tends to observe the patient only above the eyebrows. Unfortunately, the psychiatrist, whilst he would delimit the work of the practising psychologist to psychometry—a mental measuring without interpretation—is rarely able to interpret the tests himself, yet, at the same time, cannot disregard their verdict. For all practical purposes it is just as unreasonable to consider personality as unaffected by intelligence as to consider intelligence apart from personality. The most direct way of determining the question of social fitness is to study intelligence and personality in social relations.

The task of immediate importance for the users of mental tests is, then, to provide a scheme for analyzing and measuring personality in subnormal individuals, the class to which the tests are usually applied for diagnostic purposes. The long observation and intimate knowledge of defectives as individuals that is necessary for the foundation of such a work is available amongst the staff in many institutions for the feeble-minded. But this experience must be organized in such form as to make it available for comparative purposes. Before proceeding to the description of the attempt which we have made to do this with Vineland's experience, it may be well to discuss more fully what is involved in social adaptation.

The community into which an individual must fit is, first of all, a working community, hence one of the first things to be determined is the earning capacity. Under institution conditions this may be done by a form of industrial scale, in the provision of which we are already engaged and whose main principles have been previously described.* In the next place, it is to a greater or less extent an intelligent working community, so there must be a certain modicum of learning capacity to enable the individual to profit by training and to assimilate ideas. Earning and learning capacity are then closely related to self-support. But even with the ability for self-support, the individual is not fit for the community unless he has also some capacity for self-management.

and self-control. In other words, he must have the ability to manage himself and his affairs with ordinary prudence. This capacity for self-management depends mainly upon temperament and disposition, judgment and common sense, whilst self-control must be exhibited in the inhibition of unsocial, instinctive and impulsive action. The factors affecting social fitness may be conveniently displayed in the following scheme. These factors are, of course, closely related and interact in varying degrees.

Social Fitness

1. Earning Capacity { Self-support
2. Learning Capacity
3. Temperament and Disposition { Self-management
4. Judgment and Common Sense
5. Inhibition of Anti-social Instinct and Impulses { Self-control

In this attempt to devise a social rating scale for mental defectives certain guiding principles have emerged.

In the first place, it was thought advisable to select only asocial characteristics rather than to include any positive qualities in the scale. In this way the applicability of the scale is limited to individuals who are subsocial or at best at the borderline of social normality. In other words the scale is intended to provide a measure of social sufficiency rather than of social efficiency. It will not permit of a classification of individuals above the lower limen of social competency. In this respect the scale may be said to represent a test of specific social gravity, which, being determined, allows us to judge whether the individual is able to float in society, but will not tell us how high he will float above the surface. The latter question would involve a measuring of the whole personality and a balancing of positive and negative qualities—a task too complicated for our present knowledge. The difficulties in the way of such a balancing appeared to us to be insuperable. To what degree, for instance, would capacity for leadership in a thief be considered an asset, and to what degree a social hindrance? A girl who is socially maladjusted on account of extreme suggestibility might rank high as an inmate of an institution if she were rated in such qualities as obedience, cheerfulness, affection
and industrial ability. Her very suggestibility would render her amenable to good influences in her training, but all of these good qualities would not serve to obliterate the mark of the cloven hoof, which signifies potential social inefficiency. Generosity and good-heartedness are of little value in the possession of a fool. In a court of law evidence of good character may be admitted in mitigation of the punishment, but not in condonation of the offence. The same principle appears to apply when we are concerned with the practical basis of a social rating.

This confining of the selection of traits to the negative aspects of personality has a further advantage in that it restricts the consideration of ability to the lower half of the distribution—that is, on the side below the average. This has the effect of rendering accurate observation and the giving of ratings easy. It is manifestly less difficult to compare automobile drivers below the average ability than to compare those who are above average. Mistakes and the effects of inexperience are so obvious that even limited observation enables us to obtain a good measure of comparison. It takes very ordinary conditions to show up poor skill, whereas it requires an extraordinary emergency to bring into play the differences in ability amongst the extremely skilled. Stated differently, we may assume that the comparison of individuals is easiest when they are at either end of the distribution as regards ability. Consequently, it should be easier to compare generals as respects military skill than captains, and probably easiest to compare raw recruits. This should be true, not because there are wider differences between recruits than between generals, but because the differences are more easily observed. This is on account of the fact that, although the distribution of ability follows the normal curve, the rate of acquirement of skill is certainly skewed towards the minus side of the average.

As regards the mentally deficient, it is a great deal easier to rate children in disobedience than in obedience. The former is brought very often under observation so that there are manifold opportunities of judging children in this respect. But if we attempt to make a further division of the obedient children—the zeros and ones of our ratings—we might have to wait for an extraordinary emergency to make this differentiation possible. This holds good, also, as regards planning capacity. It is far easier to rate defectives according to the varying degrees of their lack of planning capacity than to rate normals throughout the whole range of this ability.
This tends to absolve our scale from some very pertinent criticism by Thorndike (4) with regard to errors inseparable from personality rating scales. He points out that ratings for widely different capacities tend to show a suspicious sameness in their correlations with the general measure of ability, and also coefficients higher than reality, plus the attenuation due to chance errors of observation would be likely to give. This condition he attributes to the "halo" which surrounds each individual, and which tends to color all the judge's views of that person. Owing to the fact that our plan makes for greater accuracy of observation, we have not found quite the same equivalence of the correlations of the single traits with the general measure. It will be observed that the coefficients have a wide range of value. The intimate acquaintance of the observers with the cases rated also renders the high correlation of certain traits with general ability less likely to be fictitious. The constant error of the "halo," as Thorndike terms it, if not eliminated, has apparently been considerably reduced by our method.

In the next place, it was found impractical to attempt a thorough-going analysis of personality which would take account of all the traits characteristic of mental deficiency. Even the simplest personality is a complex of very many traits of vastly varying import, and a too minutely divided scale would, of course, break down by its own weight. The utmost simplicity compatible with effectiveness is the aim.

The means adopted to secure the inclusion of the traits most characteristic of defectives were as follows: From the descriptions of feeble-mindedness in its social aspects, as given by the most eminent authors on the subject, a collection of traits observed among the feeble-minded was obtained. To these were added others indicated by our own experience. The result was a list of some fifty descriptive terms. The names of one hundred and twenty-five high-grade defectives were then submitted to three judges of very long experience and intimate acquaintance with these cases. The judges were then asked to indicate which traits might be considered characteristic of each individual case. In this way the frequency of appearance of each trait was determined. Many of the traits were so unusual in their appearance that they could at once be disregarded as not forming salient features in the picture of feeble-mindedness. The grouping of traits of lesser frequency with others very closely allied also reduced the number of traits until eleven remained. These were:

1. Lacking planning capacity in a new situation, poor executive ability.
2. Lacking initiative or volition, dependent on others for impulse and direction.
3. Irresolute, easily confused.
4. Nervous and excitable, over emotional.
5. Silly or obtrusive. Loud or forward.
6. Simple, suggestible.
7. Impulsive, imprudent, tending to act without due consideration.
8. Persistent moods, such as obstinacy, foolish elation, seclusiveness.
9. Bad-tempered, quarrelsome, over resentful of criticism.
10. Impudent, disobedient, disrespecting authority.
11. Cunning, sly, deceitful.

Roughly divided, the first four groups have reference mainly to ability and judgment, the next four to temperament, and the last three to character.

We next obtained ratings on every case, as regards the degree of possession of each characteristic. The individuals were ranked by the system introduced by Scott (5) in the personnel ratings for U. S. A. Army officers, except that a three instead of a five point basis of marking was adopted. The plan of procedure is to select a dozen individuals representing a wide range of difference as regards the characteristic under review, as, for instance, impulsiveness, then to select the one possessing the trait to excess and rating him "three." The individual exhibiting the trait least was rated "one." Some one occupying about a midway position was given the rating "two." Because there was necessarily a certain selection for our first group of individuals as possessing the trait, it was found advisable to allow a zero rating in the case of others in whom the characteristic was not apparent. This made the basis of rating practically a four point one. The selected individuals ranking "one," "two," and "three," then became a measuring scale by means of which the others were given comparative ratings. The Scott system of providing five ranks we found to make some of the rating rather artificial.

The ratings were supplied principally by Mrs. Nash, who has had a very long experience as head of the educational department and who has also directed the industrial training of the inmates of The Training School for many years. She has also had adequate experience in making similar ratings. The reliability of her judgment was tested in two ways. A group of children were rated twice, with an interval
of a month between the ratings. The second rating was given without any reference to the first. On the second occasion the Scott plan of marking was adopted, whilst for the first rating an ordinary system of ranking was used. The correlation between the two ratings was .87. This may be taken as a coefficient of reliability, and considering the difference in methods of rating employed it can be regarded as very satisfactory. As a further test of reliability, ratings were obtained from another judge, Mr. Arnade, who gave ratings on a group of boys whose cottage life he had supervised for ten years. The correlation between the two judges’ ratings was .85. Considering the fact that the boys were observed from a slightly different viewpoint, this high coefficient is another proof of the general reliability of Mrs. Nash’s ratings.

The next consideration was the question of the correct constitution of the scale. The inclusion or non-inclusion of any single characteristic should depend in the first place upon the closeness of its relation to the capacity which the scale as a whole is intended to measure. Unfortunately, except in a few cases, the social fitness of the individuals could not actually be observed, as very few of them had been tried in the community. Hence we were dependent upon general estimates of social fitness, founded upon a consideration of the character, disposition and ability of the individual. The general estimates were given by Mrs. Nash on a five point basis and were confirmed as before by a high coefficient of reliability and a close agreement with the judgments of other observers. The ratings for each single trait were then correlated singly with the general social estimate, with the following results:

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>GIRLS</th>
<th>BOYS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lacking planning capacity and General Social Estimate</td>
<td>.87</td>
<td>.77</td>
</tr>
<tr>
<td>Lacking initiative and G. S. E.</td>
<td>.87</td>
<td>.82</td>
</tr>
<tr>
<td>Irresolute and G. S. E.</td>
<td>.85</td>
<td>.82</td>
</tr>
<tr>
<td>Nervous and G. S. E.</td>
<td>.78</td>
<td>.72</td>
</tr>
<tr>
<td>Silly and G. S. E.</td>
<td>.62</td>
<td>.44</td>
</tr>
<tr>
<td>Impulsive and G. S. E.</td>
<td>.80</td>
<td>.57</td>
</tr>
<tr>
<td>Moody and G. S. E.</td>
<td>Negative</td>
<td>.26</td>
</tr>
<tr>
<td>Bad temper and G. S. E.</td>
<td>“</td>
<td>Negative</td>
</tr>
<tr>
<td>Impudent and G. S. E.</td>
<td>“</td>
<td>0</td>
</tr>
<tr>
<td>Cunning and G. S. E.</td>
<td>“</td>
<td>0</td>
</tr>
<tr>
<td>Simple and G. S. E.</td>
<td>.74</td>
<td>.61</td>
</tr>
</tbody>
</table>

Table I.
It is evident from this array of coefficients that cunning and deceit, bad temper, impudence and disobedience, have no reference to the estimated social fitness of the individual. These were consequently omitted, leaving eight groups of traits.

This does not mean that the omitted traits are not characteristic of defectives, but only that they do not appear to adversely affect social fitness. Cunning and slyness, as a matter of fact, appeared in greatest degree, but it must not be forgotten that a certain amount of cunning and slyness may be an asset in society as it is constituted. Disobedience and disrespect for authority may indicate an active temperament and a non-conformity which resists suggestion and makes for independence. This is in line with the experience with prisoners of Dr. E. A. Doll, who states that the most obedient and trustworthy prisoners are those who become the recidivists and hence the greatest menace to the community. The lack of correlation which we have found between these characteristics and the estimates of social fitness is the best answer possible to the objection that our judgments might be too strongly colored by the institution’s point of view, and that the undisciplined child would carry with him an "aura" which would adversely affect judgments based upon his other characteristics. Bad temper and quarrelsomeness are not often apparent in the feebleminded. There are sporadic outbursts, but generally speaking there are few who can be described as consistently ill-tempered. Institution training here has easily apparent effects. Bad temper and quarrelsomeness tend to betoken an activity of temperament which the mental defective rarely exhibits.

The next step was to correlate the single traits with one another. It was found that lack of initiative and lack of planning capacity correlated very highly with one another (.86), and that very similar correlations were observed between these two traits and the other characteristics. It appeared, therefore, that the inclusion of both traits was equivalent to putting two shots into the same mark and that we were measuring, substantially, the same thing twice. All the other inter-correlations were much lower, the only other one reaching a very high level being that between "irresolute" and "lack of planning capacity." It was, therefore, determined to combine in the one group "lack of initiative" and "lack of planning capacity." On account of the high

1For an excellent discussion of the principles underlying the arrangement of a ratings scale see article by Truman L. Kelley—(1) "Principles Underlying the Classification of Men." See also Reference 5.
correlation of each with the general social estimate, this combination naturally affected the weighting of this group. The number of characteristics then left in the scale is seven. The intercorrelations of these seven traits appeared as follows:

**INTERCORRELATIONS OF CHARACTERISTICS**

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>44 Girls</th>
<th>38 Boys</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impulsive and Irresolute</td>
<td>( r = .69 )</td>
<td>( r = .47 )</td>
</tr>
<tr>
<td>&quot; &quot; No Planning Capacity</td>
<td>( r = .67 )</td>
<td>( r = .41 )</td>
</tr>
<tr>
<td>&quot; &quot; Simple</td>
<td>( r = .70 )</td>
<td>( r = .41 )</td>
</tr>
<tr>
<td>&quot; &quot; Silly</td>
<td>( r = .67 )</td>
<td>( r = .34 )</td>
</tr>
<tr>
<td>&quot; &quot; Moody</td>
<td>( r = \text{negative} )</td>
<td>( r = .31 )</td>
</tr>
<tr>
<td>&quot; &quot; Nervous</td>
<td>( r = .60 )</td>
<td>( r = .41 )</td>
</tr>
<tr>
<td>Irresolute and no Planning Capacity</td>
<td>( r = .71 )</td>
<td>( r = .78 )</td>
</tr>
<tr>
<td>&quot; &quot; Simple</td>
<td>( r = .66 )</td>
<td>( r = .72 )</td>
</tr>
<tr>
<td>&quot; &quot; Silly</td>
<td>( r = .53 )</td>
<td>( r = .42 )</td>
</tr>
<tr>
<td>&quot; &quot; Moody</td>
<td>( r = \text{negative} )</td>
<td>( r = \text{negative} )</td>
</tr>
<tr>
<td>&quot; &quot; Nervous</td>
<td>( r = .75 )</td>
<td>( r = .47 )</td>
</tr>
<tr>
<td>No Planning Capacity and Simple</td>
<td>( r = .61 )</td>
<td>( r = .69 )</td>
</tr>
<tr>
<td>&quot; &quot; Silly</td>
<td>( r = .53 )</td>
<td>( r = .36 )</td>
</tr>
<tr>
<td>&quot; &quot; Moody</td>
<td>( r = \text{negative} )</td>
<td>( r = .03 )</td>
</tr>
<tr>
<td>&quot; &quot; Nervous</td>
<td>( r = .79 )</td>
<td>( r = .47 )</td>
</tr>
<tr>
<td>Simple and Silly</td>
<td>( r = .42 )</td>
<td>( r = .32 )</td>
</tr>
<tr>
<td>&quot; &quot; Moody</td>
<td>( r = \text{negative} )</td>
<td>( r = .07 )</td>
</tr>
<tr>
<td>&quot; &quot; Nervous</td>
<td>( r = .67 )</td>
<td>( r = .38 )</td>
</tr>
<tr>
<td>Silly and Moody</td>
<td>( r = .17 )</td>
<td>( r = .09 )</td>
</tr>
<tr>
<td>&quot; &quot; Nervous</td>
<td>( r = .46 )</td>
<td>( r = .06 )</td>
</tr>
</tbody>
</table>

Consideration of these intercorrelations shows that with girls the highest coefficients exist between lack of planning capacity and nervousness, between the former trait and irresolution, between irresolution and nervousness and between impulsiveness and suggestibility. In the case of boys, the highest correlations are between lack of planning capacity and irresolution, between irresolution and suggestibility (simple), and between lack of planning capacity and suggestibility. In the case of girls, as compared with boys, decidedly higher correlations appear between nervousness and the other six traits, and between impulsiveness and five other traits. It would appear that both over-emotionality and impulsiveness are more obvious in the make-up of the girl and are probably given greater weight in the estimate of potential social fitness. As a matter of fact impulsiveness correlates .80 with the general social estimate in the case of girls, as against .57 with boys. This may be due to the different moral standard which judges the possible effects of impulsiveness in regard to social temptations far more seriously in the case of the girl than in the case of the boy.
The final step was the weighting of the various characteristics in order to obtain individual indices of social fitness. For this the correlation with general social fitness had to be taken into account, but the final test of the right constitution and weighting of the scale could only be judged from a consideration of the correlation between the social rating and the estimate of general social fitness. The social ratings obtained by the weighting finally adopted showed the highest correlation (.89) with the general social estimate. As a further test of the practicability of the scale the correlation between the weighted social ratings of one judge were correlated with the general social estimates of the other judge. The high coefficient of .87 was obtained.

The whole process of the arrangement of the scale after the various criteria (shown in capital letters) had been applied may be illustrated by the following scheme:

**ASOCIAL CHARACTERISTICS OF THE FEEBLE-MINDED.**

**Frequency of Observation—125 Cases.**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impulsiveness</td>
<td>Lack of Initiative</td>
</tr>
<tr>
<td>Irresolution</td>
<td>Disobedience</td>
</tr>
<tr>
<td>Lack of Planning Capacity</td>
<td>Temper</td>
</tr>
<tr>
<td>Suggestible</td>
<td>Cunning</td>
</tr>
<tr>
<td>Moody</td>
<td>Excitable</td>
</tr>
</tbody>
</table>

**Correlation with Experience—General Social Estimate.**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impulsiveness</td>
<td>Lack of Initiative</td>
</tr>
<tr>
<td>Irresolution</td>
<td>Excitable</td>
</tr>
<tr>
<td>Lack of Planning Capacity</td>
<td>Obtrusive</td>
</tr>
<tr>
<td>Suggestible</td>
<td>Moody</td>
</tr>
</tbody>
</table>

**High Intercorrelations.**

<table>
<thead>
<tr>
<th>Weighting</th>
<th>Characteristic</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Impulsiveness</td>
<td>Lack of Planning</td>
<td></td>
</tr>
<tr>
<td>2 Irresolution</td>
<td>Capacity</td>
<td></td>
</tr>
<tr>
<td>3 Suggestible (simple)</td>
<td>Excitable</td>
<td></td>
</tr>
<tr>
<td>1 Moody</td>
<td>Obtrusive (silly)</td>
<td></td>
</tr>
</tbody>
</table>

Cross Correlation: S. R. — G. S. E. = .87

Boys = .88

Girls = .89

Cross Correlation: S. R. — G. S. E. = .87

Judge A with Judge B = .87

Binet (boys) = .60

Binet (girls) = .69

Porteus = .60

Porteus = .75

Binet-Porteus Average = .75

Binet-Porteus Average = .79
APPLICATION OF THE SCALE.

It may be questioned whether such a scale will really be useful outside the institution in which it has been compiled. To this question we have no final answer, as it has not yet been used elsewhere, but in so far as the scale deals with the psychological bases of social maladjustment and not with specific delinquencies, it is the more likely to be of value to the social worker in the methodical observation and guidance of social misfits. Social maladjustment frequently takes the form of delinquency or crime, but it is recognized that crime results from a great variety of causes apart from a defective mental or temperamental make-up. A social rating scale takes no cognizance, for instance, of thieving and sex propensities, which may be the result of an actively anti-social attitude, due perhaps to the unwonted strength of unsatisfied instincts. Not all criminals are either feebleminded or psychopathic. Force of character as regards determination, physical courage, initiative and cunning are present in many criminals. It is when the person steals because he is industrially incapable of earning a living or the girl becomes sexually immoral because of simpleness and suggestibility or unrestrained impulsiveness, or because she invites temptation by a foolish obtrusiveness, that the social scale begins to apply. Thieving and prostitution are in such cases the accidents of environment and are merely the expression of general mental or temperamental inadequacy. Although the scale does not pretend to plumb the whole sea of social maladjustment, it may still have a value in that it gives us a line of soundings of depths beyond the already charted limits of mental tests.

Because selfishness and egoism are expressions of self-activity, they too have been omitted from the scale. To a certain extent they represent force, whereas the scale is intended to analyze weaknesses. Neither selfishness nor egoism are barriers to social advancement, provided they are accompanied by a high degree of capacity in other directions making for social success, as witness the case of Napoleon. Feeble-minded egoism, on the other hand, is a feeble affair, manifested by a silly obtrusiveness of which the scale takes due account. Very few of our cases were characterized as selfish, so that a very low correlation existed between selfishness and social fitness.

RELATION TO PSYCHIATRY.

In so far as this study deals with personality it belongs in the psychiatric field. But here again the social rating scale has a limited application. A person's psychopathic condition may become apparent
through the extreme exaggeration of some particular trait which domi­
nates an otherwise normal personality, just as another person may
become delinquent through the possession of one compelling propen­
sity. For such cases a social rating by the scale would have little
meaning, because no adequate means of weighting the trait or pro­
pensity is possible. Many murderers no doubt would have excellent
social ratings.

Consequently, very little use has been made of the terms of
psychiatry, and no classification of the various types, such as egoistic,
fatuous, shut-in, psychopathic inferior, etc., has been adopted. The
terms used in the scale are those employed by social workers, teachers
and others not specially trained in psychiatry. The only term that has
been borrowed is "obtrusive," and that because it gives such an excel­
 lent description of feeble-minded behavior.

It may be that the psychiatrist or criminologist will find the scale
somewhat useful as a means of gathering the evidence upon which
certain psychiatric characterizations depend. That the scale does not
pretend to cover the whole field of psychiatric behavior will not render
its actual value any the less. The defective socially maladjusted
demands the attention of the psychiatrist, just as the defective delin­
quen t is also the concern of the criminologist. The addition of the
term defective to the description is only half the diagnosis.

It may be noted, however, that the prevalence of mood-disturb­
ances, impulsive judgments, childish reactions, easy suggestibility,
inability to cope with new situations, nervous irritability and obtrusive­
ness are all characteristic of the seclusive, fatuous, obtrusive or egocen­
tric temperaments and are reflected in the headings of the scale. In
a series of excellent and illuminating case histories of mentally inferior,
psychopathic prostitutes, by Dr. Walter L. Treadway (6) the terms
used in our scale are given again and again as descriptive of the salient
features of the behavior. Inability to plan new work or shape situa­
tions, suggestibility, childlike emotional activities, impulsiveness, nerv­
ous excitability, easy "stimulability" appear as the outstanding asocial
features of these cases. Disrespect for authority, over-sensitiveness,
vviolent temper, which we have found to be characteristic of the feeble­
minded, were also present in many. Treadway states: "Many of the
one hundred and fifty cases showed these traits early in life, indicating
that educational authorities should recognize these personalities and
know how to develop desirable traits that make for proper balance
in mental adaptation."
It is quite probable that the social rating scale may aid in this methodical observation, and thus help to bring about that early recognition which is so necessary for remedial measures to have any chance of success.

**INTERPRETATION OF TESTS.**

Whether or not the scale has a practical application under conditions different from those under which it was devised, its main purpose is that already alluded to—that it may serve as a standard of comparison in the interpretation of mental tests. To attain this end, correlations have been worked out for groups of both males and females with various mental tests. In order to get more meaningful results, the groups were limited to individuals over fifteen and under thirty years of age. In this way the young children who had not reached their final test-level and the old cases who had reached a certain stability in social adjustment through chronological age were excluded. The picture might have been still clearer if the cases of more than ten year institution residence had also been eliminated, but that would have reduced the groups, and, at the same time, increased the proportion of newer and thus less known individuals. As a further precaution, no low-grade cases were included. The correlations for males and females are given in the following table.

**TABLE II. CORRELATION COEFFICIENTS.**

<table>
<thead>
<tr>
<th>MALES 38 CASES.</th>
<th>FEMALES 44 CASES.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Binet with Social Rating... r = .60</td>
<td>Binet with S. R........... r = .69</td>
</tr>
<tr>
<td>Porteus with &quot; &quot; .....r = .60</td>
<td>Porteus with S. R........... r = .75</td>
</tr>
<tr>
<td>Binet-Porteus average</td>
<td>Binet-Porteus average</td>
</tr>
<tr>
<td>with S. R............ r = .73</td>
<td>with S. R............ r = .79</td>
</tr>
<tr>
<td>Form-board with S. R... r = .39</td>
<td>Form-board with S. R... r = .68</td>
</tr>
<tr>
<td>S. R. with Gen. Soc. Est.... r = .88</td>
<td>S. R. with Gen. Soc. Est... r = .89</td>
</tr>
<tr>
<td>Binet with Gen. Soc. Est.. r = .58</td>
<td>Binet with Gen. Soc. Est... r = .81</td>
</tr>
<tr>
<td>Porteus &quot; &quot; &quot; &quot; r = .61</td>
<td>Porteus &quot; &quot; &quot; &quot; r = .81</td>
</tr>
<tr>
<td>Binet-Porteus with</td>
<td>Binet-Porteus with</td>
</tr>
<tr>
<td>G. S. E.............. r = .76</td>
<td>G. S. E.............. r = .81</td>
</tr>
<tr>
<td>Form-board with G. S. E.r = .56</td>
<td>Form-board with G. S. E.r = .75</td>
</tr>
</tbody>
</table>

From the above table it will be seen that in the case of boys neither the Binet nor Porteus test age is as reliable an index of social fitness as the average of the Binet and Porteus test ages. The form-board is only slightly less reliable. A marked increase in the correlation with the general social estimate is again found when the test ages are combined and averaged. In the case of girls, the Porteus gives a better correlation with social fitness, and the coefficient is
slightly increased when the Binet and Porteus test ages are averaged. Success in the form-board has also an apparently less direct relation with social fitness. These results conform very closely to those obtained in a previous experiment, with different groups of individuals and reported in a former publication (2). When the cases are confined, however, to those of highest grade, viz., from eight year Binet age upwards, the Porteus correlation with social ratings slightly increases, whilst the Binet drops. The form-board correlation, however, decreases considerably. This bears out the view that the form-board has its greatest usefulness in the testing of the feeble-minded of lower grades, and it is not with these cases that tests are very valuable.

As a general conclusion, it may be remarked that the mental tests give a fairly reliable index of social adaptability, but that an average of Binet and Porteus test ages undoubtedly gives a safer estimate. The characteristics which each test tends to measure may be seen from the following arrangement of coefficients.

### Table III.

#### Porteus.

<table>
<thead>
<tr>
<th>Boys</th>
<th>Porteus and Lack of Planning Capacity</th>
<th>.66</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Porteus and Nervous and Excitable</td>
<td>.62</td>
</tr>
<tr>
<td></td>
<td>&quot; Irresolute</td>
<td>.59</td>
</tr>
<tr>
<td></td>
<td>&quot; Silly and Obstinate</td>
<td>.58</td>
</tr>
<tr>
<td></td>
<td>&quot; Impulsive</td>
<td>.28</td>
</tr>
<tr>
<td></td>
<td>&quot; Simple, Suggestible</td>
<td>.26</td>
</tr>
<tr>
<td></td>
<td>&quot; Moody and Obstinate</td>
<td>.17</td>
</tr>
<tr>
<td></td>
<td>&quot; Impudent and Disobedient = Neg.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&quot; Ill-tempered = Neg.</td>
<td></td>
</tr>
</tbody>
</table>

#### Girls.

<table>
<thead>
<tr>
<th>Girls</th>
<th>Porteus and Lack of Planning Capacity</th>
<th>.75</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Porteus and Nervous</td>
<td>.57</td>
</tr>
<tr>
<td></td>
<td>&quot; Irresolute</td>
<td>.69</td>
</tr>
<tr>
<td></td>
<td>&quot; Silly and Obstinate</td>
<td>.54</td>
</tr>
<tr>
<td></td>
<td>&quot; Impulsive</td>
<td>.58</td>
</tr>
<tr>
<td></td>
<td>&quot; Simple and Suggestible</td>
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</tr>
<tr>
<td></td>
<td>&quot; Moody and Obstinate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&quot; Impudent and Disobedient = Negative</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&quot; Ill-tempered                      = Negative</td>
<td></td>
</tr>
</tbody>
</table>

#### Binet.

<table>
<thead>
<tr>
<th>Binet and Nervous and Excitable</th>
<th>.50</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Irresolute&quot;</td>
<td>.69</td>
</tr>
<tr>
<td>&quot;Silly and Obstinate&quot;</td>
<td>.61</td>
</tr>
<tr>
<td>&quot;Impulsive&quot;</td>
<td>.55</td>
</tr>
<tr>
<td>&quot;Simple, Suggestible&quot;</td>
<td>.54</td>
</tr>
<tr>
<td>&quot;Moody and Obstinate&quot;</td>
<td>.24</td>
</tr>
<tr>
<td>&quot;Impudent and Disobedient = Neg.</td>
<td></td>
</tr>
<tr>
<td>&quot;Ill-tempered = Neg.&quot;</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Binet and Nervous and Excitable</th>
<th>.51</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Irresolute&quot;</td>
<td>.74</td>
</tr>
<tr>
<td>&quot;Silly and Obstinate&quot;</td>
<td>.54</td>
</tr>
<tr>
<td>&quot;Impulsive&quot;</td>
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<td>&quot;Simple, Suggestible&quot;</td>
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<td>&quot;Ill-tempered = Neg.&quot;</td>
<td></td>
</tr>
</tbody>
</table>
Allowing for chance fluctuations, it may be concluded that non-success in both Binet and Porteus tests is related mainly to the possession of the same asocial characteristics. These appear to be irresolution and lack of planning capacity in both boys and girls, since these traits show very high correlations with each test. The Porteus test, however, has a closer relation to nervous excitability in both boys and girls than has the Binet. In the case of girls suggestibility and silly obtrusiveness are reflected more in the Porteus test than in the Binet. As these characteristics would be of great weight in considering a girl's social chances, the weighting of these traits naturally makes for the better correlation of the Porteus test in their case with the social ratings. Strange to say, impulsiveness and suggestibility, in the case of boys, correlate more highly with the Binet than with the Porteus. It would seem that neither test has any relation to bad temper and disobedience and herein may be the explanation of the fact that the school's bad boy is not infrequently a success in after life.

The Scale.

In order to insure greater accuracy and independence of ratings under single headings, and thus to reduce the "halo" by presenting in a measure the evidence upon which a rating is assigned, we have attempted to indicate the degree of possession of a trait at which a certain rating should be assigned. This is not to be regarded, however, as a system to be slavishly followed, as in many individual cases the relative importance of the subdivisions may not be correct. As a general principle, however, the plan indicated will be found valuable. The suggested rating is given in brackets after each description:

1. Lacking planning capacity.
   Poor executive ability, able to do new tasks after short training. (1)
   Very slow to take up new work, adjustment difficult except with much supervision. (2)
   Capable of routine work only and within a restricted range. (3)

2. Irresolute, easily confused.
   Slow to make decisions in emergencies. (1)
   Over-inhibited, dependent upon others for direction in new situations. (2)
   No presence of mind nor self-confidence, confused in ordinary situations requiring decision. (3)
3. Nervous and excitable.
   Over-emotional, slightly nervous. (1)
   Easy excitability. (2)
   Exaggerated emotional conditions without sufficient cause. (3)

4. Silly or obtrusive.
   Tendency to foolish laughter or loquacity. (1)
   Thrusting himself unduly under notice. (2)
   Cranky. (3)

5. Simple, suggestible.
   Simple, credulous. (1)
   Very easily influenced. (2)
   Extremely suggestible, facile. (3)

6. Impulsive, imprudent.
   Impulsive, tending to act without due consideration. (1)
   Acting imprudently, but with some ability for self-correction. (2)
   Imprudence without apparent capacity to profit by experience. (3)

7. Moody.
   Shyness, diffidence. (1)
   Persistence of moods, such as stubbornness, foolish elation. (2)
   Extreme persistence of moods such as exclusiveness, irascibility. (3)

**Instructions**

1. For each of the seven groups of traits in the scale we require to arrange three individuals as a measure of comparison with the persons to be rated. To do this, select a number of cases who possess in varying degrees the trait in question. Choose from this number a person possessing it to a very minor degree and rate him "one." Choose next a person who possesses it to excess and rate him "three." An individual occupying a midway position between these two individuals is given the rating "two." All the members of the group of cases are then rated in comparison with these three selected cases. Anyone not considered to possess the trait in question to a noticeable extent may be rated zero.

   Caution: Be very careful to rate each trait quite independently of the ratings given for other traits. Do not allow your estimate in one respect to color your judgments of other characteristics.
2. Weight the ratings given in the following manner:

Multiply rating under (1) Lack of Planning Capacity by 6
" " " (2) Irresolute " 2
" " " (3) Nervous " 2
" " " (4) Silly " 2
" " " (5) Simple " 3
" " " (6) Impulsive " 2
" " " (7) Moody " 1

Add the weighted ratings, the total being the social inefficiency index. For the practical purpose of estimating the advisability of parole from an institution a fairly safe working rule provides that no one with a rating of less than twenty-two, equivalent to 40 per cent. of the total possible rating, may be regarded as being potentially socially inefficient. If social failure results in any of these cases it is very unlikely that it is due to feeble-mindedness. Those rating from twenty-two to twenty-seven (50 per cent. of the total) deserve social opportunities, but under a probationary system of control and guidance. These levels of social efficiency will, of course, only hold good if they have been obtained in comparison with the ratings of feeble-minded of moron level. As a further condition, the ratings should be given for comparatively large groups, in order to obtain the proper range of the asocial characteristics in question.

**SUMMARY.**

The failure of psychologists to agree upon a mental age definition of feeble-mindedness confirms our reliance upon the criterion of social inefficiency due to mental or temperamental inadequacy.

The attempt to fix definite Binet age limits of normality failed because of the difficulty in determining and interpreting mental age. The "clinical" psychologist is hampered also because diagnosis is not readily checked up with the results of treatment. The mental clinician rarely sees his own mistakes and thus does not profit to the full by experience. In the meantime, mental tests tend to be accepted uncritically and interpreted slavishly, without a proper comparison of their verdict with methodical and long-continued observation.

Behind the mental age stands the personality of the defective. The psychologist can no more neglect the study of personality in social diagnosis than the psychiatrist can fail to consider the intelligence of the individual. An attempt at a systematic study of the personality of the defective, by means of a social rating scale, is described in this paper and a comparison with the results of mental
tests is shown. The main principles of construction of this scale may be summarized as follows:

(a) Social adjustment depends upon the capacity of the individual for self-support, self-management and self-control. The social rating scale takes account of the traits which underlie the characteristic deficiencies of the feeble-minded in these reports.

(b) Only asocial characteristics are included, so that the scale provides a measure of social sufficiency rather than of social efficiency. The object is to make a test of specific social gravity which will determine whether or not the individual will float in society. Limiting the traits to be rated to the negative side of the average renders accurate observation easier and ratings more reliable. Inefficiency is more easily rated than efficiency because mistakes are so obvious.

(c) The constitution of the scale is limited to a further extent by the inclusion of only the most characteristic feeble-minded traits. These traits were selected from many others on the basis of their frequency of appearance in a large number of individuals.

(d) The number of characteristics is further reduced by the omission of the more active traits of bad-temper, disobedience, cunning and slyness, which proved to have a negative correlation with general social fitness. Lack of initiative is also eliminated owing to its very high intercorrelation with lack of planning capacity, which proved that identical traits were being rated under both these headings.

(e) Ratings were given according to the Scott plan as used in the army work, except that a three point basis was adopted.

(f) Traits were experimentally weighted after consideration of their correlations with estimated general social fitness.

(g) Ratings of judges were tested by the calculation of coefficients of reliability and by the cross correlation of one judge's social ratings with another judge's estimate of general social fitness on the same group of cases.

The scale takes no cognizance of specific delinquencies, but deals rather with the psychological bases of such behavior when it is the expression of a mental or temperamental inadequacy. It does not pretend to cover the whole field of delinquency, the whole field of psychopathic behavior, nor the whole field of social maladjustment. Its concern is
the social maladjustment of the mentally inferior or the tempera-
mentally unstable. Its usefulness lies in the fact that it is independent
of mental tests and hence gives another approach to the problem of
diagnosis. It may not prove to be applicable outside of an institution,
but a comparison of case histories of social misfits shows that the
traits included in the scale form the salient features of a large number
of such cases.

The scale as representing organized experience gives a measure
of the validity and comparative value of tests for social diagnosis.
The correlation-coefficients with the Binet, Porteus and form-board
tests show an equivalent relation between both Binet and Porteus and
social fitness, except in the case of girls, where the Porteus test has
the advantage. But a decidedly closer relation exists between the
social ratings and the composite mental age in the form of a Binet-
Porteus average. The diagnostic value of the form-board is shown
to diminish the higher the grade (per Binet) of the subject. This is
its most serious defect.

The correlations of each trait with Binet and Porteus tests are
also given and show that successful adjustment to either scale of tests
is related to somewhat similar social defects. The list of character-
istics forming the scale is finally given and a guide to allotment of
ratings is appended.

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5. ———. Fundamental Theorems in Judging Men. Journal
6. Treadway, Walter L., Weldon, L. O., and Hill, Alice M.
   Psychiatric Studies of Delinquents. Public Health Reports. Reprint
LIST OF PUBLICATIONS

FROM

THE RESEARCH LABORATORY OF THE TRAINING SCHOOL AT VINELAND, N. J.

Porteus Tests—Vineland Revision. By S. D. Porteus, Director of Research, Vineland. 44 pp., paper. 30 cents, postpaid.

Describes the latest revision of the well-known graded Maze Tests, showing their value in detecting the feebly inhibited and the mentally unstable types. Describes the standardization of the tests, sex differences in performance, correlations with the Binet, Army tests, estimates of social fitness and industrial abilities. These tests throw new light on difficult and typical cases.

The Development of Intelligence in Children (The Binet-Simon Scale). By Alfred Binet, Sc.D., and Th. Simon, M.D. Translated by Elizabeth S. Kite, with introduction by Henry H. Goddard. 8 vo., 336 pp. $2.00, postpaid.

This book comprises the complete writings of the authors relative to their scale. It deals with the origin and history of the scale, its evolution in the minds of its authors, their methods of standardizing and the method of using. It is a complete guide to the tests.

The Intelligence of the Feeble-Minded, Including a Study of Their Language and a Comparison of Feeble-Mindedness with Dementia. By A. Binet, Sc.D., and Th. Simon, M.D. Translated by Elizabeth S. Kite. Cloth, 8 vo., 328 pp. $2.00, postpaid.

This volume is a supplement to "The Development of Intelligence in Children" and gives Binet's and Simon's own application of their scale to the problem of feeble-mindedness. It is the most complete psychological scientific study of mental defectives that has ever been made. It should be in the hands of everyone who would understand the problem.


A study of the relation of brain growth and capacity to mental defect.
Anthropometry as an Aid to Mental Diagnosis. A Simple Method for Examination of Subnormals. By Edgar A. Doll, Ph.D. 8 vo., 91 pp., paper. 75 cents, postpaid.

This book shows a new and simple method of making a preliminary diagnosis of feeble-mindedness by means of six anthropometric measurements. It is based on a statistical study of normal and defective children.


The first part of this booklet describes the value and limitations of the Binet for diagnostic purposes, presents percentile tables for the Goddard and Stanford revisions based on four thousand cases, and proposes an entirely new plan for increasing the diagnostic value of results by the use of a diagnostic score in certain selected tests. Desirable modifications in the scoring test procedure, and standardization of the Stanford-Binet tests are discussed on the basis of the application of the tests to large numbers of normal and subnormal children.

The second part gives the tests and test procedure of the modified scale in the handiest form possible for reference, the test material, exact procedure and conditions of success being displayed side by side.


Criticizes the present system of training of feeble-minded in the light of results of twenty years' teaching, observation and research.

"It is eminently desirable that every person actively or indirectly interested in the education of defectives should read and reread this pamphlet. It is wholesome and sympathetic."—Journal of Education, Boston, April, 1920.