

TESTS OF THE EMOTIONS.

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The past three or four years have witnessed an altogether extraordinary activity in work with "mental tests". As a chief result, it is being realized that such tests are by no means as valuable as was once thought. It has frequently been stated that the most important single cause of delinquency and crime was feeble-mindedness. But a very careful investigator has recently published data (the most accurate of its kind so far) showing that the inmates of a certain state penitentiary average practically the same in intelligence as the general adult population. It was once supposed that most cases dependent upon charity showed a mental age below twelve and were to be considered feeble-minded. We now know that a "mental age" of twelve is only very slightly below average in mental development. The result is that feeble-mindedness is being used much less than formerly as an explanation of social difficulties, and that research workers are turning more and more toward emotional and environmental factors in seeking an explanation for such social and economic mal-adjustment. And there is really a great deal being done, in a quiet way, in the attempt to measure the emotions. So I want you to think of the scale, copies of which I have passed out to you, as by no means a bit of freak research, but as simply one of a number of efforts along this line.

The first test consists, as you will see, of twenty-five lists such as:

disgust fear sex suspicion aunt
 roar divorce dislike sidewalk wiggle
 naked sneaker wonder spit fight
 failure home rotting snake hug
 prize gutter thunder breast insult

The subjects are told first to go through the lists and cross out everything that is unpleasant to them. Then after they have done this, they are told to go through the lists again, and to draw a circle around the one word in each list which is *most* unpleasant to them. The words are arranged according to a definite scheme; there are five sets of words, a series of jokers and words chosen as unpleasant to four different types of morbid personality. The selection of words has been made on the basis of extended experience in work with the insane and with delinquents. Back of the test is a large body of theory with regard to the neuroses; it is held by many writers that in such morbid conditions there is a marked increase in the tendency to emotionalize, and a tendency to transfer emotion from usual to unusual or associated objects. The test is scored with these two points in mind. First, the total number of words crossed out is counted. Then the scorer counts the number of times the subject has chosen an unusual word, in selecting the most unpleasant thing.

The second test consists of twenty-five lists such as:

BLOSSOM flame flower paralyzed red sew
 LAMP poor headache match dogs light
 BATH naked choke tree alone danger
 KING father baseball queen rights razor
 SLEEP grade ache fright tongue worry

The subjects are told first to cross out all the words in small letters which are connected in their mind, or associated, with the word in capitals at the beginning of each list. They are then told to go through the lists again, and draw a circle around the *one* word in each list which is most closely connected with the capitalized word. The words are chosen very carefully with reference to pathological conditions and criminology. Thus following "DREAM" is the word "floating", since according to certain psychiatrists dreams of floating have a definite significance. Following "DEATH" are the words "water", "self", "welcome", "hopeless", as words naturally associated by many persons going through an emotional crisis. The test has back of it a large body of research going to show that in pathological conditions peculiar connections between ideas are a very important symptom. The words used are primarily words of strong emotional content, with the idea that an emotional condition would show itself also in more extensive associations. Scoring again takes into account both of these possibilities; first the number of words crossed out is counted, then the number of peculiar associates, in selecting the word most closely connected with the capitalized word.

The third test consists of twenty-five lists of which the five below will serve as examples:

begging swearing smoking flirting spitting
 fear hate anger jealousy suspicion
 dullness weakness ignorance innocence meekness
 careless fussy reckless silly childish
 poor extravagant sporty shrewd bad-mannered

The subjects are told first to cross out everything they consider wrong. Then they are told to go through again and draw a circle around the one thing in each list they consider worst. The test is an attempt to put in a convenient group test form an ethical discrimination test. The general purpose of the test is obvious, and it need hardly be said that it has a long history and an obvious relevance in the study of delinquents. Scoring again is in terms of total words crossed out (or extensiveness of the moral attitude of the individual) and unusual selection of the worst thing (or idiosyncrasy in moral judgment). In general, an effort has been made to obtain judgments as to the comparative importance of different types of wrong-doing, as in the first list, or to obtain an indication of the tendency of one's prejudices, as in the fourth.

The fourth test consists of twenty-five lists such as:

injustice noise self-consciousness discouragement germs
 clothes conscience heart-failure poison sleep
 sickness enemies money blushing failure
 falling queerness religion dizziness boss
 sin operation conspiracy lightning marriage

The subjects are told, first of all, to cross out all the things in this list about which they have ever worried, and then to go over the lists again and draw a circle around the one word in each list about which they have worried most. Again the scoring is in terms of the total number crossed

out (or amount of emotional stress), and peculiar choices in words circled (or idiosyncrasy in anxiety tendencies). And again the test has back of it experience with abnormal personalities; it has obvious relations to certain kinds of anxiety states. The test, it should be added, derives most directly from a questionnaire used by Woodworth in studying neurotic individuals in the army. And it is aimed to involve the content of certain types of delusion common in mental disease.

So much for the separate tests: in summarizing the total examination the total number of words crossed out is first summed, and is considered an indication of total affectivity or emotionality. The deviations are then added together, and the total used as an expression of "total idiosyncrasy".

Well—the tests doubtless seem to you very crude—and so they are; they simply represent an effort at first investigation of a subject which has until recently been all too much neglected. But as an investigatory instrument the examination has certain advantages which I would like to have you consider for a moment. I mentioned a moment ago Woodworth's questionnaire. It consisted of questions such as:

Have you worried about smoking? Yes. No.

And the person taking the examination was to underline "Yes" or "No" according as one answer or the other was correct. Putting the questions in this way it required an 11x17 sheet to ask one hundred such questions. We ask one hundred fifty questions in a space 9x6; the total examination really asks six hundred questions all on two sides of a 9x12 sheet. The great condensation is obvious.

It is thus possible in a very brief space to accumulate a large amount of data. But there are other advantages. There is no elaborate technique in giving the examination. All that is necessary is to hand the blank to the person who is to take the test and say, "Read the directions, and do what they tell you to do". It is thus possible for us to send out the blanks to other colleges and institutions and obtain results which are strictly comparable, so far as directions are concerned, to the results we obtain ourselves. Suppose for the moment you are taking the test. You do not have to write any answers. All you have to do is cross out certain words or draw lines around them. The result is that the average college student answers these six hundred questions in less than half an hour! Furthermore, in the first scoring of the blank, all that is necessary is to count up the number of words crossed out, and the number of peculiar choices made in circling words. So the examination is an extremely convenient method of obtaining information: those of you who teach will appreciate that an examination in which six hundred questions are asked and answered in thirty minutes, and in which a first valuation of the results can be obtained in three minutes, is somewhat unusual.

However, such an instrument is of little value if the information yielded by it is not worth while. The examination is intended primarily, of course, for work with delinquent and with nervously abnormal individuals. And from such groups data are not yet available, though results from a number of reform schools, a group of colored people, a theological seminary, and a colony for epileptics will be ready soon. Results from a group of college students have, however, been analyzed to show sex differences. Briefly it may be said that 64% of the girls find more things unpleasant than the

average (median) man. 56% of the girls worry about more things than the median man. 69% of the girls consider more things wrong than the median man. The girls are distinctly more original than the boys in selecting the most unpleasant thing (64% above the median man), but they are distinctly less individual in selecting things to worry about (36% above the median man). They are more original in their choice of the worst thing (69% above the men's median).

The results on the individual words are even more striking. The girls find words having any sex reference, or mentioning anything disgusting, much more unpleasant than the men do. The men on the other hand find particularly unpleasant such words as "disgrace, poison, persecute, unfair, failure". So far as worries go, the girls worry much more about religious topics than the men; they tend more to be depressed. The men stand out as worrying about their own health, as being distinctly hypochondriacal.

These are simply interesting bits of fact, however. The important question is: can such an examination or questionnaire yield information which will enable one to distinguish the psychopathic or the criminalistic from the average individual, in something of the same way as scales for measuring intelligence are used to distinguish the feeble-minded? As was said before, data from pathological groups are lacking. It was thought interesting, however, to determine how definitely the two sexes could be distinguished by means of the tests. Briefly, it was found that the results in total affectivity and total idiosyncrasy were largely identical for the two sexes; there was nothing distinctive in these totals. However, the four words on each test showing *most* distinctive results (in choice of the word to be circled) were found, and results on these sixteen words alone were used. And it was found that in thirty percent of the cases an absolute distinction could be made! In fact there was only one man who scored above the median for the women. It is at once suggested that similar valuable distinctions, in separating out the pathological and the delinquent, may be possible. At least it seems worth trying.