EVALUATION OF REACTIONS IN AN ASSOCIATION TEST DESIGNED FOR THE PURPOSE OF HIGHER MENTAL MEASUREMENTS.

BY A. J. ROSANOFF, M. D.,
Kings Park State Hospital, Kings Park, N. Y.

Our general plan for the development of standards in a higher scale of mental measurement has already been described.* The work of collecting the material which is to serve for the construction of the basic standard is nearly finished. The question before us now is that of a proper objective evaluation of the reactions to the stimulus words obtained in the test.

Theoretically, it may perhaps be assumed that a reaction is of biological value according to the faithfulness and comprehensiveness with which it represents the actual relationships of the things represented by the stimulus word. Practically, our material reveals these relationships only in so far as they are mirrored in the minds of our subjects.

It would seem, a priori, that the frequency with which a reaction to a given stimulus words occurs in a series of test records selected at random should be a more or less accurate measure of the element of faithfulness, for chance is obviously against the repeated presentation of any one falsely perceived or imagined relationship.

It would seem also that the element of comprehensiveness, too, should be to some extent measurable by frequency, for undoubtedly the more numerous the points of relationship are between a given pair of stimulus and reaction words and the things represented by them, the more often will these points of relationship determine the production of that particular reaction.

But in this connection, another factor appears for consideration, namely: the special experience equipment of the group of subjects from whom the material in the shape of test records has been obtained.

Our previous experience,* which was with an association test in which commonplace words in daily use served as stimulus, did not show this factor to be of any great importance. The case is, however, quite different with the stimulus, did not show this factor to be of any great test in which commonplace words in daily use served as test on which we are now at work, owing to the kind of stimulus words required for the special purpose and accordingly selected; to demonstrate this point is the object of this communication.

Frequency tables for the entire list of one hundred stimulus words have been compiled on the basis, thus far, of full collegiate education. We submit herewith the reactions to three of the finished by another compared with common reactions to the same words.

Even more striking differences are indicated in the fact of the far group-28 per cent as compared with 12 per cent—is of significance, especially in view of the circumstance that there were no instances of failure of reaction in the first group and no less than twenty in the second.

We conclude that the values of reactions would be erroneously indicated by frequency tables constructed on the basis of material obtained from subjects selected at random; but a special selection of subjects according to education would seem to make possible the construction of standards that could serve for practical purposes.