

**CORRELATIONS OF MENTAL
ABILITIES; TEACHERS COLLEGE,
COLUMBIA UNIVERSITY,
CONSTRUCTIONS TO
EDUCATION, NO. 53**

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Correlations of Mental Abilities; Teachers College, Columbia University, Constructions to Education, No. 53 by Benjamin R. Simpson

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BENJAMIN R. SIMPSON

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CORRELATIONS OF MENTAL ABILITIES

BY
BENJAMIN R. SIMPSON, Ph. D.

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CORRELATIONS OF MENTAL ABILITIES*

I. THE PROBLEM AND ITS IMPORTANCE

What constitutes general intelligence? How can we measure its amount? These are questions of immense practical importance as well as of theoretical interest. Men in every line of activity are called upon every day to pass judgment upon the mental capacity of individuals and of groups. In many cases a choice must be made between a number of applicants of varying degrees of capacity and fitness. Other things being fairly equal, the matter of prime importance for the judge to discern is the general mental ability of each of the persons in question. This judgment must be made in one of three ways: (1) by the examinations the candidate has passed and the certificates he has gained as a result of definite study; (2) by the opinions or recommendations concerning the candidate, given by those who know him and his work; (3) by the general impression gained from the way the candidate conducts himself during the course of the interview. We shall not dwell upon the inadequacy of these tests as a means of determining the general intelligence of an individual. The first, at best, gives a measure of the candidate's attainments along the lines tested, and only indirectly and secondarily gives an indication of his ability. The second and third are subject to all the inaccuracies of unscientific and ill-grounded personal opinion. Much as we need to get the right people into the right places, comparatively little has been done to replace these empirical methods by scientific ones.

*The problem of this research was suggested and outlined by Professor E. L. Thorndike, and indebtedness is cheerfully acknowledged to him for a teacher's guidance and help in every difficulty. The work as carried out has been somewhat less comprehensive than that originally suggested.

Grateful acknowledgment is also due the seventeen professors and students of Teachers College who acted as members of the "Good" group of subjects, to Miss Rusk for assistance in scoring a number of the records, and to Dr. Whitley.

For the conclusions stated, the writer alone is responsible.

The same holds true with regard to school determinations of ability. Certificates, degrees, and the like, of all grades of importance are given on the basis of demonstrably inadequate measures of mental capacity or amount of training, and later offered as valid measures of either or both. Students of education have felt the inadequacy of the old time methods to diagnose and measure with any degree of accuracy the real abilities of the pupil, and students of psychology have, beginning with Galton, been devising tests of mental capacities both special and general. This work has been summarized in Whipple's "Manual of Mental and Physical Tests" ('10), from which may be gained a just notion of the range of experimentation, the mistakes and improvements, and the present hopeful status of intellectual diagnosis by objective tests. The early workers along the line of devising mental tests for the measurement and diagnosis of general intelligence now see their labors justified by practical results. The period of discouragement and temporary defeat in the use of this method has been passed, and the time has come when workers in this field can go ahead with confidence that in due time results of much practical importance will be secured through painstaking and intelligent investigation. Once a series of mental tests can be perfected that will enable us to determine the nature and amount of a person's mental capacity with a fair degree of accuracy, a corner stone will have been laid toward the foundation of a science of education. As yet we are not in a position to do justice either to the exceptionally bright or the exceptionally dull pupils, to say nothing of pupils of smaller degrees of variation from the average. We have as yet perfected no scientific method of picking out exceptional children, and until we have adequate means of doing this, we cannot expect to have their respective needs properly provided for.

But can we hope to find the means of classifying pupils in this way, according to the degree of their intelligence? The answer to this question is to be found in the results that have already been achieved by the use of even such imperfect tests as the Binet-Simon Tests of Intelligence. Already they are being successfully used and widely adopted in schools for the feeble-minded, to determine the mentality of the subject and the conse-