The Relation of Mathematics Aptitude to Other Aptitudes

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of present day psychologists but to the intimate relationships between workers in affiliate fields of investigation.

It is not claimed that this chart is without fault. Two obvious criticisms can be directed toward it. (1) Any logical classification at once does damage to the objects classified in that it neglects gradations and intermediate positions and tears apart those which in actual practice are interrelated. (2) The chart, since it is the logical product of one mind, must be in a sense highly personal and unscientific. Another psychologist going at the same problem might make a radically different scheme. It is for this reason that the chart is presented for discussion and criticism at this meeting. The classification, of course, must also be subject to expansion and development as positive knowledge accumulates.

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THE RELATION OF MATHEMATICS APTITUDE TO OTHER APTITUDES

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(ABSTRACT)

The purpose of this study was to determine the relation of mathematics aptitude to aptitude in other subjects. The materials available for the investigation were (1) certain tests that had been taken by the Freshmen upon entering the University in 1925 — tests in Mathematics Aptitude (M.A.) and Mathematics Training (M.T.), English Aptitude (E.A.) and English Training (E.T.), Chemistry Aptitude (C.A.) and Chemistry Training (C.T.), and French Aptitude (F.A.) and French Training (F.T.) ; (2) High School Content Examinations, Iowa Comprehension Test, and Thorndike Intelligence Test Part 1, Form B; (3) grades made in courses during the Freshman year; and (4) the average number of grade points made by each student for each semester. The M. A. and the M. T. tests consisted of four parts, each part furnishing a separate score. Correlations were made to determine various relationships.

Findings show the correlations of M.A. and M.T. with the average grade points for the first semester considerably higher than for the second semester. M.A. and M. T. added together correlate slightly higher with the first semester grade points than do either of the tests taken separately ; but M. T. alone correlates

slightly higher with the average grade points for the second sem-
ester or for both semesters, and also with the mathematics grades
for the first semester. M. T. as a whole also correlates higher
with the first semester mathematics grades than does any single
part of it; but the first semester mathematics grades correlate
higher with the third part of M.A. than with the four parts taken
together.

M.A. correlates with Chemistry, English, Speech, and Mathe-
matics first semester grades in the order named; but M.T. cor-
relates with Mathematics, Chemistry, French, Economics, English,
Spanish, History, and Speech in descending order. The scores
on the M.T. test are more indicative of success in mathematics in
college than are the results of the M.A. tests. Of those who had
taken the M.A. tests, too few had taken French, Economics, Span-
ish, and History to make correlations possible.

Other correlations indicate relationship between C.A. and M.A.,
M.T. and M.A., C.T. and M.T., and E.T. and M.T. in descending
order.

Partial correlations show that there is no relation between the
M.A. scores and the average grade points for the first semester
if the M.T. is held constant in both cases. The same is true for
M.A. and mathematics grades for the second semester if the in-
fluence of the mathematics grades for the first semester and the
M.T. is held constant.

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CEREBRAL DOMINANCE IN SPEECH

Lee Edward Travis

(ABSTRACT)

This study was an attempt to determine if the function of speech
is controlled primarily by one of the two cerebral hemispheres.
Cases of stuttering were chosen as the subjects.

Approaches to the problem were made from several angles.
(1) A brief case history was obtained. It had to do mainly with
early manual dexterity, pre-school and early school training, onset
of speech trouble, etc. (2) Tests for ocular dominance. (3) Tests
for spontaneous mirror writing. (4) Tests for motor lead and
(5) Studies of neuro-muscular action currents.

About 50% of the cases in the pre-school and early school periods