# CHANGES IN MENTAL TRAITS WITH AGE DETERMINED BY ANNUAL RE-TESTS

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Changes in Mental Traits with Age Determined by Annual Re-Tests by Fowler Dell Brooks

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### **FOWLER DELL BROOKS**

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## Changes in Mental Traits with Age Determined by Annual Re-Tests

By
FOWLER DELL BROOKS, Ph.D.

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F. D. Brooks

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#### PURPOSE AND PLAN OF THIS INVESTIGATION

In discussing the influence of maturity upon individual differences, Thorndike (1914, pp. 275ff.) points out the complexity of the problem in the respect that changes in an individual's mental traits with age may possibly be due to at least three factors: (1) the maturing of the trait, (2) the influence of training upon it, and (3) "the influence of both maturity and training upon the ability to understand and the wish to follow instructions and the ambition to do well in tests." He further insists that a knowledge of differences in mental traits with age does not tell us much about the influence of maturity upon these changes unless we can parcel out their causes among these three factors, and, that such parc:lling out is practically impossible. Turning to the more general problem of changes with age he says, "So far upon the supposition that by changes in mental traits with age, we mean changes in the same individuals measured at different ages. The average change would then be the average of the changes in all the individuals studied. But in the studies that have been reported, the difference between the figures for, say, ten and eleven years, is not the average of the changes of all the individuals studied and need not in any real way describe them.

"For (1) the difference between the average of a group at ten and of the same group at eleven years does not describe the real individual changes; and (2) when we measure ten- and elevenyear-olds as we find them in school or elsewhere, we cannot be sure that the eleven-year-olds represent what the ten-year-olds will become . . . To measure the development of mental traits with age we must repeat measurements upon the same individuals and for all purposes of inference preserve intact each of the individual changes."

This investigation seeks to find out what changes in mental traits take place with age, and it seeks to find them out in the only way they can be found out accurately-by discovering what changes actually do take place in the same individuals from one