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An Analysis of Reading Improvement

LEWIS R. VAVRA

INTRODUCTION

It has been established by different investigators that a positive correlation exists between intelligence and reading speed. Humber (1944) found a correlation of $+0.76$ between reading rate and ACE scores of University of Minnesota students. A study by Anderson and Dearborn (1941) shows that reading ability and college achievement are often closely related. Data were available from several classes of a reading improvement course, and it was considered worthwhile to analyze the data to ascertain which decile groups were profiting most by training. The fundamental hypothesis set up for testing in this study may be stated as follows: There is a difference in the amount of improvement between the reading speed of decile levels on the ACE test.

In all, 107 cases were used in this study. All had taken the six-week Reading Improvement Course which stresses reading efficiency at the college level through increase in speed and comprehension. The study is an attempt to obtain experimental answers to the following questions:

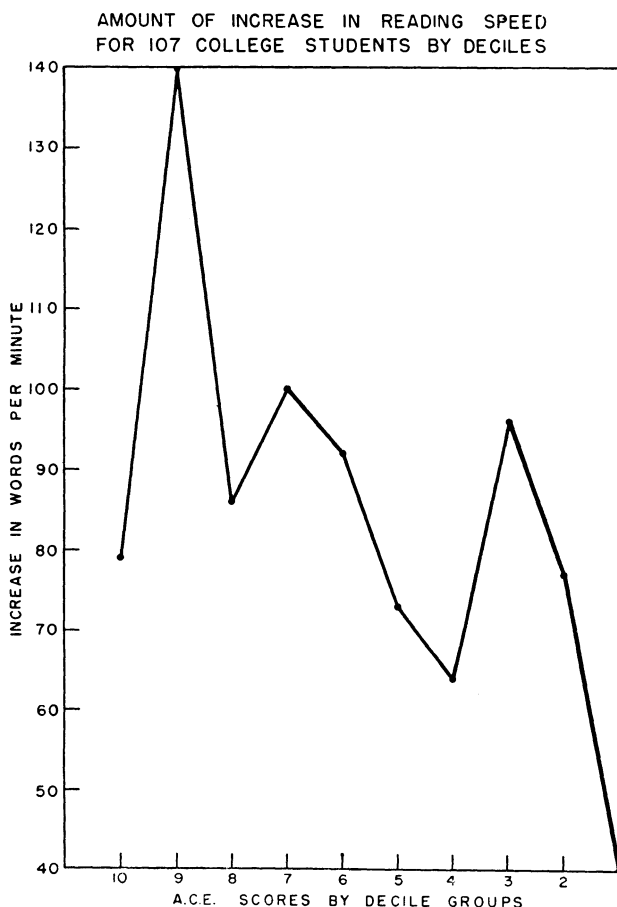
1. Do persons with high total ACE scores show greater amounts of increase in reading speed during five weeks of special reading improvement training?
2. Do persons with high total ACE scores have higher initial reading speeds?

METHOD AND PROCEDURE

Students from the winter and spring quarter reading improvement classes were used as the sample with the exception of those for whom entering ACE scores were not available. This left a total of 88 cases. Nineteen other cases from the winter of 1951 reading section were added. They had the same course as the original group of 88 cases. This made a total sample of 107 cases. Each individual in the sample had taken the reading improvement course. His initial reading speed, his final reading speed, and his total ACE score were recorded. The reading-speed scores were taken from Form A of the Pressey Reading Test administered on the opening day of the class and a final reading speed score which is obtained by testing the class at the end of the five weeks course with Form B of the Pressey Reading Test. Some preliminary evidence from this study seemed to indicate that the Pressey Reading Speed and Comprehen-

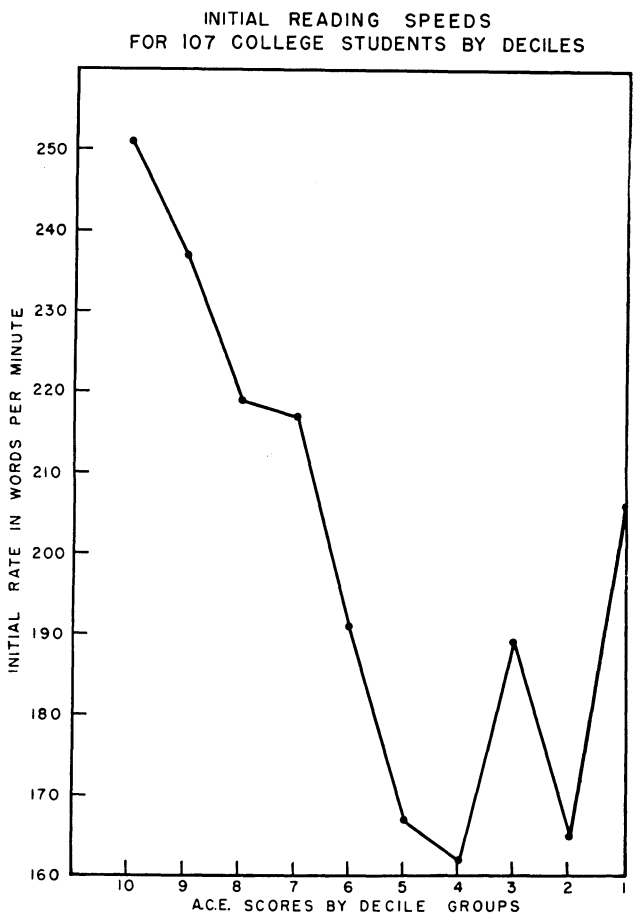
sion Forms A and B of the Ohio Scholarship Tests which had been used are not equivalent. However, that should not be of particular importance to this study, since initial speed and speed of increase of the separate groups as a whole, and not the amount of increase in individual reading speeds were analyzed.

The 107 cases were divided into deciles according to total ACE scores. The reading speed at the beginning of the course and the increase in speed for each individual were listed by groups. Next, analysis of variance was computed using the data available. It would be expected that if persons with superior ACE scores are superior in reading speed and improvement a statistically significant difference should be obtained at different levels of intelligence when between-group comparisons are made.



RESULTS

Analysis of variance revealed no significant difference in increase in reading speed among the ACE decile groups.



Analysis of variance showed a significant difference at the 1 per cent level of confidence in initial reading speed among the ACE decile groups.

When the t test was made between the highest and lowest ACE decile groups, differences in their initial reading speeds were not significant. This may be due to a selective factor particularly at the lower decile level. Mean initial reading speeds were highest in the top ACE deciles and tended to be lower with each descending ACE decile except in the lowest three where this relationship did not

exist. This may be due to students with extremely low reading ability dropping out of school.

CONCLUSIONS

The data show no significant difference in the amount of increase between persons with high and low ACE ratings. Several factors may be operating here. The person who is initially a better reader may have more nearly reached a plateau due to methods by which he learned. The slower reader may be more highly motivated to increase his speed due to lower grades. Again, there apparently is a selective factor operating in the lower deciles as the poorer readers often are incapable of doing acceptable work.

A significant difference in initial reading speed was shown in favor of those with higher ACE scores which is in accordance with the findings of other investigators.

The primary hypothesis was rejected on the basis of the data analyzed. The conclusions drawn are subject to the limitations of the data and method used as well as the number of subjects.

References

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