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#### ABSTRACT

The purpose of this study was to determine whether a relationship exists between reading ability and self-concept of academic ability. The Nelson-Denny Reading Test was administered to 253 freshman, sophomore, junior, and senior college subjects. The scores attained by the subjects were used to classify the subjects as reading above actual grade placement or below actual grade placement, according to norms for their rempective groups. Further stratification was done on the basis of sex. Thus, the subjects were classified in one of the following four categories: males reading above grade placement, females reading above grade placement, males reading below grade placement, and females reading below grade placement. All subjects in each of the four categories were also given the Michigan State Self-Concept of Academic Ability Scale. The results indicated that those subjects above grade level have a higher self-concept of academic ability than those reading below actual grade level. No difference was found between male and female subjects. (WR)



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The Effect of Reading Ability

on the

Self-Concept-of-Academic Ability

of

College Students

by

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Ohio University

and

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A paper presented at the Special Interest Group -Reading Research during the Annual Meeting of the American Educational Research Association, Washington, D.C., April , 1975.



THE EFFECTS OF READING ABILITY
ON THE SELF-CONCEPT-OF-ACADEMIC ABILITY
OF COLLEGE STUDENTS

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## **ABSTRACT**

Results indicate (N-253Ss) those above actual grade level have a higher self-concept-of-academic ability than those below actual grade level readers. No difference was found between male and female Ss. Further analysis reveals that no differences exist in self-concept-of-academic ability between male and female Ss above actual grade level readers; female Ss below actual grade level readers than a higher self-concept-of-academic ability than males; that males above and below actual grade level readers did not differ; and, that female Ss above actual grade level readers had a better self-concept-of-academic ability than females below actual grade level readers.



The Effect of Reading Ability
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Brookover and associates (1962, 1964, 1965) have investigated the nature of self-concept and its effects, and relationships, to the academic achievement. Results reported indicate that there is a direct relationship between self-concept and academic achievement. Further research has also corroborated the Brookover findings for black adolescents (Morse, 1963), for mentally retarded (Towne, 1966), for deaf (Joiner, 1966) and for compensatory education students (Olsen, 1971). The Brookover study also concluded that specific subject area self-concept-of-academic ability scores, in this case reading proficiency, was related to one's performance in this subject area.

When applying the findings of Brookover to the curricular area of reading, one must delve into the effects, and relationships, of reading proficiency and self-concept.

Wattenberg and Clifford (1964) indicate that one's self-concept upon entering kindergarten seems to be predictive of later accomplishments in beginning reading. The effect of comparative success or failure in reading did not, however, strongly influence one's self-concept. Lumpkin (1959) attempted to discover whether or not there were differences in self-concept of overachievers and underachievers in reading. Results indicate that



overachieving readers had a more positive self-concept than underachievers.

Bodwin (1959) studied 100 third through sixth graders with reading disabilities and found a significant positive relationship between self-concept and reading disabilities.

### PURPOSE OF THE STUDY

The primary purpose of this study is to discern as to whether a relationship exists between reading ability (as determined by the Nelson-Denny Reading Test) and self-co cept-of-academic ability (as measured by the Michigan State Self-Concept-of-Academic Ability Scale).

#### **OBJECTIVES**

Answers were sought to the following research questions:

- 1. Was there a significant difference in the mean self-concept-ofacademic ability scores of college Ss categorized by reading achievement (above or below actual grade placement)?
- 2. Was there a significant difference in the mean self-concept-of-academic ability scores of college Ss categorized by sex (male or female)?
- 3. Was there a significant difference in the mean self-concept-of-academic ability scores of college Ss categorized by sex and reading above actual grade placement?
- 4. Was there a significant difference in the mean self-concept-ofacademic ability scores of college Ss categorized by sex and reading below grade placement?
- 5. Was there a significant difference in the mean self-concept-of academic ability scores of male college Ss when categorized by reading achievement (above or below actual grade placement)?
- 6. Was there a significant difference in the mean self-concept-ofacademic ability scores of female college Ss categorized by reading achievement (above or below actual grade placement)?



### PROCEDURE

The Nelson-Denny Reading Test was administered to 253 freshman, sophomore, junior, and senior college Ss. The Examiner's Manual of the Nelson-Denny Reading Test was used to score the test. The scores attained by the Ss were then utilized to classify the Ss as reading "above actual grade placement" or "below actual grade placement", according to the norms for their respective groups.

Further stratification was done on the basis of sex (male or female). Thus, the 253 Ss were classified in one of the following four categories:

(1) males reading above actual grade placement; (2) females reading above actual grade placement; (3) males reading below actual grade placement; and, (4) females reading below actual grade placement.

All Ss in each of the four categories were also given the Michigan State Self-Concept of Academic Ability Scale (MSCOAA). The MSCOAA is an 8 item Guttman Scale with total scores of 8.000-15.999 indicating that the S perceives himself as "POOR", a total score of 16.000-23.999 indicates an impression of being "BELOW AVERAGE", a total score of 24.000-31.999 indicates a perception of "AVERAGE", 32.000-39.999 indicates that the S perceives himself to be "ABOVE AVERAGE", and a total score of 40.000 indicates perception of "SUPERIOR" ability.

# DATA ANALYSIS

All research questions were tested for significance by utilization of a two-tailed t-test. Classification factors were sex (male or female) and reading achievement (above actual grade placement or below actual grade placement). Rejection level was set at .05 for each research question.



### RESULTS

Analysis of data indicated that the college Ss in this investigation who were classified as reading above actual grade level were
found to have a more favorable mean self-concept-of-academic ability
score (hereafter referred to as SCOAA) than the college Ss reading
below actual grade level. Table I shows that the mean SCOAA for college

TABLE I. MEAN SCOAA SCORES BY READING LEVEL (ABOVE-BELOW GRADE LEVEL)

# READING LEVEL

	ABOVE GRADE	BELOW GRADE
SCOAA	28.226*	25.450
	*p=<.01	

Ss reading above grade leve! was 28.226, compared to a mean SCOAA of 25.450 for those college Ss who read below actual grade level. Thus, research question 1 in this investigation is answered in the affirmative.

Results, as shown in Table II, indicate that there was no difference

TABLE II. MEAN SCOAA SCORES BY SEX (MALE-FEMALE)

SEX

SCOAA 26.649 26.538

in the mean SCOAA of college Ss when they were categorized by sex. The female college Ss had a mean SCOAA of 26.649 with the male college Ss having a mean SCOAA of 26.538. Therefore, research question 2 is answered in the negative.



When considering the sex of the college Ss who read above actual grade level, it was found that there were no differences in mean SCOAA of males and females. Table III points out that the mean SCOAA for female college

TABLE III. MEAN SCOAA SCORES BY SEX (MALE-FEMALE)
READING ABOVE GRADE LEVEL

SEX

FEMALE

28.298

ABOVE GRADE 28.113

So who read above actual grade level was 28.298 while the mean SCOAA for the male college So who read above actual grade level was 28.113. Hence, research question 3 is answered in the negative.

However, when considering the sex of the college Ss who read below actual grade level, it was found that there were differences in mean SCOAA.

Table IV indicates that the mean SCOAA for female college Ss reading below actual grade level was 26.519, as compared to a mean SCOAA of 23.200 for the male college Ss reading below actual grade level. Thus, research

TABLE IV. MEAN SCOAA SCORES BY SEX (MALE-FEMALE)
READING BELOW GRADE LEVEL

BELOW GRADE 23.200 26.519\*

\*p= < .01

question 4 is answered in the affirmative.

When considering the mean SCOAA for all male college Ss reading above and below actual grade level, it was discovered that the male college Ss reading above actual grade level had a higher mean SCOAA than



those male college Ss who read below actual grade revel. Table V illus-

TABLE V. MEAN SCOAA SCORES OF MALE COLLEGE STUDENTS BY READING LEVEL (ABOVE-BELOW GRADE LEVEL)

# READING LEVEL

	ABOVE GRADE	BELOW GRADE
SCOAA	28.113*	23.200
	*p= < .01	

trates that the mean SCOAA for male college Ss reading above actual grade level was 28.113 while those male college Ss reading below actual grade level had a mean SCOAA of 23.200. Therefore, research question 5 is answered in the affirmative.

Finally, when considering the mean SCOAA for all female college Ss reading above and below actual grade level, like the male college Ss, there was a difference in mean SCOAA. Table VI conveys that the mean SCOAA for

TABLE VI. MEAN SCOAA SCORES OF FEMALE COLLEGE STUDENTS BY READING LEVEL (ABOVE-BELOW GRADE LEVEL)

# READING LEVEL

	ABOVE GRADE	BELOW GRADE
SCOAA	28.298*	26.519
	*p= < .01	

female college Ss reading above actual grade level was 28.298, while the mean SCOAA for female college Ss reading below actual grade level was 26.519. Thus, research question 6 is also answered in the affirmative.



# **CONCLUSIONS**

From the previously cited results, this research investigation can arrive at a number of conclusions. For this population of college Ss reading above and below actual grade level, all persons, except males reading below actual grade level, had a mean SCOAA that was considered to be between average (24.000) and above average (32.000).

A difference was found to exist between the mean SCOAA of college Ss reading above (28.226) and below (25.450) actual grade level. This finding seems to corroborate the findings of Lumpkin (1959) and Bodwin (1959) in that those research findings also indicated a relationship between reading success and self-concept-of-academic ability. The findings would also be supportive of both the axiom "nothing succeeds like success itself", and the theory of positive reinforcement.

When considering the sex of the college Ss studied, the findings indicate that no difference exists between the mean SCOAA of males (26.649) and females (26.538). Since no attempt was made in this study to ascertain the Ss past reading experiences, and owing to the principal of the normative curve, it must be assumed that the Ss have had similar reading experiences. It can then be concluded that the sex of an individual has little or no effect upon one's self-concept-of-academic ability.

The aforementioned results also hold true for male and female college Ss who read above actual grade level. Namely, that there was no difference in the mean SCOAA of male college Ss (28.113) and female college Ss (28.298) reading above actual grade level. Since the reading ability of the two groups was approximately equal (both reading above actual grade level) it must be assumed that the Ss in each group had similar "successes" in



rending. Therefore, this finding indicates that one's reading proficiency is a more viable determinant of self-concept-of-academic ability than one's sex. It adds further credence to the findings, reported in prior sections of this investigation, to research questions 1 and 2.

The sex of college Ss, when they are reading below actual grade level, does have a bearing on their mean SCOAA. There was a difference in mean SCOAA between male college Ss (23.200) and female college Ss (26.519) reading below actual grade level. Since there was no difference between the mean SCOAA of male (28.113) and female (28.298) college Ss reading above actual grade level, it would seem to indicate that when proficiency in a specific subject area (reading) is considered, no difference between the sexes exist. However, when lack of proficiency (low reading ability) is considered, then sex is a determining ractor.

Finally, a difference does exist between the mean SCOAA of male college Ss reading above actual grade level (28.113) and those reading below actual grade level (23.200), an female college Ss reading above actual grade level (28.298) and those reading below actual grade level (26.519). Both these findings substantiate the results previously reported for answering research question 1. Namely, those college students, whether male or female, who are successful in reading, appear to have a more positive self-concept-of-academic ability; and, those college students who are not proficient in reading, whether male or female, appear to have a less positive self-concept-of-academic ability.

The findings of this study seem to substantiate Brookover's prior research. However, to make the conclusion more generalizable, additional research must be conducted with populations differing in such factors as age, sex, socio-economic status, and academic level.



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