

RELATIVE UNDERACHIEVERS

in

MATHEMATICS

AN ABSTRACT OF

A THESIS

**PRESENTED TO THE GRADUATE FACULTY
OF WESTERN CONNECTICUT STATE COLLEGE**

IN PARTIAL FULFILLMENT

OF THE REQUIREMENTS FOR THE DEGREE

MASTER OF SCIENCE

by

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March 1972

The study hypothesized that there exist students whose potential for success in mathematics is limited in relation to their potential for success in the study of other subject areas and that these students, referred to as relative underachievers, possess perceptions somewhat different from those of achieving mathematics students, in areas relating to the study of mathematics. The study was concerned with identifying possible causal factors in this condition referred to as relative underachievement. The study was also concerned with identifying ways in which relative underachievement could be treated or prevented.

The procedure of the study was to analyze research into underachievement and research into non-achievement in mathematics and to show how these are related in the case of the student whose achievement is weak mainly in the area of mathematics. The study utilized theories of the manner in which learning takes place, in order to explain how learning of mathematics is hindered in the relative underachiever.

Furthermore, an original test was designed in conjunction with the paper in order to determine if it were

true as hypothesized that achievers and relative under-achievers have (1) different attitudes toward the study of mathematics, (2) similar attitudes toward the study of other subjects, (3) different perceptions of their potential for success in the study of mathematics, (4) different attitudes toward the importance of order, essential to a thorough understanding of mathematics, and (5) different perceptions of their exposure to organization at home.

The study shows that there are students who do not achieve as well in the area of mathematics as in other subject areas. The study shows that these students do have different attitudes and perceptions from achieving students of comparable ability.

The study demonstrates that there are two primary causes of relative underachievement. One is the failure of the student to develop a perceived need for orderliness. The other primary cause of relative underachievement is caused by the student developing a perception of himself as incapable of success in the study of mathematics. Both causes tend to be self-perpetuating if allowed to remain uncorrected.

The study makes a number of suggestions for teachers to use in helping the relative underachiever to overcome his handicap. Included in these are suggestions to make to parents who wish to help a relative underachieving child or prevent a child from becoming one.