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## The Relationships Of Selected Factors To Success In A College Reading Program

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*University of Nevada, Las Vegas*

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*University of Nevada, Las Vegas*

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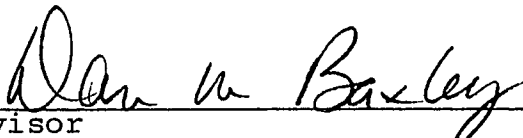
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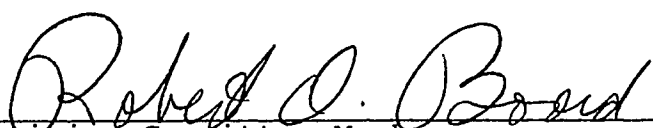
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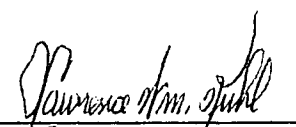
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This work is dedicated to my husband Beni, our son Kwakou, and his "Broster" whose patience and encouragement have been sustaining, to my parents Lawrence and Dorothy Walker who first gave me the right, and to our past, present and future.

## TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS . . . . .	i
ABSTRACT . . . . .	v
 <u>Chapter</u>	
1. INTRODUCTION . . . . .	1
STATEMENT OF THE PROBLEM . . . . .	1
RATIONALE FOR THE STUDY . . . . .	1
SIGNIFICANCE OF THE STUDY . . . . .	3
DEFINITIONS OF TERMS . . . . .	3
HYPOTHESES . . . . .	5
ASSUMPTIONS AND LIMITATIONS . . . . .	6
ORGANIZATION OF THE STUDY . . . . .	7
SUMMARY . . . . .	7
2. REVIEW OF THE LITERATURE . . . . .	9
PROBLEMS AND APPROACHES . . . . .	9
Status of College Reading Programs . . . . .	10
Precise Descriptions of Programs . . . . .	12
The Successful Program . . . . .	16
THE <u>IOWA SILENT READING TESTS</u> . . . . .	19
A Measure of Progress . . . . .	20
A Predictive Measure . . . . .	22
Use of Standardized Tests . . . . .	23
LOCUS OF CONTROL . . . . .	28
Reading Achievement and Personality . . . . .	29

	Page
A Measure of Personality . . . . .	31
The I-E Scale . . . . .	34
Reading Achievement and Locus of Control . .	36
CLASS ATTENDANCE . . . . .	43
AGE AND SUCCESS . . . . .	44
SEX AND SUCCESS . . . . .	45
SUMMARY . . . . .	46
3. METHODS AND PROCEDURES . . . . .	48
DESCRIPTION OF COURSE . . . . .	48
An Overview . . . . .	49
Materials . . . . .	50
Speed Development . . . . .	50
Comprehension . . . . .	51
Vocabulary Development . . . . .	52
Study Skills . . . . .	53
Timing . . . . .	53
Progress Analysis . . . . .	54
SAMPLE POPULATION . . . . .	54
METHODS . . . . .	55
Success . . . . .	56
Criterion One . . . . .	56
Criterion Two . . . . .	57
PROCEDURES . . . . .	57
SUMMARY . . . . .	58
4. ANALYSIS OF THE DATA . . . . .	59
HYPOTHESES . . . . .	59
Hypothesis One . . . . .	59
Hypothesis Two . . . . .	60
Hypothesis Three . . . . .	60
Hypothesis Four . . . . .	60
Hypothesis Five . . . . .	61
Hypothesis Six . . . . .	61



	Page
Hypothesis Seven . . . . .	62
Hypothesis Eight . . . . .	62
SUMMARY . . . . .	62
5. DISCUSSION AND CONCLUSIONS . . . . .	64
DISCUSSION OF SELECTED VARIABLES . . . . .	64
Vocabulary . . . . .	64
Reading Comprehension . . . . .	65
Reading Power . . . . .	65
Reading Efficiency . . . . .	65
Locus of Control . . . . .	66
Class Attendance . . . . .	67
Age . . . . .	67
Sex . . . . .	68
SUMMARY . . . . .	68
CONCLUSIONS . . . . .	70
REFERENCES . . . . .	72
APPENDICES . . . . .	86
A. PLANS AND LECTURES FOR SPEED READING AND STUDY SKILLS . . . . .	87
B. INFORMATION-RELEASE FORM . . . . .	94
C. DATA SHEET . . . . .	95
D. CRITERION ONE SCORING MATRIX . . . . .	96
E. CRITERION TWO SCORING MATRIX . . . . .	97
F. SUCCESS AND SELECTED VARIABLES RANK-ORDERED . . .	98
G. THE ROTTER INTERNAL-EXTERNAL CONTROL SCALE . . .	101
VITA . . . . .	105

## ABSTRACT

### Purpose

The purpose of this study was to investigate the relationships of several variables--reading ability (vocabulary, reading comprehension, reading power, and reading efficiency) as measured by the Iowa Silent Reading Tests, locus of control as measured by the Rotter I-E Scale, class attendance, age and sex--to overall success in a college reading improvement program.

### Subjects

Subjects were students enrolled in three sections of Speed Reading and Study Skills at the University of Nevada, Las Vegas (UNLV), during the First Spring Session, 1977. Sixty-three students participated in the study--thirty-three males and thirty females ranging in age from seventeen to sixty-one years. The class met twice weekly for two hours over a seven-week period.

### Procedures

Hypotheses. Hypotheses stated that there is no significant relationship between each variable--vocabulary, reading comprehension, reading power, reading efficiency,

locus of control, class attendance, age and sex--and success as defined for the college reading improvement program at UNLV.

Data Collection and Analysis. Data was rank ordered and number or letter coded as it became available during the seven-week course. Success data was obtained following the final class meeting, success being defined in terms of speed increases and maintenance of adequate comprehension.

A computer program correlated each variable with success. The Spearman Rank-Order Correlation technique was used, corrected for tie conditions. The point-biserial correlation technique was used to determine the relationship between sex and success. A critical-ratio z-test was applied to the correlations obtained to determine their significance. Specific P-values were reported for each correlation.

## Results

Hypotheses associating vocabulary, reading efficiency, age and sex with success were accepted when no significant relationships were found. Hypotheses associating reading comprehension, reading power, and class attendance with success were not accepted as positive and significant relationships were found. Hypothesis associating locus of control with success was rejected when a

highly significant and negative correlation was found. Results were interpreted within the framework in which they were gathered and related to similar finds in other studies.

### Conclusions

The study was summarized, including a review of literature, and recommendations were suggested for further research to determine factors significantly related to success in a college reading improvement program.

## Chapter 1

### INTRODUCTION

Chapter 1 of this study is divided in the following manner: (1) statement of the problem; (2) rationale for the study; (3) significance of the study; (4) definitions of terms; (5) hypotheses; (6) assumptions and limitations; (7) organization of the study; and (8) summary.

### STATEMENT OF THE PROBLEM

The purpose of this study was to investigate the relationships of several variables--reading ability (vocabulary, reading comprehension, reading power, and reading efficiency), locus of control, class attendance, age, and sex--to overall success in a college reading improvement class.

### RATIONALE FOR THE STUDY

Several investigators have shown concern for the structure and management of college reading programs over the years (Anderson, 1975; Berg, 1960a; Eller, 1959, 1960; Klaeser, 1972). These investigators have also called for studies which would permit greater insight into reasons

for success of students in college reading programs.

The college reading improvement program at the University of Nevada, Las Vegas (UNLV), is relatively new. Its growth has been steady since its inception and has become rapid within the past year. Sections have multiplied, and numbers of students desiring to enroll in the course have overflowed to waiting lists. Success of the program is mirrored in the success of the majority of students who complete the course. It is, perhaps, a prudent decision to attempt to determine if certain factors are related to success in the course while interest is at this peak. This investigator, with the support of Reading Center and Clinic personnel, selected initial reading ability, locus of control, class attendance, age, and sex as the variables to explore at this time.

Identification of factors related to success would provide university personnel with information necessary for the formulation of screening procedures for students desiring to enter the reading improvement course in the future. The screening procedures would conceivably contain a series of tests and other observations, the results of which, when analyzed, would be predictive of success in the course. At present students are accepted on a first-come, first-served basis. Space being limited, screening procedures would permit more efficient allotment of time and space now being utilized in the instruction of the

unsuccessful student. This student could be counseled to seek other available means of improving his or her reading ability which would be more profitable educationally.

#### SIGNIFICANCE OF THE STUDY

This study represents a cooperative venture between the investigator and the Reading Center and Clinic, an integral part of the College of Education at UNLV. As the initial study focusing on the college reading improvement program, it, therefore, serves as a cornerstone for future research in this area at UNLV.

Should factors relevant to success be determined through this investigation, the university personnel might gain valuable insights relative to what type of student will succeed in the course. The student body could profit from knowledge of factors which are predictive of their success in the reading improvement program. On the basis of such information, the student could decide whether or not to enroll in the course. Should the design of this study prove manageable, the study could be replicated at UNLV and at other institutions in order to verify results and to develop comprehensive screening procedures.

#### DEFINITIONS OF TERMS

Definitions of terms used and methods employed in measuring variables were as follows:

External Control--the degree to which an individual perceives of the occurrences in life as attributable to forces other than self, such as chance, fate, or luck;

Generalized Expectancy--an abstraction referring to what one anticipates as the source of reinforcement (internal or external forces) in the present or future, based on previous experience;

Internal Control--the degree to which an individual believes that the occurrences in life are a consequence of his or her own actions;

Locus of Control--place or seat of control of reinforcement (internal or external forces); measured by the Rotter I-E Scale;

Reading Ability--the ability which the individual manifests upon entering the college reading improvement course as measured by the Iowa Silent Reading Tests of Vocabulary, Reading Comprehension, Reading Power, and Reading Efficiency (forms specified by the instructor); also known as ISRT;

Reading Improvement--used synonymously with speed reading and college or developmental reading programs; referred also to the speed reading course at UNLV as explicitly described;

Success--defined by the investigator as the sum of doubling of speed and steady increments in speed while maintaining comprehension between seventy and ninety percent.



## HYPOTHESES

The study was designed to test the following null hypotheses:

- Hypothesis 1: There is no significant relationship between vocabulary development as measured by the Iowa Silent Reading Tests and success in the college reading improvement class at UNLV.
- Hypothesis 2: There is no significant relationship between reading comprehension as measured by the Iowa Silent Reading Tests and success in the college reading improvement class at UNLV.
- Hypothesis 3: There is no significant relationship between reading power as measured by the Iowa Silent Reading Tests and success in the college reading improvement class at UNLV.
- Hypothesis 4: There is no significant relationship between reading efficiency as measured by the Iowa Silent Reading Tests and success in the college reading improvement class at UNLV.
- Hypothesis 5: There is no significant relationship between locus of control as measured by the Rotter I-E Scale and success in the college reading improvement class at UNLV.
- Hypothesis 6: There is no significant relationship between class attendance and success in the college

reading improvement class at UNLV.

Hypothesis 7: There is no significant relationship between age and success in the college reading improvement class at UNLV.

Hypothesis 8: There is no significant relationship between sex and success in the college reading improvement class at UNLV.

#### ASSUMPTIONS AND LIMITATIONS

These assumptions were made in designing this study:

1. There are discrete factors which are related to success in a college reading program.
2. These factors can be adequately measured or recorded.

These limitations were deemed restrictive in generalizing the findings of this study to the total population:

1. This study was designed to identify and isolate variables which might be related to success in the college reading improvement class at UNLV.
2. Since no extensive body of knowledge was available concerning the relationships of variables selected for investigation in this study, the null hypotheses were stated that no significant relationships existed (Cook & LaFleur, 1975, p. 19).
3. There was no attempt to design a study whereby

results could be generalized to a greater population. Though the procedures employed in this study may have promise for other populations, results apply to this sample only.

#### ORGANIZATION OF THE STUDY

The purpose of this study, the rationale for the study, the significance of the study, definitions of terms, hypotheses, and assumptions and limitations of the study were introduced in Chapter 1. The literature pertinent to the topic is presented in Chapter 2. Chapter 3 contains a description of the college reading improvement course at UNLV--methods, materials, and rationale for course structure. Procedures for collection of data are described in Chapter 3 also. Findings of this study are presented in Chapter 4. Conclusions and implications drawn from the data collected in this study are discussed in Chapter 5.

#### SUMMARY

The main purpose of this study was to investigate the relationships of several variables--reading ability, locus of control, class attendance, age and sex--to overall success in a college reading improvement class. Rationale for the study included the identification and isolation of factors possibly related to success for the purpose of developing comprehensive screening procedures in the

future. Significance of the study lay in the fact that such a study provides new and useful research data for the university community--administration, faculty, and student body--and others who have an interest in the course. Definitions of terms used in the study provided clarification of some of the relevant concepts. Hypotheses which the study was designed to answer were enumerated.

Generalizations pertinent to the conclusions reached in this study would, of necessity, be limited to the precise conditions described in this study since the investigation was of a descriptive, rather than an experimental, nature.

## Chapter 2

### REVIEW OF THE LITERATURE

Literature reviewed and termed relevant to this study is divided into the following categories: (1) problems and approaches in college developmental reading, (2) general and specific usage of the Iowa Silent Reading Tests, (3) locus of control, (4) class attendance and success in college reading programs, (5) age and success in college reading programs, (6) sex and success in college reading programs.

### PROBLEMS AND APPROACHES

Reading improvement programs, existing in their various formats, have been described and evaluated since their mass inception in the early fifties (Causey, 1956, 1957b, 1958). For many years the Southwest Reading Conference, later known as the National Reading Conference, provided an annual and complete review of literature and research detailing methods, materials and status of newly developing reading improvement programs throughout the nation (Bliesmer, 1956, 1958, 1959, 1960; Bliesmer & Lowe, 1961; Causey, 1957b; Sommerfield, 1957).

Status of College  
Reading Programs

Positing that the future of college reading looked bleak, Maxwell (1963) cited as reasons the fact that often the community, student body, and university personnel associate the college reading program with reading deficiency, assuming that enrollees are remedial or ill-prepared for undertaking college requirements; an over-emphasis on the superficial aspects of the act of reading, such as machinery and speed; and a lack of esprit among college reading specialists.

Colvin (1970) echoed Maxwell's query regarding college reading specialists but delved further into the cause of what Maxwell had termed a "lack of professional identity" (p. 4). Colvin, having to gather information from two studies he conducted within a ten-year period because of an inability to locate other data, concluded that most personnel who directed, conducted, and instructed students in formally-organized college reading programs possessed neither the background nor qualifications for maintaining such positions. He called for formal preparatory programs as one means of establishing professionalism among college reading personnel. He seriously questioned if anyone with limited preparation could qualify to teach college students to read and study.

A survey of department affiliation of college and

university developmental reading programs, conducted by Ronald Huslin, Director of the Reading Center at Rider College, Trenton, New Jersey, showed that of 177 responses to the questionnaire (a return rate of 63%) administration of programs was listed under twenty-one different departments (Huslin, 1975). Huslin observed that it seems as though many colleges do not know what to do when it comes to administrative placement of reading personnel and Reading Center/Clinics. Though not purporting to be a "complete, comprehensive compilation of data" (p. 203), Huslin maintained that his survey does show college reading to be a growing field.

Ray (1964) reviewed the summaries of college reading improvement programs reported in the literature between the years 1948-1960. Though he reviewed the literature appearing as early as 1945, he found that actual summaries did not begin until 1948. His review was inclusive, then, of the years 1945-1960, with summaries covering the years 1948-1960. He cited as weaknesses of earlier studies the failure to report gains and statistical significance of results. Huslin indicated that attendance, progress and achievement, cooperation, attitude, vocabulary, comprehension, contract basis, speed, self-evaluation, improvement, and individual tests most frequently formed the bases for evaluation of college reading programs (Huslin, 1975). Means of determining the significance of

these criteria were not cited.

Maxwell (1971) and Tillman (1973) questioned the sole reliance upon grade-point average as a criterion for measuring success in four-year college reading programs. They suggested the use of additional factors such as attendance, informal feedback, attrition from enrollment and persistence of gains. Maxwell also cautioned that a basic design problem occurs when statistical procedures are used which assume a normal distribution for readers who fall within a skewed population in a college reading program. She further criticized that standardized tests often ignore such skills as purpose and flexibility, though Huslin reported that a majority of schools surveyed use a standardized test to measure progress (Huslin, 1975).

#### Precise Descriptions of Programs

The National Reading Conference, through several changes in command, has maintained its policy of reporting yearly the research in college and adult reading. A section of this report has traditionally spotlighted programs. Bliesmer (1971) found that although some forty-four reading and/or study skills programs had been reported in the literature, only thirteen of these contained descriptions of specific programs. In the early reported history of college reading programs, precise descriptions were more forthcoming. The Fifth Yearbook of the Southwest



Reading Conference, entitled Exploring the Goals of College Reading Programs, carried several college and university reading course descriptions (Causey, 1956). Though diverse in their structure and management, all appeared to serve the populations for which they were designed.

The program at the University of Texas, called "A Reading Improvement Program," was outlined by Dotson (1957). Administered by the Counseling Division of the Testing and Guidance Bureau, the program focused upon the "reader as a person" (p. 32). Major goals were to facilitate growth of self-concept and of the reader's concept of reading. Increasing facility in reading skills was also among the goals. The course was not required and offered no credit. Perusal of the program's format indicated an emphasis upon reading improvement through guidance and counseling as five different tests, including a personal preference scale, were utilized during the course of the program.

Ernest Jones (1957) detailed components of a small college reading program at Central State College, Edmond, Oklahoma, which serviced a total of ninety-eight students during its initial three semesters. Each entering student was administered a battery of tests. Results were reported to students, followed by a counseling session. As an adjunct to the English Department, the course met for five

fifty-minute periods weekly, emphasizing novel-reading. Spelling and vocabulary were stressed according to the indications of student needs as assessed during the pretest battery. Neither workbooks nor mechanical devices were employed.

Cosper, Lokke, and Schick (1957) presented the background for the development of the reading course at Purdue University. The course evolved out of a summer seminar held in 1950 involving eight participants from Ohio State University, the University of Chicago, IIT, State University of Iowa, and Maxwell Air Force Base in Alabama. It was the consensus of that body that only basic reading skills should be taught with study skills being included only incidentally; that the laboratory should be of service for testing, diagnosis, and practice; and that the course should be voluntary, offering no credit. The original program serviced 250 students in one lab during the 1950-1951 school year. A variety of materials was used, including the Harvard Reading Films, one group tachistoscope, four individual tachistoscopes, and a projector and screen.

By 1956, three labs were servicing upwards of 1100 students. Much of the materials used in the earlier phases of the program were replaced by materials developed by several professors at Purdue University. The new materials included Cosper's Toward Better Reading Skill and a complete

test battery. Also utilized were magazines, the Harvard Essay Books and Tests, twenty-four accelerators, plus 200 books calibrated and leveled by the Dale-Chall and Fry reading formulae. The course now carried two-thirds of a credit hour.

Pauk (1957) described the Cornell University reading improvement program developed in 1949 by an interested Marvin D. Glock, then a professor of Educational Psychology. Glock's philosophy was that the student should be provided with practice in order to gain insight into the principles of comprehension. The program experienced tremendous growth in its early years, utilizing materials developed by Dr. Glock.

Edwards (1961) minutely detailed the program at Auburn University, Alabama, indicating growth from one section in 1951 to fifteen sections in 1959. Under the auspices of the Department of Psychology, the instructors (from education or psychology) advocated a student-centered approach. The student-centered approach sought the voluntary and enthusiastic student. The student was allowed to choose his or her own materials from a document entitled "Your Index to the Auburn Reading Laboratory." The index included books and pamphlets discussing different aspects of the reading process such as what reading and language are all about, comprehension, word meaning (vocabulary), rate, etc. The Index and a bibliography to

the course were provided as a part of the description.

Allen Berger (1970) a pioneer in the field of college reading, edited an annotated bibliography of literature and research on college reading programs.

In outlining a reading course for the college-bound high-school student, Gudaitis (1976) stressed five areas of concentration: rate, vocabulary-building, the reading of fact and fiction, and college study skills including study habits, test-taking of various sorts, the SQ3R method of reading a text, note-taking, using the library, outlining, and listening.

Well-defined programs such as those noted are more typical of the literature of the early years of development of college reading programs. Though reports of progress appear often, such reports should be accompanied by detailed descriptions of the conditions under which that progress occurs in order that the successful program may serve as a model for others, be replicated for future research, and/or be used in comparative studies.

#### The Successful Program

Eller (1959) listed four crucial differences between the successful and the unsuccessful program. He proposed smooth and efficient classroom procedures, optimum conditions for the use of mechanical aids, suitable instructional material, and overall effective teaching. Noting a thirteen percent attrition rate in college reading

programs between the years 1955 and 1958, Eller (1960) observed that in addition to the previous cautions, initiators of college reading programs must have the support of a major segment of the faculty and/or administration. Otherwise, he advised, a small-scale pilot should be planned in lieu of an all-inclusive undertaking. He also admonished those who endorse blanket acceptance of neighboring programs, reasoning that the needs of each university and student body are different. Eller (1960) advocated statement of objectives relative to student needs. Klaeser (1972) concurred with Eller, positing that college reading programs designed in entirely different manners may be equally successful. She encouraged the tailoring of the reading program to the student body, to the college itself, and to the capabilities of the staff. No program, she added, should be copied in its entirety as there exists no one "right" way of designing a college reading program.

Berg (1960a), commenting upon his exhaustive study of the literature inclusive of the years 1950-1953, made the following observation in keeping the compilation up-to-date:

. . . those concepts, techniques, and procedures which maintained the greatest confidence among reading specialists . . . are still, in the main, the same basic concepts, techniques, and procedures which guide the majority of our reading programs today (p. 131).

He enumerated several areas of importance: student motivation, reading as an act of reasoning rather than a mechani-

cal process, methods of teaching vocabulary and word-study as more important than the words themselves, the teaching of words in context rather than in isolation, an understanding of rate and flexibility, and, finally, competence of the instructor.

Seeking to organize significant research related to the improvement of college reading programs, Anderson (1975) concluded that needs lie primarily in four areas: (1) adequate and appropriate measures of success, (2) an improvement in measuring tools, (3) appropriate statistical designs, and (4) greater attention to "affective variables as predictors of success" (p. 192). Anderson's review indicated a concern in later years with the compilation and reporting of data gathered from research on college reading programs, whereas earlier concerns centered about the structure and design of the program itself.

Research reported on college reading programs since their widespread introduction in the fifties indicated a variety of concerns. Among these were personnel qualifications, department affiliation, criteria for measuring success, reporting of gains, statistical significance of results, precise program descriptions and components of the successful program. It has been suggested that one program cannot be deemed successful then copied by all following initiators. However, it would seem that the more research available which minutely details significant

aspects of a successful program, along with other concerns in college developmental reading, the more precise and relevant will become future college reading programs, whether components duplicate other programs or not.

#### THE IOWA SILENT READING TESTS

Research showed that among the most popular instruments for measuring progress and establishing reading level in college reading programs has been the Iowa Silent Reading Tests (Bliesmer, 1969). Of less availability was research demonstrating that the Iowa Silent Reading Tests can be of a predictive value in college reading programs.

Since their development in 1939 by Greene, Jorgeson and Kelly, the Iowa Silent Reading Tests, through several revisions, have reflected the philosophy that reading ability is best assessed through measurement of several skills thought to be of importance to the reader (Farr, 1973). The college-level battery tests vocabulary, reading comprehension, and reading efficiency (p. 4). The currently-used revision, consuming several years in its development, was standardized utilizing samples from across the United States (p. 27); and the forms have been equated on some 4,000 students (pp. 26-27). Such a well-tried measure as the Iowa Silent Reading Tests could greatly benefit instructors as a predictive measure. Validity and reliability have already been established over years of

continuous use. As a predictive measure, usage could be greatly extended.

### A Measure of Progress

Usage of the Iowa Silent Reading Tests (ISRT) with college students was reported as early as 1950 by Sheldon and Landsman who used the tests as one of several measures of differences between various groups of students in academic difficulty (Sheldon & Landsman, 1950). Sheldon (1955) again reported use of the battery at Syracuse University in order to survey the reading abilities of college students. Willey and Thompson (1956) administered the ISRT to entering freshmen at New Mexico College of Agricultural and Mechanical Arts and matched the students on the basis of ISRT and ACE scores. The experimenters then enrolled one member of each pair in a developmental reading program, their major objective being to determine if the developmental reading program would significantly affect grade-point average after one semester.

Patterson (1957), in a survey of reading improvement programs in industry, reported that the ISRT was commonly the test used for assessing reading ability at the college or adult level.

Jones (1957), in a program already described (see p. 13), reported that the ISRT was administered to all students during their first semester at the college in addition to the Michigan Vocabulary Profile Test, Keystone



Visual Survey Tests, Self-Analysis of Reading Habit, an ophthalmograph, and a spelling test to complete the battery. The information gathered was then used to counsel each student. The ISRT provided posttest data, also.

Lee (1958) reported usage of the instrument as a mid-term deselection device for freshmen students who scored below the median for grade thirteen on a pretest but scored at or above the median for grade thirteen on a posttest administered at mid-term. Students who reached the criterion by mid-term were allowed to discontinue participation in the reading improvement course but were given full-semester credit, thus allowing time for more intense instruction for those who failed to perform at criterion by mid-term.

The ISRT was reportedly administered as pretests and posttests to twenty-four policemen averaging thirty-five years of age. These men had scored below the fiftieth percentile for college freshmen on the pretest (Witty, Stolarz, & Cooper, 1959). Following a six-week program to improve rate and comprehension, meeting once weekly for a two-hour period, terminal ISRT scores were higher than beginning scores.

Summarizing the current usage of workbooks and mechanical aids, Lyle Miller (1959), in addition to data collected on workbooks, mechanical aids, credit basis of course offerings and hours of supervised instruction, also

reported that the ISRT was among the most frequently-used pretest and posttest, the others being the Diagnostic Reading Tests and the Cooperative English Tests. Bliesmer (1959) also reported wide usage of the ISRT in his review of research on college and noncollege adult reading. Bliesmer's 1959 review, as did many others which appeared as a traditional portion of the National Reading Conference's Annual Yearbook, focused upon reading programs, tests, and factors influencing reading and study skills. His review of tests cited those tests frequently used in reading or study programs, and tests which have pertinence for such programs (p. 53). Bliesmer again found in his 1968-1969 review of research that ISRT was the second most popular test in college and adult reading programs carried out during that year (Bliesmer, 1971).

#### A Predictive Measure

Measuring factors associated with the academic achievement of 160 freshmen at an agricultural college, Bonner (1957) found ISRT scores to be among the four out of five factors to correlate significantly with grade-point averages. Bonner was perhaps considering use of the test as a predictive measure.

Causey (1957a, p. 117) indicated a study-in-progress by Van Roekel at Michigan State University. Van Roekel sought to detail the relative consistency of items responded to correctly as measures of progress in reading improvement

classes. Pretest and posttest data from the ISRT were to be analyzed in this study. Again, such information could be of predictive value.

Specific reports of usage continued in the 1960's when Garrett (1960), as had Bonner (1957) earlier, found that the ISRT scores significantly contributed as a predictor of academic success for students entering a school of nursing. However, as already noted, reports of use of ISRT as a predictive measure have been very few.

#### Use of Standardized Tests

Frederick B. Davis (1961), commenting upon the assessment of change, recommended that tests used to estimate improvement which results from learning should be scored with a correction for chance success. He also suggested that test directions should contain some explanation of how scoring is to be done. Anderson (1975) observed that these were two of the weaknesses of the older edition of ISRT (p. 193).

Pauk (1969) discussed what reading tests for college freshmen should measure. He suggested that the vocabulary portions of reading tests should be eliminated, his reasons being that one's vocabulary is no indication of the ability to read and study assignments, and the words for assessment of vocabulary development are generally taken from literature only and not expository

prose to which the college student is mainly exposed in textbook material. Furthermore, Pauk maintained, two scores should be obtained from a high-school or college reading test: reading literature and, more importantly, reading textbook-type material (p. 11). The ideal test, Pauk contended, should test ability to read science, math, social science and English. The test-taker should be allotted an unlimited time period in which to complete the tests. The time-limit is considered a punishment to the true scholar who reads and rereads in order to be certain of responses. The test should be constructed in such a way that the student is required to read several long paragraphs of equal difficulty. Discrimination in ability would be determined from the student's adeptness at answering the questions following each paragraph, the questions increasing in difficulty as one advances through the paragraphs rather than the paragraphs themselves becoming more difficult (p. 4).

Kingston (1965) also questioned if reading is actually what is measured by the standardized reading test. He pointed out that the necessity of using a standardized reading test creates a dilemma for the reading specialist, who realizes that the reading test being used rarely taps all the facets which are of concern to the specialist (p. 106).

Roger Farr (1969) enumerated steps to be followed

in recognition of the problems encountered when attempting to use standardized tests for placement and achievement. Among Farr's considerations were an operational definition of skills being taught in the program, norm groups which matched the group to be tested (or the development of local norms), and measurement procedures to approximate the teaching-learning situation, i.e., the test should assess skill development commensurate with objectives around which the course was designed. Alexander (1977) corroborated these views. Showing a willingness to continue the use of standardized tests, she sought to add to their usefulness for the college reading program. She summarized that placement and achievement tests must be selected on the basis of the degree of correspondence between skills measured by the test and the objectives specified by the program (p. 291).

Despite difficulties noted in the use of ISRT and other standardized reading tests, Tillman (1973), reviewing four-year college reading programs from 1945-1971, noted that the ISRT was among the three most frequently-used tests, though frequency of usage had declined in recent years.

The fact that the tests have been a part of the tools used for assessment in college reading programs for more than 25 years, thus accumulating volumes of evidence, attests to the types of usage possible. Of particular

interest in this study is the possibility of use as a predictive measure of success in the college reading program, especially when considering the scores of each test of reading ability separately.

Vocabulary, comprehension, reading power, and reading efficiency are considered separate measures by the designers of ISRT. If they are, indeed, separate measures, then scores yielded should reflect different abilities possessed by the student. Considered separately, strength or weakness in one or more of these areas could portend performance in the college reading program. Should one area be more predictive of overall success than another, i.e., comprehension correlate more highly with success than reading power, then the comprehension score could serve as a part of the total measures considered when decisions are made by university personnel and students concerning who should take the course. Though Pauk (1969) suggested that vocabulary may not be a reliable indication of college performance in certain circumstances, vocabulary still is a component of reading assessments such as ISRT. As such, the efficacy of the vocabulary measure of the ISRT should be tested.

There are many usages for ISRT scores. As has been referenced, ISRT scores have served to establish entry level (Patterson, 1957; Sheldon, 1955; Sheldon & Landsman, 1950; Willey & Thompson, 1956), as pretest and posttest

measures (Jones, 1957; Lee, 1958; Witty, Stolarz, & Cooper, 1959), and as predictive measures (Bonner, 1957; Causey, 1957a, p. 117; Garrett, 1960). These usages serve distinct purposes. An initial ISRT score can possibly be predictive of success in a course even though little difference would be reflected between pretest and posttest scores. Among the reasons for such a discrepancy are, as Farr (1969) and Alexander (1977) outlined, the degree to which the test corresponds with course objectives and also the length of time which elapses between measurements. The student who experiences a great deal of success in a college reading program which lasts for seven weeks may not find success is reflected in a posttest measured by standardized procedures because of a "time-lapse," the time necessary for improvement to show on a standardized measure. Seven weeks could be too short a period of time. Research is needed in this area. Instructors often make such observations regarding a student's "actual" progress vs. "measured" progress. Kingston (1965) expanded upon this point. Research should explain why this is so. Until such data is available, the question in this investigation is not whether ISRT accurately reflects changes in reading behavior over the course of a college reading improvement program, but whether initial ISRT scores can be used to predict success according to criteria commensurate with the objectives around which that course is structured.

## LOCUS OF CONTROL

Anderson (1975) was earlier quoted as advocating that affective variables be given more attention as predictors of success in the college reading program (see p. 18). He is further quoted thusly:

Though the evidence from which to draw such conclusions is yet rather meager, that which is available would seem to suggest that measures of the affective quality . . . may well be more appropriate than strictly cognitive concerns (p. 197).

Tillman, Millott, and Larsen (1974) noted the dearth of research focusing upon the relationship between personality and reading ability "especially as they vary within normal limits" among adolescent and young adult age levels (p. 125).

Volumes of research have grown out of the initial efforts to develop an I-E Scale, a measure of personality. The first published review of research on locus of control was jointly authored by Rotter, Seeman, and Liverant in the early sixties (Rotter, Seeman, & Liverant, 1962). Other extensive reviews subsequently appeared (Joe, 1971; Lefcourt, 1966b, 1972, 1976; Phares, 1976; Rotter, 1966), reflecting the burgeoning of investigations taking place. Throop and MacDonald (1971) in an annotated bibliography listed eleven tests, 169 published, and 170 unpublished articles pertinent to locus of control.

The research of Lefcourt (1976) showed that topics of central concern to investigators have been the resistance



to influence, cognitive activity, achievement-related behavior, fatalism and psychopathology, social antecedents of locus of control, changes in the locus of control, and the assessment of locus of control. Relevant to this study was the research focusing upon achievement and locus of control. Reading achievement is considered a smaller portion of research relating to achievement behavior.

#### Reading Achievement and Personality

Personality was defined by Shaffer (1936) as the individual's persistent tendencies to make certain kinds and qualities of adjustment. Physique, intellect, motives, experiences, and habits, he continued, all contribute to personality and not as separate entities but as an organized system.

Among the early concerns of the initiators of college reading programs was that personality be assessed in addition to academic achievement (Dumler, 1958; Joseph & McDonald, 1964; McDonald, 1960; McDonald, Edwin, Zolik, & Byrne, 1959; Smith, Wood, & Carrigan, 1957). Berg (1960b) eloquently stated the interrelationship between personality and achievement:

Motivations are internal springs to action, promoted by needs, emotions and organic states which lead to goal-seeking behavior. Why a person chooses a particular incentive to help him attain his goal is, of course, based on many reasons--cultural, social, emotional and peer-group aspirations, to name only a few. With a constant incentive or stimulus, the response or choice

will vary according to the motivation or state of the student (p. 113). . . . Reading must be seen as contributing to a person's basic felt needs or he will not select it as meaningful to goal attainment (p. 120).

Each review of literature on college and adult reading programs presented by the Southwest, and later the National, Reading Conference detailed factors influencing skills and study habits (Bliesmer & Kingston, 1961; Bliesmer & Staiger, 1962; Causey, 1956, 1957b, 1958; Causey & Bliesmer, 1960; Causey & Eller, 1959; Greene, 1972, Vol. I & Vol. 2; McNinch & Miller, 1975; Miller & McNinch, 1976; Nacke, 1973, 1974; Schick & May, 1966, 1967, 1968, 1969, 1970, Vol 1, & 1971, Vol. 2; Staiger & Melton, 1963; Thurston & Hafner, 1964, 1965). Personality factors were always included in these reviews.

Reviewing research pertinent to personality factors and college reading over the previous 20-year period, Ketcham (1965) summed that a definite weakness exists in the quality of research. She reported a "feeling of bewilderment" at studies which are poorly designed, lacking in lucidity of the report, in need of replication, and antithetical to others of similar design (p. 54). She called for (1) a good study to be designed and replicated in many different types of colleges and in various areas, and (2) a more clear-cut picture of the relationship between personality and college reading ability (p. 57).

### A Measure of Personality

Rotter (1971) posited that the locus of control construct is a personality trait and, as such, tends to be stable. Its stability enhances its generalizability over various situations. The locus of control construct, first presented by Julian B. Rotter (1954) is an integral part of his social learning theory. Describing a most important assumption of social learning theory, Phares (1967) stated:

There is unity to personality. Individuals' experiences--their interactions with their meaningful environment--though varied, are interrelated. The common thread is their personality with all its stable aspects. New experiences become tinged by the effects of accumulated knowledge from previous experiences. Therefore, though change is still possible through proper selection of new learning experiences, it is fair to say that as individuals grow older their behavior and personality take on increasing consistency (p. 11).

Social learning theory is one explanation of how an individual makes choices from the large number of possible behaviors available to him (Phares, p. 13). Social learning theory states that in an unfamiliar situation, generalized expectancies would play a major role in determining what the individual expects to occur. Confronted with a situation in which the individual has had some background of experience, specific, rather than generalized, expectancies will be the primary determinants of what the individual expects to occur (Phares, p. 16).

Illustrating this theory, a college student who has never sewn on a sewing machine enrolls in such a course and is asked to state the expectancy for receiving an "A" grade on the first clothing-construction task in the course, a blouse. The tendency would be to relate expectancy to other experiences with sewing on a machine, but this is not possible since there were no other experiences. So, the student bases expectancy upon experiences considered similar to the present situation, e.g., other handiwork performed or other experiences with machines. Should the same question be posed at the end of the sewing course, an answer would be based almost entirely upon the specific experience with clothing construction just encountered and hardly at all upon generalized expectancies.

An understanding of social learning theory provides a general framework for the understanding of the locus of control construct. Locus of control was ideally defined by Rotter as follows:

When a reinforcement is perceived by the subject as following some action of his own but not being entirely contingent upon his action, then, in our culture, it is typically perceived as the result of luck, chance, fate, as under the control of powerful others, or as unpredictable because of the great complexity of the forces surrounding him . . . we have labeled this a belief in external control. If the person perceives that the event is contingent upon his own behavior or his own relatively permanent characteristics, we have termed this a belief in internal control (Rotter, 1966, p. 1).

The term "locus of control" refers to belief by the individual that reinforcement is either internally or externally controlled, "locus," then, meaning place (or seat) of control--either internal or external. Few individuals exist as total believers in internal or external control of reinforcement. Phares (1976, p. 23) stated:

Extremely internal individuals might be so overcome with a sense of personal responsibility over every little failure of their own or others that they would be inundated with anxiety-depressive reactions. Extreme externals might completely lose any initiative and become near vegetables because of total inability to see how they could exert any environmental effects.

Phares further suggested that both very external and very internal subjects (referring to their belief in control) might be maladjusted, that rather than a linear relationship between locus of control and adjustment, i.e., the more internal or external, the more adjusted, there probably exists a relationship in which the best adjusted persons fall in the middle rather than at either extreme. Phares summed the case well when he stated, ". . . no matter how 'external' individuals may be, they still flip the light switch when they want more light" (Phares, p. 23). Rotter (1966, p. 16) indicated that while good adjustment might be expected from high internality scores, in our society, high external scores probably indicate significant maladjustment, reflected in failure to act at all when confronted with difficulties.

Lefcourt (1966a) distinguished between the two major research approaches to the study of locus of control. One approach focused upon the situation-bound expectancies "which are usually determined by instructions to given tasks" (p. 186). The second approach emphasized generalized expectancies "measured by scales or behaviors related to the control dimension" (p. 186), of which the I-E Scale is one.

#### The I-E Scale

The locus of control construct was first deemed a measurable entity by E. Jerry Phares who devised the first internal-external scale for generalized expectancies (Lefcourt, 1976, p. 34). James subsequently revised the Phares Scale, expanding it from thirteen to twenty-six items, but retaining those items which appeared from Phares' study to be most useful (Lefcourt, 1976, p. 34). These early investigations provided evidence that generalized expectancies were measurable through pencil-and-paper devices (p. 35).

Cautioning against the psychologist's mass consumption of the questionnaire as the tool for the assessment of personality, Cattell, a pioneer in the study of personality, conceded that the questionnaire is probably an integral part of the psychologist's tools. He stated:

One or two reviewers have noted with an ironic chuckle that I began 40 years ago by rejecting the questionnaire as a test form and turning whatever

creativity I possessed to the invention of objective personality tests--that is, to measures of actual behavior. . . . The latter I still regard as the foundation of personality research with which psychologists should be most seriously concerned. But I have had to come to terms with the fact that this generation of psychologists, although moving slowly toward objective tests, is predominantly attached to the convenience of the questionnaire (Cattell, 1973, p. x).

Cattell's lament notwithstanding, as early as 1958 Rotter and his colleagues attempted to construct an I-E that would "capitalize on the functional relationships among various goals or reinforcements" (Phares, 1976, p. 40). Liverant, Rotter, and Seeman developed an I-E Scale of 100 forced-choice items, one item of each pair reflecting an external belief, the other item, an internal belief. Liverant reduced this scale to sixty items by submitting the 100-item scale to an item analysis and a factor analysis. However, this reduced scale proved weak for several reasons. Subscales failed to produce independent predictions; the achievement items correlated too highly with desirability measures; and correlations between subscales were as high as the internal consistency of individual subscales. The decision was made to abandon the subscale approach (p. 41).

Liverant, Rotter, and Crowne undertook to revise and refine the sixty-item scale by eliminating items which correlated highly with the Marlowe-Crowne Social Desirability Scale, items of a pair which were endorsed more than eighty-five percent of the time, items which bore a non-

significant relationship to other items, and items which approached a zero correlation with both validation criteria. Validation criteria were obtained from the Seeman and Evans study (1962) which indicated that among tubercular patients, "internals" tended to make more effort to control their environment than did "externals." In addition, the Rotter, Liverant, and Crowne study (1961), which measured individual differences in trials to extinction, provided the second validation criterion. If an item proved "appropriately predictive" of (1) one's effort to control the hospital environment, and (2) trials to extinction in an experimental task, then the item was retained in the final version of the I-E Scale (Phares, 1976, p. 41).

The final scale, known as the Rotter I-E Scale, contained twenty-three internal-external forced-choice items and six filler items to partially disguise the intent of the test. The items themselves were concerned with belief about the nature of the world rather than preference for internal or external control (Rotter, 1966, p. 10).

#### Reading Achievement and Locus of Control

Within the framework of social learning theory, achievement may be defined in three ways. Achievement behaviors refer to grades in school, studying, etc. Achievement may also be viewed as a need or motivational



variable, i.e., desire to attain excellence, or the need to surpass others. Finally, achievement may be defined as an expectancy--the "probability held by the individual that achievement behaviors will lead to the attainment of an achievement-related goal" (Phares, 1976, pp. 107-108).

Harris (1970) differentiated two manners of increasing reading ability. One way was the controlled approach, with its reliance upon mechanical devices, the other, the motivated approach, relying upon the student's desire to improve reading ability. Considering the locus of control construct, logically, the controlled approach would better suit the externally-controlled personality type who believes reinforcements to be associated with forces outside his own ability to control. On the other hand, the internally-controlled personality would more likely improve under conditions which assume that improvement in reading was a function of motivation and willingness to practice (Brandt, 1975b, p. 377).

Brandt found that "the generalized I-E personality dimension was not a significant variable for predicting the effect of externally and internally oriented reading rate instruction on college students" (Brandt, 1975a, p. 4140). Hypothesizing that (1) there would be a high positive correlation between the I-E personality dimension and improvement in reading rate, without significant change in comprehension for subjects receiving controlled reading

instruction; and (2) there would be a high negative correlation between the I-E personality dimension and improvement in reading rate, without significant change in comprehension for subjects receiving motivated reading instruction, Brandt, in fact, found that the I-E personality dimension correlated with reading-rate improvement and comprehension change in the control group only (Brandt, 1975b, p. 372). Four experimental groups were formed, each of two controlled groups taught by a male and female instructor, and two motivated instruction groups taught by the same male and female instructor. Though all groups improved, only the nontreatment control group showed results consistent with locus of control hypotheses (p. 377). DuCETTE and Wolk expressed the view that the impact of the subject's I-E generalized personality dimension on learning may be progressively lessened as the result of repeated exposure to a learning situation. The control group, being in a situation in which they would develop fewer specific expectancies, is more influenced by generalized expectancies. Hence, significant correlations are manifest in the control group but not in the treatment group whose sensitivities have been lessened as a result of exposure to a specific situation (DuCETTE & Wolk, 1972).

Reimanis (1970), after studying both elementary and college-level students, was impressed that many freshmen in college do not believe in their ability to

effect their own reinforcement. Mathis (1970), using the James I-E Scale, sought evidence to support the hypothesis that the internal-external control concept is an important variable in predicting reading improvement among high-school students.

Vasquez (1973) assessed the relationship of teacher locus of control to teacher characteristics and reading gains in pupils. Though not precisely applicable to this investigation, Vasquez did introduce the interesting concept "counter trend" (p. 102). Vasquez explained that the teacher attributes pupil success to self (internal control) as years of teaching experience increase, yet, at the same time, toward the student (external control) as evidence amasses that no particular methodology, funds, programs, teacher-types, etc., sufficiently account for student achievement. Partly because of the effect of the counter trend, Vasquez found no correlation between years of teaching experience and internal-external locus of control (p. 102). Vasquez had devised his own measures of internal-external locus of control geared specifically to teachers of reading.

Results achieved by Drummond, Smith, and Pinette (1975) with an individualized instructional program in reading indicated that the externally-oriented students attained more. Several explanations could have related to these findings. Internals, believing in their own power

to control outcomes, may have been less conscientious about carrying out the assignments than were externals. Rotter (1966) found internals not always willing to seek achievement overtly. Male college students (the subjects of the Drummond, Smith, & Pinette study), Rotter hypothesized, present an external outlook as a defense against failure. Though internally competitive and striving, they exhibit external attitudes as an outer front. Externals, in addition, might tend to seek reinforcement and support from outside sources, such as the instructor. Internals may have found the reading course, though individualized, too structured and confining for their liking. Wide latitude might be a prerequisite for top performance from the internally-oriented individual (Drummond, Smith, & Pinette, 1975). These investigators also raised the question of whether or not locus of control needs to be considered in the planning of a college reading program. They posited:

A sensitivity to individual differences is an important, if not essential aptitude for reading teachers to possess; however, student differences are not important from an instructional point of view unless the students need to be taught in different ways. Students are growing, changing individuals so there is a real danger in categorizing them on the basis of even the most extensive information. . . . Nevertheless, significant learning often does depend upon modification of educational strategy. Therefore, if the internal-external control of the student contributes to the success or failure of his performance. . . , then decisions about instructional methods and teacher behavior should be made on the basis of this type of information as well as on the basis of scholastic

information. Internal-external information might prevent teachers . . . from concluding that personal barriers beyond the instructor's control cause some students to do poorly (p. 37).

Rotter's I-E Scale is no panacea for easy assessment of the personality trait (locus of control) it purports to measure. Discontent with the instrument is evident in the numbers of investigators who have sought to construct alternative scales for measurement of locus of control in adults since the appearance of Rotter's Scale in 1966 (Adams-Webber, 1969; Dies, 1968; Dissinger, 1968; Gurin, Gurin, Lao, & Beattie, 1969; Jessor, Graves, Hanson, & Jessor, 1968; Lao, 1970; Levenson, 1973; Nowicki & Duke, 1974; Powell & Vega, 1972; Vasquez, 1973).

Several investigators have felt the necessity of developing instruments to assess locus of control in children. The scale most frequently used for this purpose is the Intellectual Achievement Responsibility Scale (Phares, 1976, p. 53). Developed by Crandall, Katkovsky, and Crandall, the scale was specifically designed to measure locus of control in situations of intellectual achievement (Crandall, Katkovsky, & Crandall, 1965).

Nowicki and Strickland (1973) devised the Nowicki-Strickland Scale for Children. It was designed as a generalized expectancy measure of control in children. Among other areas, the scale described reinforcement in the area of achievement. Several additional scales have been developed for use with children of pre-school and school

age (Mischel, Zeiss, & Zeiss, 1974; Stephens & Delys, 1973; Wilson, Duke, & Nowicki, 1972).

Barry Collins (1974), leveling a specific criticism against the Rotter I-E Scale, developed from the 23 original scale items, 46 items which he presented in a Likert-type agree-disagree format. After administering the scale, Collins, upon analyzing his data, discovered four distinct subscales. He concluded that a subject may score external because of belief in a difficult world, a just world, a predictable world, or a politically unresponsive world.

While not claiming perfection for the scale, Phares (1976) pointed out that various methods of factor analysis are often used, thus producing various results as researchers attempt to prove that the Rotter Scale measures other factors in addition to, or instead of, locus of control. Populations used in substantiating or repudiating the scale also present a difficulty. The more homogeneous the population, the less likelihood of variability in I-E scores. For example, college students offer fewer extreme scores than perhaps a less-elite population would (Phares, 1976, p. 123). Homogeneity may be manifest in age, sex, occupation, education level, health status, etc. Phares noted further that some investigators create new or modified scales, which means that they are "no longer dealing with the Rotter I-E Scale" (p. 51). Finally, purpose must be stated, such as the enhancement of predic-

tive value, prior to engaging in factor analysis. Rotter, in defense of his I-E Scale, stated that often distinct aspects of achievement are confounded in other measuring instruments, causing confusion and leading to poor predictive value (Rotter, 1960). Phares cited the tremendous volume of validity data which has amassed over the years since the appearance of Rotter's Scale. Phares implied that this scale has withstood the test of time (p. 51). Anastasi (1976) concurred, stating that the scale has been "carefully constructed and evaluated" (p. 557).

Regarding research on the relationship between locus of control and reading achievement, the results from the few studies reported, all of them in recent years, were quite inconclusive. This is not a criticism; it is only indicative of the fact that far more research needs to be conducted in this specific area before definite trends will become evident. If the Rotter I-E Scale can be used to predict success in college reading improvement programs at UNLV, then screening procedures can be more easily devised.

#### CLASS ATTENDANCE

No research was evident related to class attendance and success in a college reading program. Though Huslin (1975) indicated in his survey of college and developmental reading programs that attendance is one of the criteria by which students are evaluated, research did not justify

attendance as a consideration in student evaluation of performance. Though it may be generally assumed that consistent attendance is a requisite for success, no relationship was supported by research in this area.

#### AGE AND SUCCESS

Little research has been forthcoming pertinent to age as a significant factor to success in a college reading program. This is probably due to the fact that most college reading programs are geared to and serve freshmen students who are generally assumed to be within the same age group. However, research already cited (e.g., Bliesmer, 1960; Patterson, 1957) demonstrated that many reading courses are designed for adults who are past college age. Pauk (1957) detailing the structure of the program at Cornell University, indicated that the Fall program admitted freshmen only. However, the Spring program included all, whether freshmen, graduates, or faculty. The National Reading Conference, though initially focusing upon college programs (Causey, 1956; Bliesmer, 1956), broadened and maintained the spectrum of including adult reading programs both in its conference themes and annual reviews of literature (e.g., Bliesmer, 1958, 1959; 1960; Bliesmer & Kingston, 1961; Bliesmer & Lowe, 1961; Causey, 1957b, 1958).

Kasdon (1955) found age to be significant, younger



college students being the better readers, as did Newton (1959) in her study of differences between adequate and retarded college readers. However, Carter and McGinnis (1952), in investigating "factors which differentiate college freshmen having lowest and highest point-hour ratios" (p. 219), found that age was not at all insignificant. Neville (1961), comparing successful and non-successful readers, concluded that age was a weak discriminator between good and poor readers.

Though few and far between, the studies which did recognize age as a factor worthy of study as it relates to performance leaves the researcher with conclusions which are far from decisive.

#### SEX AND SUCCESS

Sex, being more readily established than age among college students, has, hence, been investigated more often than has age. However, conclusions were just as indecisive as with investigations of the significance of age.

Carter and McGinnis (1952), in the study earlier cited, found sex significantly related to success, with men being the poorer readers. On the other hand, Neville (1961) and Newton (1959) found no significant relationship between sex and success.

In an attempt to determine a superior method of accelerating reading rate without the use of mechanical

aids and to determine personality factors which might serve as predictors of success in reading rate course work, Mattern (1972) concluded that greater gains were achieved in structured classes and that male students benefited more from instruction than did female students.

Brandt (1975a), though concerned with instructional method, did observe sex of the instructor and results obtained. He suggested at the conclusion of his study that sex of the instructor is possibly a significant factor. Vasquez (1973), focusing upon the instructor rather than the student, suggested further research in the area of teacher characteristics such as age, sex, ethnicity, and number of years in the teaching profession in relation to locus of control.

#### SUMMARY

Chapter 2 summarized literature pertinent to college reading programs, the Iowa Silent Reading Tests, locus of control, class attendance, age, and sex. College reading programs were reviewed in terms of their current status, descriptions, and characteristics of successful programs. Traditional uses of the ISRT were enumerated. It was noted that the tests have been used to establish entry level, as measures of progress, and as predictive measures within the framework of college and adult educational programs. In relation to ISRT, problems encountered in the

use of standardized tests in college reading programs were discussed.

Development of the locus of control construct was traced from its development as a part of social learning theory to the current use of the many scales for measurement of the trait. The discussion explored locus of control as a measure of personality and included research published in the area of college reading achievement and personality. The Rotter I-E Scale was identified as the most widely-accepted tool for the assessment of locus of control in college and adult populations. It was noted that recently-reported research has focused on reading behavior and locus of control using the Rotter I-E Scale or similar measures and that no definite relationships between reading behavior and locus of control have been established.

No literature was found which investigated the importance of class attendance in a college reading improvement program. Research cited regarding age and sex as variables in college reading programs was inconclusive. From this review of the literature, it, then, can be concluded that Iowa Silent Reading Tests as predictive measures, locus of control as a personality trait, class attendance, age, and sex seem to be variables worthy of more research as they relate to success in a college reading improvement program.

## Chapter 3

### METHODS AND PROCEDURES

This chapter contains a detailed description of the college reading improvement program at UNLV. Sample population for the study is discussed, and methods of data collection and procedures for data analysis are described.

### DESCRIPTION OF COURSE

The college reading improvement class at UNLV was a seven-week course which met twice weekly for two hours each class meeting. The sessions met fourteen times between Tuesday, February 8, and Thursday, March 24, 1977. All three sections, serving a maximum of 75 students, were involved in the study. Of these 75 students, 63 participated in the study. Classes were held in the College Reading Lab of the Reading Center and Clinic in the Teacher Education Building. This room was used solely for the college reading improvement program.

The course, known on the campus as Speed Reading and Study Skills, was taught by two female graduate assistants, one assistant teaching one class, and the other teaching two. Enrollment was on a voluntary first-

come, first-served basis. Fee assessment for the noncredit course was \$25, covering the cost of all books and materials consumed by the student.

### An Overview

Format for the course was contained in a manual entitled "Handbook for the College Reading Program," available through the UNLV Reading Center and Clinic. The handbook stated that the course was designed for the student with adequate word-attack skills who wished to improve speed and comprehension, develop vocabulary, learn effective study habits, and improve test-taking abilities.

The Iowa Silent Reading Tests (ISRT) which had norms for 13th grade, Level 3, Form F, was administered during the first class meeting in order to identify the student whose reading ability was below average. This determination was made through use of the Reading Efficiency Index Chart which was a part of ISRT. Special consideration and attention in the form of speed and accuracy drills was given to the student who scored in the lower ranges of speed and accuracy.

During the first three sessions of the class, the reading process was explained and reading techniques were practiced with a series of warm-up drills and timed speed-reading exercises. Comprehension was developed through the survey and prediction techniques. Each student developed a vocabulary card file which was turned in to

the instructor on Tuesdays and returned to the student on Thursdays. Study skills, which the student was expected to practice outside of class, were introduced. The student was evaluated by the instructor on a weekly basis by means of a Student Activity Analysis Sheet which was kept in the Lab in the student's folder.

Intensive practice with timed speed-reading drills and comprehension improvement exercises formed the core of the program. The student who conscientiously participated in the course activities as described below was expected to double beginning reading rate by the end of the seven-week period.

### Materials

Speed Development. Reading Skills by William D. Baker (1967) was the basic text. The soft-back book contained twenty-four relatively easy selections of approximately 1,000 words each. The student was timed daily on the Baker selections. These selections, offering information on how to increase reading efficiency, provided the opportunity to gain confidence and speed. Comprehension was expected to be maintained between seventy to ninety percent. Once speed and comprehension improved and leveled off, more difficult passages were introduced.

Toward Better Reading Skill by Russell G. Cosper and E. Glenn Griffin (1967) was designed for college students. The selections were more difficult and were

intended for use after a plateau had been reached in the Baker material. Selections varied in length between 1,000 and 2,000 words. Comprehension had to be maintained between seventy to ninety percent in the Cosper material, also.

Reading Drills for Speed and Comprehension by Edward B. Fry (1975) was intended for the slower reader who had leveled off in the Baker material but would have difficulty maintaining the immediate and sustained concentration and speed required by the Cosper selections.

Comprehension. Reading for Understanding, General, by SRA (Thurstone, 1969) was a kit containing 400 reading comprehension exercises ranging in difficulty from third grade through college level. The paragraphs emphasized reasoning, inference, interpretation and meaning. The student was encouraged to read at least three complete cards, containing ten paragraphs and questions, during each class meeting. The student was instructed to place a cover over the material as it was read, forcing retention of the main idea without returning to the paragraph just completed. The student began with three level-one cards but skipped ten levels if all the comprehension questions were answered correctly.

Survey-Predict-Decide, a comprehension technique known as SPD, was developed by Edwards and Silvaroli (1967). The technique gave practice to the student in thinking--

prior, during and after a selection had been read. The student was taught to survey, or scan, material prior to reading it. The survey included the title, first and last paragraphs, charts, italicized words, pictures, headings, etc. The student then used a worksheet to rapidly list four predictions regarding the article surveyed. After reading the article as quickly as possible, the student decided if predictions were accurate by recording comments upon each prediction made. When the technique had been grasped, the student was introduced to the SRA 3A kit (Parker, 1973) for easy practice of the technique. The student was expected to complete three SPD exercises during each session. When practice became habit, speed and comprehension increased.

A sample schedule, which the instructor posted on the board, including number and time, was

Baker (number listed)  
RFU--3 cards  
SPD--3 cards  
Next timing (time listed)

(for complete plans, see Appendix A). Such a schedule alerted the student to complete the RFU and SPD exercises as quickly as possible.

Vocabulary Development. The Card File encouraged the student to extend vocabulary through reading and recording of unfamiliar, frequently-occurring words and their meanings. Students were expected to hand in seven



cards weekly. Extensive vocabulary development was continuously stressed by the instructor as a life-long process which led to a faster rate and greater comprehension.

CRP (College Reading Program) handouts contained vocabulary activities such as word meanings, prefixes, context clues, and perception exercises, and were assigned at the rate of one or more each week, at the discretion of the instructor. Warm-up exercises were a part of these activities.

Study Skills. Lectures and class discussions were held on study skills such as outlining, marginal notes, note-taking and test-taking. Students were encouraged to practice techniques outside of class.

### Timing

A large clock was used to indicate elapsed time in five-second intervals. Timings were conducted on the Baker, Cosper and Fry selections. The student read the passage and recorded completion time on an individual Reading Progress Chart. Comprehension questions were answered and scored and the word-per-minute rate was determined by using conversion charts. Each timing yielded two reading rates: a word-per-minute rate and an effective reading rate—a product of the wpm rate and comprehension percentage. Generally, two timings were

accomplished during each class session.

### Progress Analysis

Instructors reviewed the progress of each student on a weekly basis through use of the Student Activity Analysis Sheet. Speed, comprehension and vocabulary exercises were checked for accuracy and completeness. Comments were made by the instructor on each area. These comments were reinforcing, but candid, pointing out the student's strengths and weaknesses. The instructors maintained positive, motivating and reinforcing classroom atmospheres throughout the duration of the course.

### SAMPLE POPULATION

The sample population was comprised of persons (to be referred to as students) enrolled in the three sections of Speed Reading and Study Skills at the University of Nevada, Las Vegas, during the first Spring Session, 1977. These students were from the university student body and the local community. The only restriction with respect to enrollment was that the student be a high school senior. Enrollment was restricted to twenty-five students per section. The sixty-three participants in the study ranged in age from seventeen to sixty-one years. Though seventy-five were enrolled in the course, four failed to sign the information release forms, three failed to take the ISRT, and two enrolled late and failed to

take the I-E Scale, and four dropped the course in the first week. Females numbered thirty, and males numbered thirty-three.

#### METHODS

Permission to use data collected on the ISRT, Rotter I-E Scale, class attendance, age, and sex was requested of each student during the first class session. Those who complied signed information-release forms (Appendix B) and filled in pertinent data on their Rotter I-E Scale answer sheets. These sheets became the forms for recording of data to be analyzed following the termination of the course (see Appendix C for data portion of sheet).

The ISRT and I-E Scale were administered during the first class meeting. After scoring the ISRT, the instructors entered vocabulary, comprehension, reading power and reading efficiency information on the data sheets. Raw scores, stanines, percentiles, and standard scores were recorded. Standard scores were then rank-ordered and coded on the data sheets. Tie conditions were given the mean ranking for the position numbers involved. I-E Scales were electronically scored by Scantron. Two scores were recorded on the data sheets--an internal score and an external score. One score was complementary of the other. Scores were rank-ordered and coded on the basis of internal control responses. Tie conditions

were treated in the same manner as ISRT ties. Names were letter-coded to protect anonymity. Age was rank-ordered and coded. Information on class attendance was secured from the instructors following the final class meeting, rank-ordered, and coded on the data sheets. Ties were handled in the manner specified above.

### Success

Success was objectively defined by the investigator. The definition was accepted and supported by Reading Center and Clinic personnel at UNLV. Success, it was agreed, would be determined by two criteria: (1) the number of times a student doubled the first timed reading (e.g., doubled normal speed); and (2) the number of times normal speed was increased by 100, 200, 300, 400, etc., words per minute.

Criterion One. Each time normal speed was at least doubled a point value was recorded which value was increased with each successive occurrence of a doubling of speed. The increased value for each successive occurrence was considered a correction for chance success, i.e., the more often the student doubled normal speed, the more habitual the practice was becoming (see Appendix D for Criterion One Scoring Matrix). Doubling of speed was discounted unless the student's comprehension rate was maintained between seventy and ninety percent. A lower rate was indicative of

lack of comprehension, a higher rate indicative of failure to reach equilibrium between speed and comprehension.

Criterion Two. Each time the student reached increments of 100-word intervals above normal speed a point value was recorded in order to recognize success that was reflected in steady gains and not only in a doubling of speed. Each occurrence received a greater point value than the previous occurrence or the previous interval (see Appendix E for Criterion Two Scoring Matrix). Again, comprehension had to be maintained between seventy and ninety percent.

During the course, students were unaware of the specific definition of success. After the course, using Criteria Matrixes, success data was recorded for each student. Success was then rank-ordered and coded on the data sheets. Ties were handled as specified for ISRT, locus of control, and attendance.

#### PROCEDURES

A computer program was developed for correlation of rank-ordered data. Vocabulary, comprehension, reading power, and reading efficiency from ISRT, locus of control, class attendance and age were correlated with success by the Spearman Rank-Order Correlation ( $\rho$ ). The formula for describing computational procedures was corrected for the conditions (Gibbons, 1976, p. 279).

Correlation between sex and success was computed by the point-biserial correlation procedures which determined the relationship between one dichotomous variable (sex) and one continuous variable (success). Success rank was used rather than success score (Gibbons, 1976, pp. 340-341).

Significance of obtained correlations was determined through application of the critical-ratio  $z$ -test which is used for rank-order correlations where  $N$  is 30 or larger (Bruning & Kintz, 1968).

#### SUMMARY

Chapter 3 detailed the college reading improvement program at UNLV including a description of methods and materials. Sample population was described as were methods of data collection and procedures for analysis of data.

A new technique for determination of success in the program was explicitly detailed. The technique involved the use of two Criteria Matrixes for arrival at a success score which was subsequently ranked. Procedures for data analysis were described which involved the use of a computer program for correlation of each variable (excluding sex) with success. A second technique was described for correlation of sex and success.

## Chapter 4

### ANALYSIS OF THE DATA

Chapter 4 contains a report of the results yielded when each of several selected variables--vocabulary, reading comprehension, reading power, and reading efficiency as measured by the Iowa Silent Reading Tests (ISRT), locus of control as measured by the Rotter I-E Scale, class attendance, age, and sex--was correlated with success through procedures described in Chapter 3. Specific, rather than general, P-values are stated. These P-values were obtained from Minium (1970).

### HYPOTHESES

#### Hypothesis One

There was no significant relationship between vocabulary as measured by ISRT and success in the college reading improvement class at UNLV. Correlating rank-ordered vocabulary and success (see Appendix F, columns three and one, respectively), an association of  $+0.187$  was obtained. Applying the critical-ratio  $z$ -test, a  $z$  of  $+1.47$  was calculated. Using a two-tailed test, the calculated  $z$  yielded a P-value of  $.142$ , a value too great

to be considered of significance. The null hypothesis was accepted, therefore.

#### Hypothesis Two

There was a significant relationship between comprehension as measured by ISRT and success in the college reading class at UNLV. Correlation of comprehension (Appendix F, column 4) and success (column 1) yielded an association of  $+0.295$ . Applying the critical-ratio  $z$  test, a  $z$  of  $+2.32$  was calculated. The P-value of this  $z$ , using a two-tailed test, was determined to be  $.020$  a statistically significant level. The null hypothesis was not accepted.

#### Hypothesis Three

There was a significant relationship between reading power as measured by ISRT and success in the college reading improvement class at UNLV. The rank-ordered correlations of reading power and success (Appendix F, columns 5 and 1) yielded an association of  $+0.316$ . The critical-ratio  $z$ -test supplied a  $z$  of  $+2.49$ , significant at a P-value of  $.013$  using a two-tailed test. The null hypothesis was not accepted.

#### Hypothesis Four

There was no significant relationship between reading efficiency as measured by ISRT and success in the college reading class at UNLV. Correlation of reading



efficiency and success (Appendix F, columns 6 and 1) yielded an association of  $+0.181$ . The critical-ratio  $z$ -test produced a  $z$  of  $+1.42$  which yielded a P-value of  $.156$  using a two-tailed test. This level was too high to be considered significant. The null hypothesis was accepted.

#### Hypothesis Five

There was a significant relationship between internal control as measured by the Rotter I-E Scale and success in the college reading class at UNLV. Correlating internal control with success (Appendix F, columns 7 and 1), an association of  $-0.838$  was obtained. Applying the critical-ratio  $z$ -test, a  $z$  of  $-6.60$  was calculated which was significant beyond the level of  $.0002$  using a two-tailed test. The null hypothesis was rejected.

#### Hypothesis Six

There was a significant relationship between class attendance and success in the college reading class at UNLV. Correlating class attendance with success (Appendix F, columns 8 and 1), an association of  $+0.262$  was obtained. The critical-ratio  $z$ -test yielded a  $z$  of  $+2.06$ . Using a two-tailed test, the correlation was determined to be significant at a level of  $.039$ . The null hypothesis was not accepted.

### Hypothesis Seven

There was no significant relationship between age and success in the college reading class at UNLV. A correlation of age and success (Appendix F, columns 9 and 1) yielded an association of  $+0.066$ . Applying the critical-ratio  $z$ -test, a  $z$  of  $+0.52$  was obtained. The P-value of a  $z$  of  $+0.52$  was calculated to be  $.603$ , using a two-tailed test, too great to be statistically significant. The null hypothesis was accepted.

### Hypothesis Eight

There was no significant relationship between sex and success in the college reading improvement class at UNLV. A correlation of sex and success (Appendix F, columns 10 and 1) yielded an association of  $+0.056$ . The critical-ratio  $z$ -test produced a  $z$  of  $+0.441$ . Using a two-tailed test, the P-value of the correlation was determined to be  $.660$ . The null hypothesis was accepted.

## SUMMARY

Chapter 4 contained a report of results obtained when the selected variables--vocabulary, comprehension, reading power, reading efficiency, locus of control, class attendance, age, and sex--were separately correlated with success in the college reading improvement class at UNLV during the First Spring Session, 1977. Results were

reported in terms of the hypotheses stated in Chapter 1. Hypotheses One, Four, Seven and Eight, correlating vocabulary and reading efficiency as measured by ISRT, age and sex with success were accepted. There was no significant relationship. Hypotheses Two, Three and Six, correlating reading comprehension and reading power as measured by ISRT, and class attendance were not accepted as positive and significant relationships were found. Hypothesis Five was rejected as a highly significant, though negative, relationship was discovered between internal locus of control as measured by the Rotter I-E Scale and success in the college reading improvement class at UNLV.

## Chapter 5

### DISCUSSION AND CONCLUSIONS

Chapter 5 contains a discussion of the results reported in Chapter 4, a summary of the investigation, and conclusions and recommendations.

#### DISCUSSION OF SELECTED VARIABLES

##### Vocabulary

The Vocabulary subtest of the Iowa Silent Reading Tests surveyed the student's "depth, breadth and precision of word knowledge" (Farr, 1973, p. 8). The test contained fifty items with easy items being interspersed throughout. There was a fifteen-minute time limit on the test. For the sixty-three students who participated in the study, there was a range in scores from 13/50 to 50/50 correct items. The finding that there was no significant relationship between vocabulary and success tended to lend support to Pauk's hypothesis that the vocabulary portion of the standardized test may be somewhat nonfunctional (see p. 23 of this study).

### Reading Comprehension

The Reading Comprehension subtest of the ISRT contained fifty items and tested comprehension of passages read. It also tested the ability to interpret different points of view (Farr, 1973). There was a thirty-seven minute time limit on this portion of the test. The range of scores was from 18/50 to 45/50 correct. While there was a positive and significant correlation between comprehension and success in the reading program, the correlation was probably not high enough to consider comprehension as measured by ISRT a powerful discriminator.

### Reading Power

Reading power was not a separate test in the ISRT battery. It represented a combined measure of Vocabulary and Reading Comprehension scores. Reading power scores ranged from the second to the ninth stanine. Though this was the subtest of the ISRT which was most highly correlated with success in the reading improvement program at UNLV, the strength of the correlation would not warrant consideration of total dependence upon the test as a determiner of success.

### Reading Efficiency

Reading Efficiency was a speeded test forming the final section of the ISRT battery. Students were not informed of the time-limit but were urged to complete the

forty items as quickly as possible. Students' scores ranged from thirteen attempts with eight correct answers to thirty-nine attempts with thirty-nine correct answers. Considering the structure of the reading improvement class at UNLV, it would seem that this test might have correlated most significantly with success as it measured speed and comprehension. However, results showed no significant relationship.

#### Locus of Control

The Rotter I-E Scale (Appendix G) was analyzed along the internal control continuum only, the higher score indicating a greater belief in internal (or self) control of reinforcement, the lower score indicating a greater belief in external control. The high negative correlation obtained might initially tend to support the finding of Smith, Drummond, and Pinette (1975) that externals achieve more in a college reading program. However, in order to view the findings of the present investigation in context, it must be noted that internal control scores ranged from a high of twenty-two to a low of six. Phares (1976) and Rotter (1966) indicated that extreme scores at either end of the continuum might suggest maladjustment, that the best-adjusted persons are probably somewhere in the middle. The sample under investigation produced no extremely low internal scores, hence no extreme beliefs in external control. The high negative

correlation between locus of control and success, then, would seem to suggest that success was related to the less-extreme lower internal scores which for the sample population would have been the scores that were practically a balance between belief in internal and external locus of control. The high correlation found between the two variables, locus of control and success, would certainly warrant further investigation into belief in internal-external control of reinforcement.

#### Class Attendance

The positive and significant correlation obtained between class attendance and success might be partially explained by the fact that success was defined in such a way that attendance was necessary in order to obtain points for timed readings (see Chapter 3, p. 56, of this study). Further research is needed in this area using varied lengths of course durations.

#### Age

The students in this investigation ranged in age from seventeen to sixty-one years. The Mean age was 26.5 years; the Median age was 22.5 years. Results obtained in this study supported the findings of Carter and McGinnis (1952) and Neville (1961) who found age to be of little import in college reading success.

Sex

Thirty-three males and thirty females participated in this study with equal success. There was no significant difference in their achievements. Newton (1959) and Neville (1961) obtained similar results.

## SUMMARY

The purpose of this investigation was to determine the relationships of several selected variables--vocabulary, reading comprehension, reading power, and reading efficiency as measured by ISRT, locus of control as measured by Rotter's I-E Scale, class attendance, age, and sex--to success as defined in UNLV's Reading Center and Clinic. Rationale for the study and significance of the study were explained. Eight null hypotheses were stated around which the investigation centered.

The review of literature contained research available on college reading programs and the variables selected for study. The college reading improvement program at UNLV was explicitly described, and procedures for measurement of the variables were delineated. An analysis of data collected led to acceptance of the null hypotheses which stated that no relationship existed between vocabulary and reading efficiency as measured by ISRT, age, and sex, and success in the reading improvement class at UNLV. The null hypotheses which suggested that no relationship existed



between reading comprehension and reading power as measured by ISRT, class attendance, and success were not accepted when a positive and significant relationship was found. The hypothesis which stated no significant relationship existed between locus of control as measured by Rotter's I-E Scale and success was rejected when a negative and highly significant relationship was found. Findings were interpreted within the framework in which they were gathered and related to similar results obtained in other studies.

Throughout the investigation reference was made to the concept "success." Often success in college reading programs has been determined by grade-point average. However, such a definition may or may not be contained in the precise objectives of the reading improvement course. Hence, success in the course would be difficult to measure. For the purpose of this investigation a two-faceted definition of success was devised. Commensurate with the objectives of the course, success was determined to be the sum of doubling of speed and steady increments in speed when comprehension was maintained within the instructional level. Quite objectively, a student could be ranked among others on the success variable or rated on success individually. Such a definition of success would be functional in any reading improvement course which had among its objectives "to improve speed and comprehension,"

whether at the adult, college, high-school or elementary levels. Though it was not within the purpose of this investigation, a definite numerical success criterion could be established depending upon objectives, duration and structure of the course under examination.

Prior to this investigation, there was no objective means of determining who might succeed in the reading improvement course at UNLV nor who actually did succeed in the course. This study represented an initial attempt to establish norms for this purpose.

#### CONCLUSIONS

While other unexamined variables may prove to correlate more significantly with success in the future, results of this study indicated that under the conditions described in this study, internal control as measured by Rotter's I-E Scale correlated most highly with success. This correlation was negative. Reading power and reading comprehension as measured by ISRT, and class attendance correlated positively and significantly. Vocabulary and reading efficiency as measured by ISRT, age, and sex bore no significant relationship to success.

This investigator wishes to make the following recommendations as a result of her efforts:

1. A continuous search for variables which might correlate more highly with success as defined in

UNLV's college reading improvement program should be conducted.

2. Research should be conducted which would establish the reliability and validity of the success criteria defined in this study.
3. This investigation should be replicated with other populations for confirmation and expansion of results obtained.

As a result of this investigation, an initial step has been taken to identify variables that could become predictive of success in the college reading program at UNLV should research be continued along these lines. Hopefully, a format will be developed whereby variables will be combined to yield higher correlations among these same variables.

This study, the first of its kind at UNLV, attempted to define more precisely the results obtained in a college reading program for the purpose of developing comprehensive screening procedures in the future.

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## APPENDICES

## Appendix A

## PLANS AND LECTURES FOR SPEED READING AND STUDY SKILLS

University of Nevada, Las Vegas

February, 1977

## Week I Session 1

Give 3 x 5 card to each student: name, phone, occupation, address, age, school

Administer Iowa Silent Reading Tests: 1 hr. 40 min.

Administer Rotter I-E Scale

Lecture on the reading process. Developing Reading Efficiency (Miller, 1972)

## Session 2

Explain folders: timing, charting, and daily schedules

Explain Vocabulary Card File

Describe vocabulary worksheet

Supervise Baker timing (ask for normal reading behavior)  
Using folder material, have students grade, time  
and plot the timing results.

\*Break--10-15 min.

Lecture on Comprehension and use of SPD

## Week II Session 3

Collect 7 Vocabulary cards

Initiate Warm-up...Speed of Perception

Supervise Baker timing - grade and chart

Lecture on Context Clues

Prescribe vocabulary worksheet - context clues

\*Break--10-15 min.

Supervise Warm-up...Speed of Interpretation

Initiate Baker timing - grade and chart

SPD...do together

Demonstrate RFU Kit

#### Session 4

Return Vocabulary Cards

Initiate Warm-up...Speed of Perception

Supervise Baker timing - grade and chart

Lecture on Physical Reading Habits: Developing Reading Efficiency (Miller, 1972). Distribute handouts.

Allow for SPD - SRA Kit

\*Break--10-15 min.

Main idea exercise

Allow for RFU Kit

Initiate Warm-up...Speed of Interpretation

Supervise Baker timing - grade and chart

Engage in evaluation

#### Week III Session 5

Collect Vocabulary Cards (7)

Initiate Warm-up...Speed of Perception (3)

Supervise Baker timing - grade and chart

Lecture on main idea

Distribute main idea worksheet

Allow for SPD - SRA Kit

\*Break--10-15 min.

Allow for RFU Kit

Distribute vocabulary worksheet - Context Clues

Initiate Warm-up...Speed of Interpretation

Supervise Baker timing - grade and chart

#### Session 6

Return Vocabulary Cards

Initiate Warm-up...Speed of Perception (4)

Supervise Baker timing - grade and chart

Lecture on the necessity of shifting speed for material

Allow for SRA - SPD

\*Break--10-15 min.

Allow for RFU Kit

Initiate Warm-up...Speed of Interpretation

Supervise Baker timing - grade and chart

Engage in evaluation

#### Week IV Session 7

Collect Vocabulary Cards (7)

Initiate Warm-up...Speed of Perception (5)

Supervise Baker timing - grade and chart

Distribute vocabulary worksheet

Lecture on fixations--distribute CRP handouts

Allow for SRA - SPD

\*Break--10-15 min.

Discuss Main Idea

Allow for RFU Kit

Initiate Warm-up...Speed of Interpretation

Supervise Baker timing - grade and chart

#### Session 8

Return Vocabulary Cards

Initiate Warm-up..."It's the Difference"

Supervise Baker timing - grade and chart

Lecture on skimming and scanning techniques - distribute handouts

Allow for SRA - SPD

\*Break--10-15 min.

Allow for RFU Kit

Initiate Warm-up...Speed of Interpretation

Supervise Baker timing - grade and chart

Engage in evaluation

#### Week V Session 9

Collect Vocabulary Cards (7)

Initiate Warm-up..."It's the Difference"

Supervise Baker timing - grade and chart

Vocabulary worksheet

Lecture on study skills

Allow for SRA - SPD

\*Break--10-15 min.

Conduct main idea exercise

Initiate Warm-up...Speed of Interpretation

Supervise Baker timing - grade and chart

Allow for RFU Kit

Supervise Baker timing - grade and chart

#### Session 10

Return Vocabulary Cards

Initiate Warm-up..."It's the Difference"

Supervise Baker timing - grade and chart

Lecture on study skills

Allow for SRA - SPD

\*Break--10-15 min.

Initiate Warm-up...Speed of Interpretation

Supervise Baker timing - grade and chart

Allow for RFU Kit

Supervise Baker timing - grade and chart

Engage in evaluation

#### Week VI Session 11

Collect Vocabulary Cards (7)

Initiate Warm-up..."It's the Difference"

Supervise Baker timing - grade and chart

Distribute vocabulary worksheet

Conduct Main Idea exercise

Allow for SRA - SPD

\*Break--10-15 min.

Initiate Warm-up...Speed of Interpretation

Introduce Cosper and Fry timing - grade and chart

Allow for RFU Kit

Supervise Baker timing - grade and chart

## Session 12

Return Vocabulary Cards

Initiate Warm-up..."It's the Difference"

Supervise Baker timing - grade and chart

Allow for SPD - SRA

\*Break--10-15 min.

Initiate Warm-up...Speed of Interpretation

Conduct Cosper or Fry timing - grade and chart

Allow for RFU Kit

Supervise Baker timing - grade and chart

Engage in evaluation

## Week VII Session 13

Collect Vocabulary Cards (7)

Initiate Warm-up..."It's the Difference"

Supervise Baker timing - grade and chart

Engage in vocabulary review, if necessary

Use Main Idea exercise

Allow for SPD - SRA

\*Break--10-15 min.

Initiate Warm-up...Speed of Interpretation

Supervise Cosper or Fry timing - grade and chart

Allow for RFU Kit

Supervise Baker timing - grade and chart

## Session 14

Return Vocabulary Cards



Initiate Warm-up..."It's the Difference"

Supervise Baker timing - grade and chart

Allow for SPD - SRA

\*Break--10-15 min.

Initiate Warm-up...Speed of Interpretation

Supervise Cosper timing - grade and chart

Allow for RFU Kit

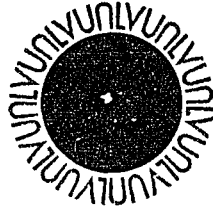
Supervise Baker timing - grade and chart

Pass out class evaluations

Clean out folders and inform of photocopies

\*Note: Instructors may substitute their own warm-up activities at any time.

Appendix B



94

SERVICES:  
READING EDUCATION  
DIAGNOSIS AND REMEDIATION  
RESEARCH  
COLLEGE READING PROGRAM

READING CENTER & CLINIC  
COLLEGE OF EDUCATION  
UNIVERSITY OF NEVADA, LAS VEGAS  
4505 MARYLAND PARKWAY • LAS VEGAS, NEVADA 89154 • (702) 739-3781

February 8, 1977

Dear Student,

In an attempt to better service the entire student body at UNLV, Dr. Baxley has authorized doctoral candidate, Corene F. Casselle, to direct an investigation during the First Spring Session of Speed Reading. The purpose of this investigation is to determine if certain factors are related to success in the course. Dr. Baxley, Mrs. Casselle, and your instructors, Mrs. Hartman and Mrs. Sibb, request your participation in this project.

Data collected on reading efficiency, a personality inventory, age, sex and daily performance will be utilized in determining which factor is most closely related to overall successful performance. Results of this study will be available for you to review upon completion. Your anonymity will be protected.

If you are willing to participate in this study, please so indicate by signing your name at the bottom of this page.

Your cooperation is greatly appreciated.

*Dan M. Baxley*

Dr. Dan M. Baxley  
Director  
Reading Center and Clinic

Thank you,

*Corene F. Casselle*

Corene F. Casselle  
Doctoral Candidate

---

Signature of Consent

## Appendix C

## DATA SHEET

NAME:					2
DATE OF BIRTH:		AGE:			3
SEX:					4
SECTION:		HOUR:			5
OCCUPATION:					6
HOURS TAKING THIS SEMESTER:					7
Enrolled in course to:					8
	RS	ST9	%	SS	
ISRT: Vocabulary					9
ISRT: Reading Comprehension					10
ISRT: Reading Power					11
ISRT: Reading Efficiency					12
I-E Scale: Internal					13
I-E Scale: External					14
ATTENDANCE:					15
SUCCESS:					16
					17
					18
					19
SPEED READING FIRST SPRING SESSION 1977					

## Appendix D

CRITERION ONE SCORING MATRIX  
(for doubling of normal speed)

I Occurrence	II Cumulative Occurrences	III Sum of Cumulative Occurrences/Value
20	210	1540
19	190	1330
18	171	1140
17	153	969
16	136	816
15	120	680
14	105	560
13	91	455
12	78	364
11	66	286
10	55	220
9	45	165
8	36	120
7	28	84
6	21	56
5	15	35
4	10	20
3	6	10
2	3	4
1	1	1

Point value (column III) is equal to the sum of the cumulative occurrences (column II) for each occurrence (column I) inclusive. The first doubling of speed receives a point value of one (1); the fifth occurrence receives a point value of 35--the sum of the cumulative occurrences 1-5. The 20th doubling of speed receives a point value of 1540--the sum of each cumulative occurrence, 1-20 (see Chapter 3, p. 56, of this study).

## Appendix E

CRITERION TWO SCORING MATRIX  
(for 100-word increments)

Words Per Minute Intervals	Point Value											
	1	2	3	4	5	6	7	8	9	10	11	12
100- 199	10	20	30	40	50	60	70	80	90	100	110	120
200- 299	20	30	40	50	60	70	80	90	100	110	120	130
300- 399	30	40	50	60	70	80	90	100	110	120	130	140
400- 499	40	50	60	70	80	90	100	110	120	130	140	150
500- 599	50	60	70	80	90	100	110	120	130	140	150	160
600- 699	60	70	80	90	100	110	120	130	140	150	160	170
700- 799	70	80	90	100	110	120	130	140	150	160	170	180
800- 899	80	90	100	110	120	130	140	150	160	170	180	190
900- 999	90	100	110	120	130	140	150	160	170	180	190	200
1000-1099	100	110	120	130	140	150	160	170	180	190	200	210
1100-1199	110	120	130	140	150	160	170	180	190	200	210	220
1200-1299	120	130	140	150	160	170	180	190	200	210	220	230
1300-1399	130	140	150	160	170	180	190	200	210	220	230	240
1400-1499	140	150	160	170	180	190	200	210	220	230	240	250

Point value is equal to the number of times the student reads within the designated words-per-minute interval. Words per minute are equal to words read after normal speed has been increased by at least 100. If normal speed equals 200 wpm and the student reads within the 300-399 wpm interval five times, a point value of 70 is received. The student whose beginning speed is 250 words per minute must read at least 350 words within that interval before points can be received, e.g., normal speed must be increased by 100 (see Chapter 3, p. 57, of this study).

## Appendix F

## SUCCESS AND SELECTED VARIABLES RANK-ORDERED

Success	Code	Vocabulary	Comprehension	Reading Power	Reading Efficiency	Internal Control	Attendance	Age	Sex
1	BV	4.5	3	2.5	5.5	31.5	14	48	F
2	CO	1	1	1	1	8.5	39	54	F
3	AQ	3	14.5	8.5	22.5	3	14	51	M
4	AD	42	54	48	53.5	8.5	14	35	M
5	CE	11	6	8.5	9.5	47.5	23	18	F
6	BL	6	28	25	9.5	3	23	56	F
7	CN	16.5	3	8.5	53.5	27.5	5	43	M
8	CF	48.5	38.5	44.5	34	47.5	23	1	M
9	CS	11	6	6	11.5	53.5	14	46	F
10	BS	29	24	25	22.5	38.5	5	21	M
11	AI	22.5	9.5	14	17	47.5	23	7	M
12	BQ	40	35.5	35	37.5	8.5	5	5	M
13	CQ	62	57	63	61	60.5	23	34	F
14	BI	59	47	57	27.5	63	23	10	M
15	AF	8	3	5	11.5	22	39	28	M
16	BN	51	35.5	39.5	58.5	27.5	30	47	F
17	AZ	44.5	54	51	34	27.5	5	42	F
18	AN	52.5	51	53.5	17	1	5	36	M
19	AT	16.5	28	18	25	47.5	14	31	M
20	BG	26	35.5	28.5	29.5	8.5	39	45	F
21	CG	32	11.5	22	5.5	38.5	48.5	29	M
22	AS	22.5	19.5	18	43	38.5	5	2	F
23	AB	29	35.5	30	27.5	16.5	30	6	F
24	AU	13.5	6	8.5	3	31.5	48.5	12	F
25	BH	29	19.5	23.5	17	8.5	44.5	33	F

## Appendix F (cont.)

Success	Code	Vocabulary	Comprehension	Reading Power	Reading Efficiency	Internal Control	Attendance	Age	Sex
26	BK	29	28	26.5	25	31.5	5	19	F
27	AW	48.5	38.5	41	25	22	44.5	13	M
28	AL	16.5	6	11	56	16.5	44.5	41	M
29	BR	44.5	43	44.5	52	53.5	30	25	F
30	AY	13.5	32	18	34	22	34	57	M
31	AP	25	19.5	20	20	38.5	23	23	M
32	AX	40	47	41	50	53.5	39	14	M
33	CP	8	11.5	37.5	42	8.5	48.5	58	M
34	BB	2	9.5	4	8	57.5	14	44	M
35	AA	19.5	14.5	16	43	3	14	52	M
36	BC	21	11.5	14	4	47.5	53.5	39	F
37	BJ	60	58.5	61.5	49	38.5	23	4	M
38	AM	37	24	32.5	14	22	53.5	30	M
39	AJ	33.5	19.5	28.5	34	47.5	39	32	M
40	BZ	54	51	55.5	40	57.5	23	38	M
41	CI	11	19.5	14	2	53.5	23	55	M
42	AC	24	28	21.5	14	22	39	49	F
43	BF	57	38.5	51	61	62	61.5	3	F
44	AG	37	32	34	31	57.5	44.5	9	F
45	AO	40	47	43	56	38.5	14	20	F
46	AV	55	58.5	59	58.5	13.5	34	50	M
48.5	CC	4.5	16.5	12	7	8.5	23	53	M
48.5	BU	37	24	32.5	20	47.5	48.5	37	M
48.5	AK	63	43	58	45	60.5	5	22	F
48.5	CD	50	28	36	20	22	39	16	F
51	CH	48.5	43	46	34	16.5	53.5	63	F
52	AH	46	51	48	37.5	22	53.5	40	F

## Appendix F (cont.)

Success	Code	Vocabulary	Comprehension	Reading Power	Reading Efficiency	Internal Control	Attendance	Age	Sex
53	BY	57	43	53.5	46.5	38.5	58.5	8	F
54	CK	8	43	23.5	29.5	8.5	14	59	M
55	CR	52.5	56	55.5	56	31.5	34	17	F
56	BD	45	54	51	40	16.5	53.5	26	F
57	CJ	35	16.5	26.5	14	27.5	61.5	27	M
60.5	BT	33.5	32	31	51	38.5	53.5	11	M
60.5	AR	61	49	59	46.5	38.5	61.5	15	F
60.5	CL	57	61	61.5	40	57.5	58.5	24	M
60.5	CM	19.5	60	37.5	48	13.5	5	60	F
60.5	BW	29	62.5	48	63	38.5	61.5	61	F
60.5	BX	16.5	62.5	39.5	61	47.5	57	62	M



## Appendix G

## THE ROTTER INTERNAL-EXTERNAL CONTROL SCALE

This is a questionnaire to find out the way in which certain important events in our society affect different people. Each item consists of a pair of alternatives lettered a or b. Please select the one statement of each pair (and only one) which you more strongly believe to be the case as far as you're concerned. Be sure to select the one you actually believe to be more true rather than the one you think you should choose or the one you would like to be true. This is a measure of personal belief--obviously there are no right or wrong answers.

Your answers to the items on this inventory are to be recorded on a separate answer sheet which is loosely inserted in the booklet. REMOVE THIS ANSWER SHEET NOW. Print your name and any other information requested by the examiner on the answer sheet, then finish reading these directions. Do not open the booklet until you are told to do so.

Please answer these items carefully, but do not spend too much time on any one item. Be sure to find an answer for every choice. Find the number of the item on the answer sheet and black in the space for the letter a or b which you choose as the statement more true.

In some instances you may discover that you believe both statements or neither one. In such cases, be sure to select the one you more strongly believe to be the case as far as you are concerned. Also try to respond to each item independently when making your choice; do not be influenced by previous choices.

## INTERNAL VS. EXTERNAL CONTROL

- \*1.a. Children get into trouble because their parents punish them too much.
- b. The trouble with most children nowadays is that their parents are too easy with them.
- 2.a. Many of the unhappy things in people's lives are partly due to bad luck.
- b. People's misfortunes result from the mistakes they make.

- 3.a. One of the major reasons why we have wars is because people don't take enough interest in politics.
  - b. There will always be wars, no matter how hard people try to prevent them.
- 4.a. In the long run people get the respect they deserve in this world.
  - b. Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.
- 5.a. The idea that teachers are unfair to students is nonsense.
  - b. Most students don't realize the extent to which their grades are influenced by accidental happenings.
- 6.a. Without the right breaks one cannot be an effective leader.
  - b. Capable people who fail to become leaders have not taken advantage of their opportunities.
- 7.a. No matter how hard you try some people just don't like you.
  - b. People who can't get others to like them don't understand how to get along with others.
- \*8.a. Heredity plays the major role in determining one's personality.
  - b. It is one's experiences in life which determine what one is like.
- 9.a. I have often found that what is going to happen will happen.
  - b. Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.
- 10.a. In the case of the well prepared student there is rarely, if ever, such a thing as an unfair test.
  - b. Many times exam questions tend to be so unrelated to course work that studying is really useless.
- 11.a. Becoming a success is a matter of hard work; luck has little or nothing to do with it.
  - b. Getting a good job depends mainly on being in the right place at the right time.
- 12.a. The average citizen can have an influence in government decisions.
  - b. This world is run by the few people in power, and there is not much the little guy can do about it.

- 13.a. When I make plans, I am almost certain that I can make them work.
  - b. It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.
- \*14.a. There are certain people who are just no good.
  - b. There is some good in everybody.
- 15.a. In my case getting what I want has little or nothing to do with luck.
  - b. Many times we might just as well decide what to do by flipping a coin.
- 16.a. Who gets to be the boss often depends on who was lucky enough to be in the right place first.
  - b. Getting people to do the right thing depends upon ability; luck has little or nothing to do with it.
- 17.a. As far as world affairs are concerned, most of us are the victims of forces we can neither understand, nor control.
  - b. By taking an active part in political and social affairs the people can control world events.
- 18.a. Most people don't realize the extent to which their lives are controlled by accidental happenings.
  - b. There really is no such thing as "luck."
- \*19.a. One should always be willing to admit mistakes.
  - b. It is usually best to cover up one's mistakes.
- 20.a. It is hard to know whether or not a person really likes you.
  - b. How many friends you have depends on how nice a person you are.
- 21.a. In the long run the bad things that happen to us are balanced by the good ones.
  - b. Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.
- 22.a. With enough effort we can wipe out political corruption.
  - b. It is difficult for people to have much control over the things politicians do in office.
- 23.a. Sometimes I can't understand how teachers arrive at the grades they give.
  - b. There is a direct connection between how hard I study and the grades I get.

- \*24.a. A good leader expects people to decide for themselves what they should do.
- b. A good leader makes it clear to everybody what their jobs are.
  
- 25.a. Many times I feel that I have little influence over the things that happen to me.
- b. It is impossible for me to believe that chance or luck plays an important role in my life.
  
- 26.a. People are lonely because they don't try to be friendly.
- b. There's not much use in trying too hard to please people; if they like you, they like you.
  
- \*27.a. There is much emphasis on athletics in high school.
- b. Team sports are an excellent way to build character.
  
- 28.a. What happens to me is my own doing.
- b. Sometimes I feel that I don't have enough control over the direction my life is taking.
  
- 29.a. Most of the time I can't understand why politicians behave the way they do.
- b. In the long run the people are responsible for bad government on a national as well as on a local level.

\*Filler items. Internal score is the number of underlined alternatives chosen.

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## VITA

Corene Flowerette Walker Casselle was born in Chicago, Illinois on January 26, 1943. She attended Chicago Public Schools and was graduated from Parker High School in June, 1960, as the Outstanding Senior. She matriculated at Northern Illinois University, DeKalb, in 1960, receiving her B.S. in Education in June, 1964. There she was an officer of Psi Chi, the Honorary Psychology Fraternity.

After serving for two years as a Peace Corps Volunteer in Brasil, South America, several years were spent as a primary teacher in the Chicago Public School System and as Follow-through Supervisor of a kindergarten program in Washington, D.C. During this time, Corene Casselle attended graduate school at the University of Chicago and served as an Educational Consultant for SRA and the University of Illinois, Champaign, receiving her M.E. from that institution in 1970. After earning her Master's, she returned to the Chicago Public School System as a teacher in the Woodlawn Experimental Schools Project.

Corene Casselle became a teacher with the Clark County School District, Las Vegas, Nevada, in 1973. At

the same time, she enrolled for post-graduate studies at the University of Nevada, Las Vegas. She began doctoral studies at UNLV in June, 1975. She won a national award from the Joint Council on Economic Education for development of an economics comic book, Novo and Sage, for the intermediate grades in 1976. She was awarded a Fellowship through the National Fellowships Fund, Atlanta, Georgia in June, 1976 in order to engage in full-time doctoral studies. She has served as part-time faculty with UNLV.

Corene Casselle is a part-time Educational Consultant for Holt, Rinehart and Winston, a member of the National Society for the Study of Education and the local IRA. She is listed in the 42nd edition of Who's Who Among Students in American Colleges and Universities. Her award-winning economics project is cited in Economic Education Experiences of Enterprising Teachers, 1976. She has one book mentioned in Bowker Books in Print, 1976-- Country of the Black People, the first in a series for children on the history of black people.

## ABSTRACT

### The Relationships of Selected Factors to Success in a College Reading Program

by

Corene Flowerette Walker Casselle

#### Purpose

The purpose of this study was to investigate the relationships of several variables--reading ability (vocabulary, reading comprehension, reading power, and reading efficiency) as measured by the Iowa Silent Reading Tests, locus of control as measured by the Rotter I-E Scale, class attendance, age and sex--to overall success in a college reading improvement program.

#### Subjects

Subjects were students enrolled in three sections of Speed Reading and Study Skills at the University of Nevada, Las Vegas (UNLV), during the First Spring Session, 1977. Sixty-three students participated in the study--thirty-three males and thirty females ranging in age from seventeen to sixty-one years. The class met twice weekly for two hours over a seven-week period.

## Procedures

Hypotheses. Hypotheses stated that there is no significant relationship between each variable--vocabulary, reading comprehension, reading power, reading efficiency, locus of control, class attendance, age and sex--and success as defined for the college reading improvement program at UNLV.

Data Collection and Analysis. Data was rank ordered and number or letter coded as it became available during the seven-week course. Success data was obtained following the final class meeting, success being defined in terms of speed increases and maintenance of adequate comprehension.

A computer program correlated each variable with success. The Spearman Rank-Order Correlation technique was used, corrected for tie conditions. The point-biserial correlation technique was used to determine the relationship between sex and success. A critical-ratio z-test was applied to the correlations obtained to determine their significance. Specific P-values were reported for each correlation.

## Results

Hypotheses associating vocabulary, reading efficiency, age and sex with success were accepted when no significant relationships were found. Hypotheses associating reading comprehension, reading power, and class



attendance with success were not accepted as positive and significant relationships were found. Hypothesis associating locus of control with success was rejected when a highly significant and negative correlation was found. Results were interpreted within the framework in which they were gathered and related to similar finds in other studies.

### Conclusions

The study was summarized, including a review of literature, and recommendations were suggested for further research to determine factors significantly related to success in a college reading improvement program.