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THE UNIVERSITY OF OKLAHOMA
GRADUATE COLLEGE

AN INVESTIGATION INTO THE EFFECTIVENESS OF BIBLIOTHERAPY
ON THE READER'S SELF-RELIANCE

A DISSERTATION
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in partial fulfillment of the requirements for the
degree of
Doctor of Education

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Jacquelyn W. Stephens
Norman, Oklahoma
1974

AN INVESTIGATION INTO THE EFFECTIVENESS OF BIBLIOTHERAPY
ON THE READER'S SELF-RELIANCE

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DEDICATED TO:

JOLLY

A devoted husband, a dear friend, and an unselfish
person. Without his encouragement, wisdom,
financial, and loving support this
study would not have been
possible.

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TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	iv, v
LIST OF TABLES	viii
 CHAPTER	
I. INTRODUCTION	1
Background of the Problem	2
Statement of the Problem	5
Purpose of the Study	5
Theoretical Framework	5
Significance of the Study	8
II. RELATED LITERATURE	12
Definition of Terms Used	17
Statement of Hypotheses	18
Independent and Dependent Variables	18
III. METHODOLOGY	19
The Selection of the Subjects	20
Procedure for Collecting the Data	22
Instruments	24
Treatment of the Data	27
IV. RESULTS	28
V. SUMMARY, CONCLUSIONS AND DISCUSSIONS, AND RECOMMENDATIONS	38
Summary	39
Conclusions and Discussions	40
Recommendations	43

SELECTED BIBLIOGRAPHY	44
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APPENDICES

APPENDIX A - CARD FORMAT: RAW DATA	48
APPENDIX B - PRE-TEACHER RATING SCALE	50
APPENDIX C - POST-TEACHER RATING SCALE	52
APPENDIX D - READING GRADE PLACEMENT ANALYSIS .	54
APPENDIX E - I.Q. SCORES ANALYSIS	56
APPENDIX F - UNIVARIATE TEST ANALYSES	58
APPENDIX G - LITERATURE PREFERENCE ANALYSIS . .	63

LIST OF TABLES

	Page
1. Mean Gains of <u>The California Test of Personality</u>	33
2. Mean Gains of <u>The Teacher Rating Scale</u> . .	34
3,4,5. Summary Tables of Multivariate Analysis of Covariance	35,36,36
6,7. Summary Tables of Analysis of Covariance Adjusted Scores	59,60
8,9. Summary Tables of Analysis of Variance . .	61,62
10. Card Format for Recording Raw Data	49
11. Analysis of Variance for a One-Way Design of Reading Grade Placement.	55
12. Analysis of Variance for a One-Way Design of I.Q. Scores	57
13. Chi-Square Test of Literature Preference .	64

CHAPTER I

INTRODUCTION

Background of the Problem

The fourth "R" in reading is reading for guidance, known as bibliotherapy. Divergent attitudes exist toward the meaning and use of bibliotherapy. According to the literature, bibliotherapy has been used almost exclusively in a clinical setting. Tews directed a survey to determine the current thinking of a selected group of individuals who were actively engaged and interested in bibliotherapy and who possessed knowledge of the potential for the use of reading in a therapeutic way.¹ Those surveyed included one elementary school teacher, librarians (hospital and nursing school), library consultants (educator, administrators, public institutions), psychiatrists, educators in languages, two educators in nursing, one educator in adult education, one sociologist, and one chaplain. The questionnaires were returned by 116 individuals. The collective opinion was:

It cannot be considered bibliotherapy, however, unless it is an adjunctive activity which is planned, guided, and controlled by skilled trained librarians working in close cooperation and consultation with the medical team (involving a number of people: the physician, social worker, occupational therapist, nurse and others).²

Even in this setting, the literature available was not bountiful; it gave theories of the process and leads for further research but it contained few definitive

¹Ruth Tews, "The Questionnaire on Bibliotherapy," Library Trends Journal, (October, 1962), pp. 217-228.

²Ibid., pp. 226-27.

answers regarding the effects of reading.

Others such as Kircher,¹ have moved away from the medical-clinical approach, and advocated classroom teachers use bibliotherapy with children who appear to have behavioral problems. Weissenberg suggested the use of bibliotherapy for a whole class as well as an individual student.²

The research and writings of Russell and Shrodes have brought an awareness that bibliotherapy is the planned use of literature with the so-called "normal" child, in an ordinary classroom.³ They refer to the individual whose problems and tensions are the usual developmental ones rather than deep-seated conflicts. Russell and Shrodes define bibliotherapy as: "A process of dynamic interaction between the personality of the reader and literature--interaction which may be utilized for personality assessment, adjustment and growth."⁴

This definition suggests that bibliotherapy is not a strange, esoteric activity but one that lies within the province of every teacher of literature in working with

¹Clara Kircher, (ed.), Character: Formation Through Books, A Bibliography (Washington, D.C.: The Catholic University Press, 1952), pp. 5-10.

²Frances Weissenberg, "The Fourth R in Reading," The Reading Teacher, Vol. 26, No. 6 (1973), pp. 598-601.

³David H. Russell and Caroline Shrodes, "Contributions of Research in Bibliotherapy to the Language Arts Program," School Review, 1, Vol. 68 (Sept. 1950), pp. 335-42, and 11 (Oct. 1950) pp. 411-40.

⁴Ibid., pp. 335-36.

every child in a group. It also implies that through literature, most children can be helped to solve the developmental problems of adjustment which they face. Newton suggests that for teachers and other educators, bibliotherapy is simply the directed reading of books to aid in modifying the attitudes and behavior of children and youth.¹

Some educators are concerned that there is an over-emphasis of teaching skills in reading with little attention being given to the learner as a human with desires, interests and needs. In the affective dimension of the reading process the reader interacts with the text in terms of receiving, responding, valuing, organizing.² The reading process represents a continuum of potential attitudes. Can these affective experiences in reading enhance growth in sensitivity, identification and empathy?

Lideman and Kling report that there is agreement among proponents of bibliotherapy that some interaction, often beneficial, takes place between the reader and what is read.³ The adjustment potential of reading views biblio-

¹Eunice Newton, "Bibliotherapy in the Development of Minority Group Self-Concept," Journal of Negro Education, Vol. 38, No. 3 (1969), pp. 223-29.

²Benjamin Bloom, et al., Taxonomy of Educational Objectives The Classification of Educational Goals Handbook 11: Affective Domain, (New York: David McKay Company, Inc., 1956), p. 95.

³Barbara Lideman and Martin Kling, "Bibliotherapy: Definitions, Uses and Studies," Journal of School Psychology (1968-69) Vol. 7, No. 2, p. 38.

therapy as identification with characters which may increase feelings of belonging, augment self-esteem and provide insights into one's motivations and needs.

Satisfying the personality needs of students through reading is an important adjunct in the development of the total child. Through vicarious participation in other lives, if identification occurs the student may better understand the developmental problems he may encounter in the future. This insight into alternatives, solutions and ways of coping with situations can lead to personal and social adjustment.

Evidence of the value of bibliotherapy has been reported through personal opinions and case studies, but there is a lack of empirical support for the technique. It is important to establish if bibliotherapy can help children solve some developmental problems of adjustment and growth.

Statement of the Problem

What is the nature of the relationship between bibliotherapy and some developmental problems of adjustment and growth?

Purpose of this Study

The purpose of the study was to measure the effects of individually prescribed literature on the reader's self-reliance.

Theoretical Framework

Personality development takes place through experi-

ences, and since literature is one means of broadening experience, it is reasonable to conclude that literature can contribute to personal development.¹ Literary materials can be incorporated into personality through emotional and aesthetic experiences. It is actually in an adjustment of personality that any therapeutic effect must lie.

If reading has a therapeutic effect it may be explained theoretically in terms of "identification," "catharsis," and "insight."² When a reader "identifies" with a character in a book vicariously he can gain a "cathartic" effect from reading about a situation that parallels his own. Through seeing one's own motivations and needs, "insight" can occur. Psychologists view this theory of bibliotherapy largely in psychoanalytic terms. To the anthropologist, identification increases understanding.³

Wilson interviewed 109 superior children in a New York school to determine their favorite stories and characters. None of the characters was chosen more than twice in the group of 109 children.⁴ If the favorite character is

¹Evelyn Wenzel, "Children's Literature and Personality Development," Elementary English, (January, 1948), Vol. 25, pp. 12-13.

²Russell and Shrodes, "Research in bibliotherapy," pp. 335-36.

³Ethel J. Alpenfels, "All Children Need to Identify," School Review, (September, 1950), pp. 394-402.

⁴David H. Russell, "Identification Through Literature," Childhood Education (May 1949), pp. 397-402.

related to the child's identification, the chances of wide differences among children in identification seem evident. Russell feels that the evidence from studies of reading interest and investigations in children's literature, is notably inconclusive regarding the role of identification.¹

Smith and Tweffort regard the development of insight as the crucial factor in bibliotherapy.² Through insight, attitudinal and personality changes occur. When students gain insight from reading bibliotherapy is realized. In many instances literature is a means by which one discovers that his problem is not unique, that it may reflect a common experience of others in society.

Bibliotherapy has been defined as an interaction between the reader and certain literature which helps him to make personal adjustment. According to Robinson we have little information about the interactions of important concepts as we attempt to view the process of processes of reading.³

Literature provides examples and experiences for man's interaction with his environment. In associationists'

¹Ibid., p. 401.

²Smith and Tweffort, "Psychoneuroses: Their Origin and Treatment," cited by Russell and Shrodes, Research in Bibliotherapy, p. 219.

³Alan H. Robinson, "Testing Reading: Product versus Process," Reading Teacher Vol. 26, No. 3 (1972), pp. 303-04.

theory, it is advanced that the organism interacts with its environment by making sensory discriminations and by engaging in manipulatory, locomotor, and other energy interchanges with it.¹ Little has been done to support this empirically.

Educators are reluctant to accept bibliotherapy as a science, largely because of the caliber of research done in this area. Some effective work in bibliotherapy has been reported, but largely through case studies, assumptions, interviews and questionnaires. Although bibliotherapy has not yet achieved a secure place among the social sciences, there is little doubt concerning the part reading plays in changing attitudes. Attitudinal studies such as the one conducted by Smith have shown that reading does affect the attitudes of pupils, but that the results of reading are highly individualized and personal.² These studies of modified attitudes have implications for bibliotherapy.

Significance of the Study

Civilization is generated and fostered partly through the agency of literature.³ McLulan feels that the print

¹Ernest R. Hilgard, Theories of Learning (New York: Appleton-Century Crofts, Inc. 1966), pp. 12-13.

²Nilia B. Smith, "The Personal and Social Values of Reading," Elementary English, (December 1948), pp. 490-500.

³Sadie Goldsmith, "The Place of Literature in Character Education," Elementary English Review (May, 1940), Vol. 18, pp. 176-8.

medium has produced a linear way of thinking in literate man.¹ The electric age medium of television, often uses literature as a basis for its programming. Many children's classics are presented through this medium. Some studies indicate the disappointment of children when reading a story first then seeing a film or television version of it later. When the reader and text interacts and imagery is formed from print, it becomes personalized and meaningful to the reader. Television and film versions can be in direct conflict with this imagery.

Russell believes that the child is over-stimulated by the ever increasing bombardment of the radio, the movies, and television. If the child is overstimulated by the modern media or mass communication, then reading may be one of our last resorts for the quiet times which are one resource of every healthy personality.²

While cognizant of the fact that we are no longer a "print culture," in our complex society today there is a place for electronic media and the print medium, each has its place. In this era of supersonic jets, man still finds a need for the horse, not merely as transportation, but in the area of work and recreation. Similarly, reading as the major

¹John M. Culkin S.S., "A Schoolman's Guide to Marshall McLuhan" cited by Bernard D. Starr, The Psychology of School Adjustment, (New York: Random House, 1970), p. 180.

²David Russell, "Reading and the Health Personality," Elementary English (April 1952), Vol. 29, pp. 195-200.

source of information is rapidly becoming out-dated. However, reading to promote adjustment and growth, personalized, recreational and therapeutic reading like the horse should remain with us. The "living" through of books, this identification with the characters and their actions in books accounts for the fact that people today continue to read. They continue to read in spite of radio, television, movies and other competitors for their time. Even though reading ranks fourth among the media, it seems reasonable to conclude that it is interesting and meaningful, since it does compete with other demands of one's time.¹ We can sustain the importance of books by realizing their therapeutic value.

Educational literature for the past half century is replete with recommendations for building a wholesome and effective personality. Most teachers are seeking constantly to find ways of giving each child the particular guidance that he needs. One approach is through recreational reading in which the child may receive mental and emotional therapy through identification with a character in a book who faced a problem or situation similar to the child's own problem or situation.

In the school, bibliotherapy used by competent teachers, may well be a useful part of a developmental program designed to prepare students for present and future

¹Geneva H. Pilgrim and Mariana K. McAllister, Books Young People and Reading Guidance (New York: Harper and Row, 1968), p. 65.

life situations.

CHAPTER II
RELATED LITERATURE

Related Literature

The major focus of research studies in bibliotherapy has been the adolescent or adult. Few investigations have been conducted on the elementary level. Bibliotherapy is included in many children's literature and language arts texts for teachers, however, little attention is given to the rationale of its use or specific suggestions for practical classroom application of bibliotherapeutic procedures. Also lacking are research studies gathering empirical evidence of the effects of reading.

Smith conducted a study to determine if students remembered any book, story or poem which had changed their thinking or attitudes in any way. Five hundred two responses resulted from the inquiry. An analysis of the responses revealed that in 60.7 percent of the cases, changes in attitudes were reported to have taken place as a result of reading.¹ This and various other studies are in the realm of attitudinal change which is an adjunct of bibliotherapy.

Several case studies assert the value of bibliotherapy. Moore gives detailed accounts of bibliotherapeutic procedures and describes many case studies with reported success.² Elkins reported a study of the use of literature

¹Nila B. Smith, "The Personal and Social Values of Reading," Elementary English (December, 1948), Vol. 25, pp. 490-500.

²Thomas V. Moore, "Bibliotherapy," Catholic Library World (October, 1943), Vol. 15, pp. 11-20.

for guidance purposes in the classroom. Information on the children were obtained from sociometric tests, individual interviews, compositions and sociodrama. Two main areas of problems emerged: those related to family and those related to peer relations. Books were chosen in both areas, and the prescribed reading was followed by class and panel discussions. The investigator used written work, discussions and differences in reactions from the pupils for assessment. She reported that from teacher observation the children appeared to have developed greater understanding, empathy and the ability to bring greater resources to a problem.¹

In our quest to teach reading skills it is easy to lose sight of the importance of the affective aspect of the reading process. Athey realizes that the school must develop better methods of evaluating the accomplishments of the cognitive and affective domain. He further suggests that this interaction should proceed in a hand-in-hand coordinated fashion.²

The experiences the reader brings to a particular book in addition to reading skills can determine the degree of influence the book may generate. Strang suggests that intelligence is a possible factor that determines if a book

¹D. Elkins, "Students Face Their Problems," The English Journal, (1949), Vol. 38, pp. 498-503.

²Irene J. Athey and J. A. Holmes, Reading Success and Personality Characteristics in Junior High School Students (Berkeley: University of California Press, 1961), p. 114.

can have an influence upon the reader.¹ The subject's ability to exercise mental processes, comprehend the reading situations, apply past experiences, and develop insight are necessary components of bibliotherapy.

This investigation was concerned with the normal child as he encounters developmental problems of adjustment and growth. Normality in terms of intelligence was pertinent in the assessment of the findings of this study, therefore, it was necessary to control for intelligence.

Reading comprehension is also a prerequisite to any personal adjustment that can occur as a result of prescribed literature if bibliotherapy is to be achieved. Poor reading skills may prevent any positive effects that therapeutic reading may provide. Darling concludes that:

The poor reader, who must struggle with the simple process of reading will be ill equipped for the necessary processes of identification, catharsis, and insight, since he must devote all his energies to mastering the words and sentences and will have little energy remaining for a deeper understanding of the situation.²

The literature suggests that an average or above reader generally has greater involvement and participation in the reading process. In planning to promote greater self-reliance through literature, an assessment of independent reading levels is necessary. Reading ability was controlled

¹Ruth Strang, et. al., The Improvement of Reading (New York: McGraw-Hill, 1961), p. 431.

²Richard L. Darling, "Mental Hygiene and Books: Bibliotherapy as used with Children and Adolescents." Wilson Library Bulletin (December, 1957), Vol. 32, pp. 293-296.

in this study in the selection process.

In considering the effects of prescribed literature on the reader's self-reliance middle childhood is an interesting area for investigation. Most children encounter some psychological problems during middle childhood. At this particular stage of growth and development children are seeking to develop autonomy, master behavior and self-reliance.¹ The problems of this group are unique in many ways to other age levels. Elkind reports that as the child moves toward the age of eleven the growth pressures assert themselves, and the rapid growth that marks early adolescence can be seen and felt.² Therefore, the effects of prescribed literature could be measured using sixth grade students as subjects.

The intellectual-emotional appeal of literature may be a contributing factor toward personality development. Acceptance of the above concept supports the realization of higher increments of reading value. The assumption is that prescribed literature can have a curative effect. In consideration of the value of bibliotherapy there are more assertions than investigations.

The literature now suggests that research and practice are urgently needed in schools and other institutions if this new technique for human welfare is to become generally

¹Paul H. Mussen, et al., Child Development and Personality (New York: Harper and Row, 1969), p. 489.

²David Elkind, A Sympathetic Understanding of the Child Six to Sixteen (Boston: Allyn and Bacon, 1971), p. 85.

available. Research on bibliotherapy should test the hypotheses that the reported theories have suggested.

Definition of Terms Used:

1. Affective Responses - Affective Responses refer to reactions reflecting feelings and emotions.
2. Bibliotherapy - Bibliotherapy refers to a process of interaction between the personality of the reader and literature--interaction which may be utilized for adjustment and growth.
3. Catharsis - Catharsis refers to purification from emotions.
4. Developmental Problems - Developmental Problems refer to difficulty encountered with tasks related to normal emotional growth and development.
5. Identification - Identification refers to the real or imagined affiliation of one's self with a character or group in the story read.
6. Insight - Insight refers to seeing oneself in the behavior of the character and thereby achieving an awareness of one's own motivation and needs.
7. Reading Interaction - Reading Interaction refers to reciprocal influences from literature, when the reader acts on the text (interprets the text), and the text acts on the reader (the text produces a response in the reader).
8. Self-reliance - Self-reliance refers to an individual

who can do things independently of others, depend upon himself in various situations, and direct his own activities.

Questions and Hypothesis

Can bibliotherapy be used to help solve some developmental problems of adjustment and growth? This question leads to-- What are the effects of literature upon the reader's self-reliance?

General Null Hypothesis:

There will be no differences in the three groups from prescribed reading on the reader's self-reliance.

Specific Null Hypotheses:

H_{1.1} There will be no differences among groups on the reader's self-reliance as measured by the California Test of Personality.

H_{1.2} There will be no differences among groups on the reader's self-reliance as measured by The Teacher Rating Scale.

Independent Variables

Independent reading level, I.Q. and Bibliotherapy treatment

Dependent Variables

Affective responses in relation to self reliance as assessed by the California Test of Personality and Teacher ratings of the students' self-reliance.

CHAPTER III

METHODOLOGY

The Selection of the Subjects

The children comprising the sample were selected from two elementary schools in the Savannah-Chatham County Public School System in Savannah, Georgia. Thirty-six students were selected for the study. Calculation of the power of an F test in analysis of variance provided the basis for deciding the number of subjects that was to be included in the experiment.

Students were selected on the basis of four criteria:

1) having obtained an I.Q. score of not lower than 95 as measured by the California Short-Form Test of Mental Maturity, 2) an independent reading level of third grade or above as measured by the Ginn Informal Reading Inventory, 3) I.Q. scores as assessed by the Wechsler Intelligence Scale for Children and 4) a percentile rank of 40 or below in self-reliance as measured by the California Test of Personality. The subjects were randomly selected from the sixth grades of both schools.

The independent variable I.Q. was used mainly as an initial screening device. In order to control for intelligence a score of not lower than 95 was the first criterion. The California Short-Form Test of Mental Maturity was used for this purpose. Brisbane and Riker report that I.Q. scores of 75 to 90 are considered in the range of "dull normal."¹

¹Holly E. Brisbane and Audrey Palm Riker, The Developing Child (Peoria, Illinois: Chas. A. Bennett Co., Inc., 1971), p. 385.

The subjects in this investigation required "normal average" intelligence to perform the necessary mental processes inherent in the bibliotherapy treatment. The literature suggests that as a child matures his vocabulary is the best single indicator of intelligence as related to scholastic aptitude. This measurement of vocabulary can be made in an individual test, such as The Wechsler Intelligence Scale for Children.¹ The administration of this test concluded the first criterion in the selection of the subjects.

The second criterion of an independent reading level of third grade or above was also used as a screening measure. This study was concerned with the level at which the child was able to read independently. The Ginn Informal Reading Inventory provided this information. Potter and Rae, define informal tests as, "non-standardized procedures for gathering specific information about the child."² This information helped determine which children may best profit from this study. Books used in the investigation were written and selected to accommodate the reading grade placement of the subjects.

The California Test of Personality Manual suggests, that in general maladjustment is shown when a score is among the lower percentiles or when the graph tends to the

¹Dinkemeyer, Child Development, p. 239.

²Thomas C. Potter and Gwenneth Rae, Informal Reading Diagnosis a practical guide for the classroom teacher (Englewood Cliffs, New Jersey: 1973), p. 3.

left.¹ For this reason the investigator used as the fourth criterion a percentile rank of 40 or below.

Sixth grade subjects were used in the experiment because of some of the developmental problems of adjustment and growth they generally encounter.

Procedure for Collecting Data

The investigation began during the month of November of the 1973-74 school year. The experiment lasted for four weeks. A four week period was used because proponents such as Lideman and Kling² report that bibliotherapy is difficult to measure over long periods of time. For initial screening an I.Q. score of 95 or above as measured by the California Short-Form Test of Mental Maturity was used. This test was administered within six months by each school preceding the study. The subjects were then given the verbal portion of the Wechsler Intelligence Scale for Children. To control for reading ability, their Ginn Informal Reading Inventory scores as reported on their permanent record cards were used to determine their independent reading level. From this sample Form AA of the California Test of Personality was administered to obtain their self-reliance scores. Pre and post ratings from teachers on the students self-reliance were also obtained.

After thirty-six subjects who met all three criteria

¹Thorpe, et al., California Test of Personality Manual, p. 13.

²Lideman and Kling, "Bibliotherapy," p. 39.

were identified, they were randomly assigned to the following design. Each of the three groups contained twelve subjects.

(E ₁)	R	X	O ₁
(E ₂)	R	X ₁	O ₂
(Control)	R		O ₃

where: X is bibliotherapy treatment

X₁ is released time for recreational reading

R is random assignment to groups

and O₁, O₂, and O₃ are Form BB of the self-reliance test and the post-test of The Teacher Rating Scale

Form AA of the California Test of Personality was

used as the pre-test. Teacher ratings on pre-test self-reliance scores were also obtained. The treatment group (experimental group I.) was presented prescribed literature to promote greater self-reliance. The books were selected from Kircher's index of books to promote greater self-reliance used for bibliotherapy at the Child Center¹ and original stories written by the investigator. Experimental Group II was given supervised released time for recreational reading without prescribed literature. Group III was the control group without released time, recreational reading or prescribed literature. Form BB of the same test was used

¹Clara Kircher (ed.), Behavior Patterns in Children's Books (Washington, D.C.: The Catholic University Press), 1966, p. 112.

as a post-test for all groups. Teacher ratings of students' self-reliance were also used as post-tests.

Instruments

Four instruments were utilized in collecting the data for this study: 1) The California Short-Form Test of Mental Maturity, 2) The Wechsler Intelligence Scale for Children, 3) The Ginn Informal Reading Inventory, and 4) The California Test of Personality, including its Interest Inventory.

Description of The California Short-Form Test of Mental Maturity--This test is designed to "provide information about the functional capacities that are basic to learning, problem-solving and responding to new situations."¹ The 1963 revision uses the deviation I.Q. in place of the ratio I.Q. employed in previous editions. The Short-Form was scaled to the 1960 Revision of the Stanford-Binet Intelligence Scale, Form L-M, to obtain a total I.Q. and corresponding total mental age.² The rate and scope of mental development are measured in terms of four statistically-derived factors: Logical Reasoning, Numerical Reasoning, Verbal Concepts, and Memory. Within these factors, the seven test units are grouped into two sections, Language and Non-Language.

¹Elizabeth L. Sullivan, et al., California Test of Mental Maturity Manual (California: McGraw-Hill, Inc., 1963), p. 5.

²Ibid., p. 8.

Coefficients of reliability were computed by the Kuder-Richardson formula 21. The reported coefficients are Language .85, Non-Language .81 and total .88.¹ The validity was reported in terms of the care and accuracy of the item preparation and arrangement.

Description of The Wechsler Intelligence Scale For Children.--This test is a psychometric instrument designed to appraise the mental abilities of children. The author² states that the reliability coefficients have been computed by the split-half technique by the Spearman-Brown formula. Reported coefficients are, Verbal Score (without digit span) Age 10½ .96 and age 13½ .96.

Description of the Ginn Informal Reading Inventory.--This is a non-standardized instrument used by reading specialist and classroom teachers. It is used to assess instructional, frustrational, independent, and capacity reading levels.

Description of The California Test of Personality.--This test is designed to "identify and reveal the status of certain highly important factors in personality and social adjustment usually designated as intangibles."³ The purpose

¹Ibid., p. 10.

²David Wechsler, The Wechsler Intelligence Scale For Children Manual (New York: The Psychological Corporation, 1949), p. 2.

³Louis P. Thorpe, et al., California Test of Personality Manual (California: McGraw-Hill, Inc., 1953), p. 2.

of the test is to provide data for aiding individuals in maintaining or developing a normal balance between personal and social adjustment. This instrument is divided into two parts, personal and social adjustment.

The items in the Personal Adjustment half of the test are designed to measure evidences of six components of personal adjustment: 1A. Self-reliance, 1B. Sense of Personal Adjustment, 1C. Sense of Personal Freedom, 1D. Feeling of Belonging, 1E. Withdrawing tendencies and 1F. Nervous Symptoms. The items in the Social Adjustment half of the test are designed to measure evidences of six components of social adjustment: 2A. Social Standards, 2B. Social Skills, 2C. Anti-Social Tendencies, 2D. Family Relations, 2E. School Relations and 2F. Community Relations.

The California Test of Personality is divided into fifteen components and is designed to measure fifteen variables. One component of the test will be used in this investigation, 1A. Self-reliance.

The authors reported that coefficients of reliability were computed with the Kuder-Richardson formula. They further state that the items of each component have been made equivalent by the process of having each item of Form AA matched with an equivalent item of Form BB as to difficulty discriminative power, and internal consistency. Therefore the means and standard deviations are identical and the reliability data apply equally to Form AA and BB.¹ The reported

¹Ibid., p. 4.

coefficients are Personal Adjustment .96, Social Adjustment .96, and 1A. Self-reliance 78.

In the area of personal and social adjustment student attitudes may change in a relatively short time. For this reason, the statistical reliability of instruments of this type will sometimes appear to be somewhat lower than that of good tests of ability and achievement.

Item analysis, phi coefficients and intercorrelations of test sections were used in the validation of the test. The correlation between Sections 1 and 2, varied from .63 to .77. An instrument is valid if it accomplishes the purpose for which it is designed. "Syracuse University found that the California Test of Personality correlated more closely with clinical findings than any other personality test."¹

A reading center was prepared for the experimental groups. Both groups met for forty-five minutes daily. Two days were spent on interpretation skills, however there was no discussion of the stories in either group.

Treatment of the Data

For the analysis of the data a multivariate analysis of covariance was used to test the general and specific hypotheses. Other ancillary tests of analyses of variance, covariance, and chi-square were performed on the data after the major hypotheses were tested.

¹Ibid., p. 7.

CHAPTER IV

RESULTS

RESULTS

The subjects used in the investigation were thirty-six sixth grade school children from the ages of eleven to thirteen. The number of subjects used in the investigation was determined by the power of the F-test in analysis of variance.¹ The purpose of the study was to investigate the effects of prescribed literature on the reader's self-reliance. Pre and post-test measures of self-reliance were made by The California Test of Personality and The Teacher Rating Scale. The independent variables, I.Q. and Reading Grade Placement, were used as screening criteria. The Table of Random Digits² was used to assign the subjects into a three group design. The design consisted of an Experimental Group I - Bibliotherapy; An Experimental Group II - Recreational Reading; and Group III - A Control Group.

Experimental Group I was presented prescribed literature intended to promote greater self-reliance. Experimental Group II had released time for recreational reading without prescribed literature. Group III was the Control Group without prescribed literature or released time for recreational reading.

¹Gene V. Glass and Julian C. Stanley, Statistical Methods in Education and Psychology, (New Jersey: Prentice-Hall, 1970), pp. 510-512.

²Ibid., p. 376.

Data Analysis Procedures

Prior to testing the hypotheses reliability coefficients were calculated. Coefficients were not computed for The Teacher Rating Scale because each student was rated by only one teacher. The method used for calculating the reliability was Guttman's Lamda III.¹ The reliability coefficients for The California Test of Personality were found to be 0.0 for the pre-test and .48 for the post-test. Significance, or lack thereof, in tests of hypotheses related to The California Test of Personality would have to be treated with extreme caution in light of the reliability of the pre-test.

The data collected from each of the groups were coded and punched onto I.B.M. Cards. The card format for the data is shown in Tables 10 in Appendix A. Multivariate analysis of covariance was used to analyze the data. The MANCOVA was used because there were two dependent variables, The California Test of Personality and The Teacher Rating Scale. Multivariate analysis of covariance was used because it permits the experimenter to adjust the mean scores obtained on the final measure to compensate for pre-test differences among groups. Through this method the mean scores for each group can be adjusted for initial group differences before making final comparisons of gains among

¹Fredric M. Lord, and Melvin R. Novick, Statistical Theories of Mental Test Scores (Reading, Massachusetts: Addison Wesley Publishing Company, 1968), p. 94.

the three groups. The data shown in Tables 3 through 9 include pre and post-test self-reliance scores from The California Test of Personality and pre and post-test scores of self-reliance from The Teacher Rating Scale.

The statistical tests were computed on the differences between the pre and post-test scores. These mean differences are presented in Tables 1 and 2.

The results of testing the hypotheses are presented in Tables 3 through 7. All hypotheses were tested at the .05 level of significance. The Biomedical Computer Program for the Multivariate Analysis of Covariance¹ was used in the calculations necessary for testing the hypotheses. The pre-tests were treated as the covariates in the statistical tests for the MANCOVA. The following tests were used in the analyses:

1. MANCOVA where the dependent variables were the post-tests of The California Test of Personality and The Teacher Rating Scale and covariates were pre-tests of the same instruments.
2. MANCOVA where the dependent variables were the two post-tests and the covariate was the pre-test of The California Test of Personality.
3. MANCOVA where the dependent variables were the two post-tests and the covariate was the pre-test

¹W. J. Dixon (ed.), "BMD 12V-Multivariate Analysis of Covariance," BioMedical Computer Programs (Los Angeles, California: University of California Press, 1973).

of The Teacher Rating Scale.

4. ANACOVA where the dependent variable was the post-test of The California Test of Personality, with its pre-test as a covariate.
5. ANACOVA where the dependent variable was the post-test of The Teacher Rating Scale, with its pre-test as a covariate.
6. ANOVA where the post-test of The California Test of Personality was the dependent variable.
7. ANOVA where the post-test of The Teacher Rating Scale was the dependent variable.

Other ancillary tests were performed on the data after the hypotheses were tested. To test the equality of the groups ANOVA's were performed on I.Q. and Reading Grade Placement scores. The results of these tests showed that the variances of the three groups were not significantly different ($F = < 1$). The post hoc analysis to assess literature preference will be reported and discussed in Chapter V.

In MANACOVA the dependent variables were the post-tests of The California Test of Personality and The Teacher Rating Scale. The covariates were the pre-tests of the two measures. Table 1 indicates the adjusted scores on The California Test of Personality. The Bibliotherapy Group showed a mean gain of 2.67; the Recreational Reading Group showed a mean gain of 1.08 and The Control Group a mean gain of 2.49. Table 2 indicates the adjusted scores on The Teacher Rating Scale. The Bibliotherapy Group showed a mean

Table 1

Mean Gains of The California Test of Personality

		Pre-test	Post-test Unadjusted	Post-test Adjusted	Mean Gain
Experimental Group I (Bibliotherapy)	$\bar{X}=$	6.16	8.83	8.83	2.67
	sd.=	.75	1.7	1.7	
	n=	12	12	12	
Experimental Group II (Recreational Reading)	$\bar{X}=$	6.33	7.41	7.42	1.08
	sd.=	1.1	1.5	1.5	
	n=	12	12	12	
Group III (Control)	$\bar{X}=$	5.50	8.00	7.99	2.49
	sd.=	1.8	1.7	1.7	
	n=	12	12	12	

 $\bar{X}_{ij}=6.00$ $\bar{X}_{ij}=8.08$

Table 2

Mean Gains of The Teacher Rating Scale

		Pre-test	Post-test Unadjusted	Post-test Adjusted	Mean Gain
Experimental Group I (Bibliotherapy)	$\bar{X}=$	6.08	7.33	8.83	2.75
	sd.=	2.5	2.7	1.7	
	n=	12	12	12	
Experimental Group II (Recreational Reading)	$\bar{X}=$	6.25	6.87	7.42	1.17
	sd.=	2.3	1.7	1.5	
	n=	12	12	12	
Group III (Control Group)	$\bar{X}=$	6.37	6.75	7.99	1.62
	sd.=	2.6	2.6	1.7	
	n=	12	12	12	

 $\bar{X}_{ij}=6.23$ $\bar{X}_{ij}=6.98$

gain of 2.75; the Recreational Reading Group showed a mean gain of 1.17; and the Control Group a mean gain of 1.62.

The MANCOVA results showed no significant difference in the adjusted post-test scores of self-reliance of the three groups of subjects ($F = 2.17$; $df\ 4, 60$; $p < .05$). The results are shown in Table 3. The general null hypothesis of no difference among the groups' self-reliance scores was not rejected. Specific hypotheses accepted were:

H_{1.1} There will be no differences among groups on the reader's self-reliance as measured by the California Test of Personality.

H_{1.2} There will be no differences among groups on the reader's self-reliance as measured by The Teacher Rating Scale.

Table 3
Summary Table of Multivariate Analysis
of Covariance

Source	df	F Statistic
G	4, 60	2.1682
Covariate 1	2, 30	0.0082
Covariate 3	2, 30	23.5105

$F_{.95}\ (4, 60) = 5.00$

Table 4 shows the MANCOVA with the pre-test of The California Test of Personality as the covariate. The

dependent variables are the two post-tests. The results showed no significant difference in the adjusted post-test scores of self-reliance on the three groups of subjects. ($F= 1.26$; $df\ 4, 62$; $p < .05$).

Table 4
Summary Table of Multivariate Analysis
of Covariance

Source	df	F Statistic
G	4, 62	1.2599
Covariate 1	2, 31	0.0165
<hr/>		
$F_{.95}\ (4, 62) = 2.53$		

Table 5 shows MANACOVA with the pre-test of The Teacher Rating Scale as the covariate. The dependent variables are the two post-tests. The results showed no significant difference in the adjusted post-test scores of self-reliance of the three groups of subjects ($F=2.53$; $df\ 4, 62$; $p > .05$).

Table 5
Summary Table of Multivariate Analysis
of Covariance

Source	df	F Statistic
G	4, 62	2.2688
Covariate 3	2, 31	24.3148
<hr/>		
$F_{.95}\ (4, 62) = 2.53$		

Further tests using ANACOVA and ANOVA with adjusted scores (i.e., the univariate tests corresponding to the above multivariate tests) revealed no significant differences among groups. In the absence of significant results for the multivariate tests, the univariate tests are of little value and are listed as Tables 6, 7, 8, and 9 in Appendix F.

CHAPTER V

SUMMARY, CONCLUSIONS AND DISCUSSIONS, AND RECOMMENDATIONS

Summary

The purpose of this study was to measure the effects of individually prescribed literature on the reader's self-reliance. The twelve students comprising Experimental Group I - Bibliotherapy were presented books to promote greater self-reliance from Kircher's List and books written by the experimenter. The Experimental Group II - Recreational Reading Group had released time to read books of their choice, excluding those selected for Group I.

A reading center was prepared for the sessions in each school. Both groups met for forty-five minutes daily for four weeks. Two days were spent on interpretation skills with both of the experimental groups. There was no discussion of the stories in either group, thus reducing the chance of confounding by a projective effect.

The Control Group did not participate in any of the above activities though they were a part of the pre-test and post-test plan.

Prior to any treatment each teacher was asked to rate the students' self-reliance. This measure formed the pre-test of The Teacher Rating Scale (see Appendix B). After the treatment each teacher was asked to again rate the student's self-reliance. This measure formed the post-test of The Teacher Rating Scale. (see Appendix C).

Three hypotheses were tested in the study. The results indicated that there was no significant difference among groups.

Conclusions and Discussions

The general null hypothesis of no differences among the groups' self-reliance scores was accepted. Therefore, within the limits of this experiment it can be concluded that bibliotherapy may not be an effective tool in promoting greater self-reliance. This finding does not support the theoretical implication that bibliotherapy can help solve some developmental problems of adjustment and growth.

The second null hypothesis of no differences among groups on the reader's self-reliance as measured by The California Test of Personality was accepted. This would indicate that there was little demonstrable effect from the bibliotherapy treatment of promoting greater self-reliance.

The third hypothesis of no differences among groups on the reader's self-reliance as measured by The Teacher Rating Scale was accepted. The Bibliotherapy Group had a substantially higher mean adjusted post-test score and the MANCOVA results of this hypothesis approached significance (.05) and was found to be significant at the .07 level. This could indicate a need for further research and for different experimental designs.

The California Test of Personality's Interest Inventory was also given. A pertinent question on the inventory asked, "Do you like to read literature"? In the post-hoc analysis it was evident that some groups had a better attitude toward reading literature. Ten of the twelve subjects in the Control Group answered yes to the question, as com-

pared to five in the Bibliotherapy Group and six in the Recreational Reading Group. This led the experimenter to pose the question: Are the frequencies of individuals in the two categories (yes and no) significantly different? Therefore, a null hypothesis was stated and tested: There is no difference among groups in the frequencies of response to the liking literature question.

Because the data were categorized into frequencies, a chi-square test was used for the analysis. The null hypothesis was rejected since the results were significant beyond the .05 level (see Table 13 in Appendix J). These data rejected the null hypothesis that the groups were not equal in terms of liking to read literature. The Control Group had more subjects who indicated liking to read literature. This post-hoc finding may have contributed to not finding significant differences in adjusted post-test scores. In spite of the random assignment the groups differed in their interest in reading literature.

Randomization was the first step in setting up the three groups. Equality of groups based on the independent variables, I.Q. and Reading Grade Placement was supported by ANOVA (see Tables 11 and 12 in Appendices D and F).

The reliability of the pre-test may also have contributed to not finding significant differences in the tests of the hypothesis treating The California Test of Personality scores.

The purpose of this study was to investigate if

bibliotherapy can help solve some developmental problems of adjustment and growth. The adjustment potential of reading views bibliotherapy as identification with characters which may increase feelings of belonging, augment self-esteem and provide insights into one's own motivations and needs.

If reading has a therapeutic effect it may be explained theoretically in terms of "identification," "catharsis" and "insight." If the reader "identifies" with a character in a book vicariously he can gain a "cathartic" effect from reading about a situation that parallels his own. Insight is the crucial factor in bibliotherapy. It is through insight that attitudinal and personality changes occur. Another possible explanation for not rejecting the null hypothesis was that insight did not occur among the students comprising the Bibliotherapy Group.

Through the medium of books imaginative experiences may help develop sensitivity to other human beings in terms of their aspirations, needs, abilities, joys, and deprivations. If they relate in this way, this process can be viewed as "reading sensitivity." However, the degree of attitudinal modification is still questionable. Perhaps, projective techniques such as discussions concerning the pros and cons of a story are needed for therapeutic reading at the elementary level.

The major focus of research on bibliotherapy has been the adolescent or adult. Few investigations have been conducted on the elementary level, and those that have were not of an experimental nature. Most of the studies were impressionistic or used non-validated questionnaires, observations or interviews. At this point it is still questionable as to whether elementary level students benefit from bibliotherapy.

Recommendations

Based on this study and the conclusions drawn from the results, the following recommendations are suggested for further study:

1. Investigations should be conducted to make some provisions for assuring that opportunities for insight are present.
2. A study should be conducted to determine the influence of the classroom teacher in literature appreciation in the elementary school.
3. Because of the usually low reliability of personality tests, other behavioral measures should be used in studying bibliotherapy.

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APPENDIX A

CARD FORMAT: RAW DATA

Table 10
Card Format for Recording Raw Data

Information	Column
California Test of Personality Pre-test	1-26
California Test of Personality Post-test	29-54
I.Q. Scores	56-58
Reading Grade Placement	60-62
Literature Preference	64-65
Student Identification Number	78-80

APPENDIX B

PRE-TEACHER RATING SCALE

PRE-TEACHER RATING SCALE

INSTRUCTIONS: Please rate each student in your class on self-reliance. Put an X on the line where you think the student should be placed in assessing his self-reliance. Place the X directly on the numeral or the point between each numeral.

DEFINITION: Self-Reliance - An individual may be said to be self-reliant when his actual actions indicate that he can do things independently of others, depend upon himself in various situations, and direct his own activities. The self-reliant boy or girl is also characteristically stable emotionally and responsible in his or her behavior.

STUDENT'S NAME _____

'	1	'	2	'	3	'	4	'	5	'	6	'	7	'	8	'	9	'	10
lowest point										highest point									

DATE _____ **TEACHER'S NAME** _____

APPENDIX C

POST-TEACHER RATING SCALE

POST-TEACHER RATING SCALE

INSTRUCTIONS: Please rate each student in your class on self-reliance. Put an X on the line where you think the student should be placed in assessing his self-reliance. Place the X directly on the numeral or the point between each numeral.

DEFINITION: Self-Reliance - An individual may be said to be self-reliant when his actual actions indicate that he can do things independently of others, depend upon himself in various situations, and direct his own activities. The self-reliant boy or girl is also characteristically stable emotionally and responsible in his or her behavior.

STUDENT'S NAME _____

' 1 ' 2 ' 3 ' 4 ' 5 ' 6 ' 7 ' 8 ' 9 ' 10

lowest point highest point

DATE _____ TEACHER'S NAME _____

APPENDIX D

READING GRADE PLACEMENT ANALYSIS

Table 11
Analysis of Variance For a One-Way Design of Reading
Grade Placement

Source	Sum of Squares	df	Mean Square	F Ratio
Between Groups	2.0417	2	1.0208	0.6988
Within Groups	48.2083	33	1.4609	
Total	50.2500	35		
F _{.95} (2, 33) = 3.32				

APPENDIX E

I.Q. SCORES ANALYSIS

Table 12
Analysis of Variance For a One-Way Design
Of I.Q. Scores

Source	Sum of Squares	df	Mean Square	F Ratio
Between Groups	5.0554	2	2.5277	0.0329
Within Groups	2536.5811	33	76.8661	
Total	2541.6365	35		

$F_{.95} (2, 33) = 3.32$

APPENDIX F

UNIVARIATE TEST ANALYSES

Table 6 shows ANACOVA of adjusted scores where the dependent variable is the post-test of The California Test of Personality with its pre-test as a covariate. The results showed no significant difference in the adjusted post-test scores of self-reliance of the three groups of subjects ($F = 1.66$; $df\ 2, 32\ p < .05$).

Table 6

Summary Table of Analysis of Covariance (Adjusted Scores)

Source	Sum of Squares	Mean Square	df	F Statistic
G	12.1437	6.0718	2	1.66
Covariate 1	0.0033	0.0033	1	
Error	116.5795	3.6431	32	
<hr/>				
$F_{.95}\ (2, 32) = 3.32$				

Table 7 shows ANACOVA of adjusted scores to test hypothesis $H_{1.2}$ where the dependent variable is the post-test of The Teacher Rating Scale with its pre-test as a covariate. The results showed no significant difference in the adjusted post-test scores of self-reliance of the three groups of subjects ($F = 1$; df ; $p < .05$).

Table 7
Summary Table of Analysis of Covariance
Adjusted Scores

Source	Sum of Squares	Mean Square	df	F Statistic
G	3.9362	1.9681	2	0.6732
Covariate 3	97.4233	97.4233	1	
Error	93.5553	2.9236	32	
<hr/>				
$F_{.95} (2, 32) = 3.32$				

Table 8 shows ANOVA for the dependent variable the post-test of The California Test of Personality. The results showed no significant difference in gain scores of self-reliance of the three groups of subjects ($F=1.72$; $df\ 2, 32\ p < .05$).

Table 8

Summary Table of Analysis of Variance for
The California Test of Personality

Source	Sum of Squares	Mean Square	df	F Statistic
Dependent Variable 2	12.1667	6.0833	2	1.72
Error	116.5829	3.5328	33	

$F_{.95}\ (2, 33) = 3.32$

Table 9 shows ANOVA for the dependent variable the post-test of The Teacher Rating Scale. The results showed no significant difference in gain scores of self-reliance of the three groups of subjects ($F = < 1$; df ; $p < .05$).

Table 9
Summary Table of Analysis of Variance for
The Teacher Rating Scale

Source	Sum of Squares	Mean Square	df	F Statistic
Dependent Variable 4	2.2639	1.1320	2	0.1956
Full Model	190.9786	5.7872	33	
$F_{.95} (2, 33) = 3.32$				

APPENDIX G

LITERATURE PREFERENCE ANALYSIS

Table 13

Chi-square Test of Literature Preference

	Yes	No	Row	df	χ^2 Statistic	p
Experimental Group I (Bibliotherapy)						
Observed=	5	7		2	5.99	$> .05$
Expected=	(7)	(5)				
Cell value=	0.6	0.8	n=12			
Experimental Group II (Recreational Reading)						
Observed=	6	6				
Expected=	(7)	(5)				
Cell value=	0.2	1.3	n=12			
Group III (Control)						
Observed=	10	2				
Expected=	(7)	(5)				
Cell value=	1.3	1.8	n=12			

Columns

 $\chi^2 = 6.00$ ($> .05$; df 2)