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ABSTRACT

A study investigated the attitudes toward reading of Western Kansas students in grades 1-6. Of the 156 students in the sample, 45 participated in the study group while 111 constituted the control group. The independent variables were participation status, achievement in reading, gender, socioeconomic class status, intelligence test scores, and grade placement. The dependent variables were scores from the scales of the Elementary Reading Attitude Survey (ERAS). Pretest scores from the scales of the ERAS were employed as covariant measures and included Attitudes toward Recreational Reading, Attitudes toward Academic Reading, and Total. Six composite null hypotheses were tested. A total of 18 comparisons were made; seven comparisons were significant. The significant findings included participation status, socioeconomic status, and grade level. Results indicated that students who participated in a reading program had significantly higher positive attitudes toward reading than those who did not, high socioeconomic class students had significantly higher positive attitudes toward reading than low socioeconomic class students, and fifth- and sixth-grade students had significantly lower positive attitudes toward academic and total reading than students in grades 1-4. Should the study be replicated, a larger sample should be used, schools of varying size should be included, all grade levels and different organizational structures and a different experimental design should be used. (Contains 30 references and 4 tables of data; letters requesting or granting permission, the ERAS instrument, instructions for administering ERAS, validity and reliability of the ERAS, demographic sheets, and a discussion of the treatment are attached.) (Author/RS)

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ED 367 973

A STUDY OF ATTITUDES TOWARD READING OF
WESTERN KANSAS STUDENTS IN GRADES
ONE THROUGH SIX IN A
SELECTED SCHOOL

being

A Thesis Presented to the Graduate Faculty
of the Fort Hays State University in
Partial Fulfillment of the Requirements for
the Degree of Master of Science

by

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The Graduate Committee of Navene N. Rains hereby approves her thesis as meeting partial fulfillment of the requirements for the Degree of Master of Science.

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As I complete this thesis project, I want to remember the people who have supported me through this endeavor. My husband is the first that I have to thank; he encouraged and supported me tremendously. The moral support was the most important, but I knew I could depend on him to keep the home, family, and car running smoothly and effectively. With these responsibilities taken care of, I was able to focus on this venture.

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Abstract

The purpose of the researcher was to investigate the attitudes toward reading of Western Kansas students in grades 1-6. The sample consisted of 156 students; 93 girls and 63 boys. Forty-five students participated in the study group, and a control group consisted of 111 students.

The independent variables were participation status, achievement in reading, gender, socioeconomic class status, intelligence test scores, and grade placement. The dependent variables were scores from the scales of the Elementary Reading Attitude Survey (ERAS). These were: Attitudes Toward Recreational Reading, Attitudes Toward Academic Reading, and Total. Pretest scores from the scales of the ERAS were employed as covariant measures and included Attitudes Toward Recreational Reading, Attitudes Toward Academic Reading, and Total.

Six composite null hypotheses were tested at the .05 level of significance. A total of 18 comparisons were made; 7 comparisons were significant. The significant findings included participation status, socioeconomic class status, and grade level. The results of this study indicated that students who participated in a reading program had significantly higher positive attitudes toward reading than those who did not, high socioeconomic class

status students had significantly higher positive attitudes toward reading than low socioeconomic class status students, and fifth and sixth grade students had significantly lower positive attitudes toward academic and total reading than students in grades 1-4. The researcher would make these recommendations if the study were to be replicated:

1. the study should be replicated with a larger random sample,
2. the study should be replicated in schools of varying sizes,
3. the study should be replicated using additional independent variables,
4. the study should be replicated including all grade levels and different organizational structures, and
5. the study should be replicated employing a different experimental design.

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Introduction

Overview

Alexander and Filler (1976) stated the following:

"Research pertaining to reading attitude development and maintenance is still in its infancy. A literature search revealed only a limited number of studies that specifically focused on attitudes toward reading. A beginning has been made, however, and a number of variables thought to be associated with attitudes have been investigated" (p.3).

In many schools today, three skills components receive the major portion of the time and effort devoted to reading instruction: word attack skills, comprehension skills, and study skills. While these cognitive skills are highly important, an affective component—attitudes—is also valuable. There is little disagreement relative to the importance of positive attitudes in assuring maximal success with reading (Alexander & Filler, 1976).

Anderson, Wilson, and Fielding (1988) indicated that comprehension increased rapidly when children spend as little as 10 minutes a day reading books. Anderson (et al., 1988) maintained that "reading books was the out-of-school activity that had the strongest impact on reading proficiency. Reading by, with, and to children is

essential in developing present and future readers. If a skill, comprehension, increases with so little effort, how then, can students be motivated to read?"(p.285).

Definitions of Reading

Anderson, Hiebert, Scott, & Wilkinson (1985), defined reading as, "a process in which information from the text and the knowledge possessed by the reader act together to produce meaning. Good readers skillfully integrate information in the text with what they already know (p.8)." Reading was further defined by Robeck and Wilson (1974, p.41) as a "process of translating signs and symbols into meanings and incorporating new meanings into existing cognitive and affective systems." According to this definition, the reading act involves more than cognitive skills, more than prior knowledge; it also includes a more intangible affective component--attitudes.

Definitions of Attitudes Toward Reading

Attitudes toward reading have been defined in various ways. Alexander and Fuller (1976) considered attitudes to consist of a system of feelings related to reading which causes the learner to approach or avoid a reading situation. A learner's attitudes may vary with his/her various dispositions and may be affected in unique ways by variables within the learner and his/her environment.

In 1762, the philosopher Rousseau speculated that any method of teaching reading would suffice given adequate

motivation on the part of the learner (McKenna & Kear, 1990). While present-day educators might resist such a sweeping pronouncement, the importance of attitude toward reading is becoming recognized. The Commission on Reading and its summary of research (Anderson et al., 1985) concluded that "becoming a skilled reader requires...learning that written material can be interesting" (p. 18). Smith (1988, cited in McKenna & Kear, 1990) observed that "the emotional response to reading...is the primary reason most readers read, and probably the primary reason most nonreaders do not read ..." (p.626). Wilson and Hall (1972, cited in Alexander & Filler, 1976, p.1) stated that a positive attitude is "essential for successful mastery of the printed page."

Squire (1969) indicated that attitudes tended to be "unique, personal, and highly unpredictable" (p.523). The results of Squire's study also indicated certain common characteristics which need consideration in planning high school programs in literature. Some qualities which should be considered were: nature of reading interests, nature of response to literature, the effects of reading on the individual, factors involved in taste and appreciation, and the effects of instruction.

Attitude Development and Change

The measurement of attitudes plays an important role in a broad range of counseling research (Friedrich &

Verive, 1991). The reasons for such concern with attitudes have long been apparent, and the many theories of attitude development and change are very diverse. If attitudes are causes of behaviors, then knowledge of attitudes allows prediction of behavior. It also follows that if attitudes are causes of behavior, then changing an attitude allows one to change or control behavior. For at least half a century, the issue of attitude-behavior consistency has had a prominent place in American social and behavioral science. What began as a concern with whether attitudes cause behavior has been replaced with efforts to identify the conditions under which attitudes cause behavior (McBroom & Reed, 1992).

McBroom and Reed (1992) conducted a longitudinal study and measured the consistencies of attitudes and behaviors of 243 persons. While attitude-behavior consistency was a highly complex phenomenon, McBroom and Reed maintained that "positive social support was more important in producing behavior which was consistent with previously established attitudes" (p. 209).

Marjoribanks (1992) examined to what extent personality types were related to children's attitudes and aspirations after taking into account relationships between ability and the attitude and aspiration measures. Data were collected from 500 12-year-old Australian children.

The general intellectual ability of the children was assessed by the Otis Intermediate Test-Form AB, which had acceptable reliability estimates and high predictive validity in relation to measures of academic achievement. Personality was assessed by administering the Children's Personality Questionnaire, Form A. The educational and occupational aspirations of the students were measured by asking them what educational level they expected to achieve and what job they really expected to have. A two-factor affective-cognitive model of attitudes was adopted for the construction of an attitude-to-school measure.

Relationships among ability, personality type, and the attitude and aspiration measures were investigated using commonality regression analysis. The results indicated the general proposition that children's personality types have strong associations with school-related attitudes after taking into account associations between children's intellectual ability and their attitudes. In contrast, children's personalities tended not to be related to measures of educational and occupational aspirations. The results indicated that the understanding of variations in different school-related outcomes is likely to be enhanced by considering both intellectual ability and personality type as predictor variables.

Whether in the form of education or propaganda, whether the desired end is virtuous or evil, persuasion plays a central role in social behavior. Persuasion researchers have long assumed that different types of arguments would have different effects on attitude change (Millar & Millar, 1990).

Millar & Millar (1990) hypothesized that affective-based attitudes would be more susceptible to rational arguments and, alternately, cognitive-based attitudes would be more susceptible to emotional arguments. Three studies were conducted to test this hypothesis. In Study 1, the participants' attitudes about 6 common beverages were classified as affectively or cognitively based, and then either rational or emotional counterattitudinal arguments were presented. In Study 2, naturalistic emotional and rational arguments in the form of advertisements were presented. In Study 3, affective and cognitive attitudes about analytic problems were created, and then either rational or emotional counterattitudinal arguments were presented.

The predicted interaction between the type of attitude and the type of argument was obtained with both the attitude measures in Studies 1 and 3, and with one of the measures in Study 2. Also, when the cognitive responses was examined in Studies 2 and 3, the predicted

interaction between the type of attitude and the type of argument were obtained with the negative response measure.

The functional approach to attitude change indicates that attitudes serve a variety of psychological functions: ego-defensive, value-expressive, knowledge, and utilitarian. When attempting to modify an attitude, the most effective procedure is to match the persuasive message to the motives of the person holding the attitude. For example, if an attitude fulfills a value-expressive function (allows expression of self-concept), messages relating the attitude object to the positive expression of of self-concept is most effective (Millar & Millar, 1990).

Edwards (1990), drawing on the functional approach to attitude change, hypothesized that emotional arguments are most effective with affective attitudes and that informational arguments are most effective with cognitive arguments. Two experiments examined the hypothesis that the sequence of affect and cognition in an attitude's formation is an important determinant of its subsequent resistance to affective and cognitive means of persuasion.

Affect-based and cognition-based attitudes were induced and subsequently challenged by either affective or cognitive means of persuasion. The interaction between attitude type and means of persuasion emerged both when affect was manipulated subliminally (Experiment 1) and when affect was manipulated supraliminally (Experiment 2).

Moreover, in the 2nd experiment, affect-based attitudes were expressed with greater confidence than their cognition-based counterparts (Edwards, 1990).

Taken together, the results of these studies indicated that the conditions under which an attitude was formed cast an influence on its ability to withstand counterattitudinal communications. When affect preceded cognition in an attitude formation, an attitude will be more vulnerable to affective means of persuasion. On the other hand, when cognition preceded affect in attitude formation, an attitude may be equally susceptible to affective and cognitive appeals. There is also evidence from Experiment 2 indicating that an attitude is expressed with greater confidence when affect is primary or dominant in its acquisition.

Participation in a Reading Program and Attitudes Toward Reading

Cosgrove (1988) measured the effects of listening to oral reading on the attitudes, reading habits, and reading comprehension of fourth and sixth grade students in Connecticut. The Estes Scale to Measure Attitudes Toward Reading, the Degrees of Reading Power, and interview questions were employed as the assessment tools.

The sample included students from 2 small rural towns, 2 moderate size cities, and 2 large urban cities. A stratified random sampling technique was used to select

212 subjects who represented low, average, and high reading levels from different classrooms within each site. Trained educators read to the children in the experimental group 3 times a week for 12 weeks. The control group was not exposed to the listening treatment. In light of the evidence produced by this and similar studies, Cosgrove maintained that listening to oral reading on a regular basis did indeed improve students attitudes toward reading, increased students' time spent reading for recreational purposes, and increased comprehension scores.

Bullen (1970) hypothesized that more positive attitudes towards reading could be developed in elementary school children who, because of economic and cultural factors, had limited experience with books. The children selected for the study lived in an economically depressed area. Compared with the national norm, the children generally had low achievement scores and limited access to books. Selected at random were 15 experimental and 15 control classrooms in the area. At each grade level from 1 to 5, the researcher employed 3 experimental and 3 control classrooms. An analysis of reading achievement scores revealed no significant differences between the 2 groups in reading comprehension and vocabulary at the outset of the study. Each week during the school year, trained volunteers visited the experimental classrooms for an hour a day, 3 times a week. During this time the

children experienced a variety of literature activities, library trips, and introduction to books in the room which they were encouraged to take home. In the control group classrooms, the books were available, but the volunteers did not work with these children. An attitude instrument was designed to measure the children's attitudes toward reading at home and at school, visiting the library, and buying books and receiving books as gifts. According to responses recorded on the posttest, the children exposed to the treatment situation showed more positive attitudes toward reading and reading related activities.

Achievement in Reading and Attitudes Toward Reading

The present researcher found limited studies available pertaining to the association between achievement and attitudes toward reading. In some studies, evidence indicated that associations were occasionally found between higher achievement and more positive attitudes.

Askov and Fischbach (1973) investigated the associations among attitudes in reading, achievement, sex class membership, grade placement, and attitudes toward recreational reading. The subjects were 75 students in grade one and 95 students in grade three. The assessment instruments were Askov's Primary Pupil Attitude Inventory and the Paragraph Meaning and Word Meaning subtests of the Stanford Achievement Tests. The data indicated that

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attitudes were positively related to Paragraph Meaning subtest scores but not to the Word Meaning subtest scores. The researchers stated that since "the Paragraph Meaning subtest assesses the global reading process while the Word Reading subtest primarily measures vocabulary, a favorable attitude toward recreational reading might indeed be associated with good readers who have few comprehension difficulties"(p.4). They further indicated that perhaps the efforts of the school should be focused on reading skills with improved achievement, and suggested that programs that focused on attitudes may be misplacing their efforts.

Roettger (1980) investigated the attitudes of 75 fourth, fifth, and sixth graders in a personal interview after they had taken The Estes Reading Attitude Scales, Elementary Form A. Thirty-six of them had scored low on the attitude inventory and were considered to have negative attitudes. Yet, these students had scored above the 75th percentile on the Comprehension subtest of the Iowa Test of Basic Skills. The children were selected because their attitude scores and actual reading performance contradicted the belief that children who read well have positive attitudes toward reading while those who do not read well have negative attitudes. The interviewer asked the participants what would encourage recreational reading and it was the consensus of the group

that time would be appreciated for personal reading in school whether the skill pages were finished or not, teachers should talk to them about their hobbies and interests and help them find interesting books, and teachers should also tell them about interesting books they are reading.

Gender and Attitudes Toward Reading

"That girls read better than boys is a foregone conclusion in United States education" (Holbrook, 1988 p. 574). In four National Assessments of Educational Progress (1970-1984), the reading proficiency of males trailed that of females at all 3 age levels, with the gap narrowing slightly among older students. This pattern was not a recent one. Since 1932, boys have outnumbered girls in remedial reading classes by ratios ranging from 2:1 to 10:1.

Low reading achievement is not limited to the United States (Holbrook, 1988). In Canada, as well as France and other non-English speaking countries, girls read better than boys. But in cross-cultural studies, Israel and Jordan, for example, have no differences in reading achievement between males and females, while in England, Nigeria, India, and Germany, boys surpassed girls in reading achievement. In a similar study of fourth and sixth graders from California and West Germany, American California females achieved significantly higher scores

than American California males in sixth grade, while German females and males did not significantly differ at either grade level, suggesting that cultural rather than biological factors are involved.

Denny, Terry, and Weintraub (1966) asked 111 midwestern rural first graders in three school systems (which represented rural, suburban, and large city environments) whether they wanted to learn to read. Responses were divided into seven categories, one of which was "affective-evaluational." No noticeable differences were found between boys and girls on the affective category.

Walberg and Tsai (1985) used data from the 1979-80 National Assessment of Educational Progress (NAEP) which employed a stratified, multi-stage sampling design with oversampling of low income and rural areas to determine the predictive factors that influence cognitive achievement and affective factors as educational outcomes. A control variable, gender, was significantly correlated with achievement and attitude. Girls scored higher and expressed more interest in reading than did boys.

Socioeconomic Class Status and Attitudes Toward Reading

Alexander and Filler (1976) maintained that it is assumed that students from lower socioeconomic classes will have more negative attitudes toward reading and learning than those from higher levels. Research results

do not support this generalization. In the studies which researchers investigated socioeconomic class status, the indicators generally used in determining social class were father's occupation, father's education, type of housing, type of neighborhood, or a combination of two or more of these characteristics.

Socioeconomic class status (SES) was indicated by the highest level of either parent's formal education in a study conducted by Walberg and Tsai (1985). They investigated the attitudes of an equal number of boys and girls in their effort to identify factors that influence cognitive achievement and affective attitudes as educational outcomes. Children with more highly educated parents had higher achievement and attitude scores, although attitude was less predictable than achievement.

Filler (1973, cited in Alexander & Filler, 1976) investigated the relationships among reading achievement, socioeconomic status, and reading attitudes. Achievement was measured by the Stanford Achievement Tests, and socioeconomic class status was determined by Title I federal aid. Two elementary schools were selected that were receiving Title I federal aid, and two that were not. Attitudes toward reading were measured by the Estes Reading Attitude Scale. The 177 fifth grade students used in the study were selected at random from the 4 schools. The findings of the study were not conclusive; however,

there were observable trends. Results were reported in stanines, and there was evidence that indicated no appreciable difference between the attitudes of students from the two socioeconomic levels.

Sartain's Reading Attitudes Inventory was used by Heimberger (1970) to measure the attitudes toward reading of 1,093 students. The students were from 3 income levels: lower, middle, and upper. The mean attitudes for the 3 socioeconomic levels did not differ significantly. The researcher concluded the general opinion that children from lower socioeconomic levels have poorer attitudes than students from upper levels was not true in this sample.

Intelligence Test Scores and Attitudes Toward Reading

According to Alexander and Filler (1976), many educators maintain that the higher the intellectual level of the learner, the more positive his/her attitudes toward reading. The few research studies found by the present researcher did not seem to support this position. Hansen's (1969) study of fourth graders, for example, indicated that although tested intelligence was directly related to tested achievement, it was not a valid predictor of reading attitude.

An investigation of the relationship between critical reading scores and attitudes expressed toward reading was conducted by Groff (1962, cited in Alexander & Filler, 1976). The sample of 305 fifth and sixth grade children

were described as average in terms of their tested intelligence, reading ability, and socioeconomic class status. Negligible relationships were found between intelligence as measured by Kuhlman-Anderson Intelligence Test and attitudes as measured by Remmers' Scale for measuring Attitude Toward Any School Subject.

Grade Placement and Attitudes Toward Reading

According to Estes and Johnstone (1977), no child comes to school intending to hate reading. Rather, most children come to school with high expectations and enthusiasm. It is also safe to say that no teacher ever does anything with the deliberate intention of making children hate reading. Why then, do children become indifferent to reading or dislike reading?

Fredericks (1982) maintained that since attitudes develop early, the elementary school years are crucial. Data taken from a review of 110 research studies published between 1900 and 1977 (Davis, 1978), indicated that teachers need to be aware of students' attitudes when planning instruction, and that careful planning can help learners develop positive attitudes.

Chall and Snow (1982) maintained that a major problem confronting educators is the decline of the acquisition of further literacy beyond grade four. Kimmel (1983) maintained that listening to oral reading would promote reading interest and increase independent reading

for intermediate grade students, as it seemingly does for younger children.

Holbrook (1988) cited the 1979-89 National Assessment of Educational Progress (NAEP) which indicated a decline in reading proficiency and interest in reading beginning at grade 4. She suggested that reading aloud to students may be one solution to reverse that decline and promote further literacy.

Heimberger (1970) investigated the attitudes toward reading of 1093 students in an area on the east coast which closely resembled a national cross section. The research results indicated that children ages 8 years 6 months through 9 years 11 months of age tended to score higher, showing more of an interest in reading. This interest dropped off at 10 years 6 months through 11 years 6 months. This group had more low scores than any other group. The sample of children age 6 years 6 months through 7 years 6 months was too small to draw a conclusion.

Summary

Reading has been defined as a process of decoding and encoding words. Another component, attitude, is also present. Attitude was defined as a system of feelings related to reading which causes the learner to approach or avoid a reading situation. According to social scientists, attitudes develop as a combination of

intelligence, experiences, and environment. Social scientists also maintain that attitudes may be changed. Literature previously reviewed indicated that achievement in reading, gender, socioeconomic class status, tested intelligence, and grade placement may all be variables in attitude development.

Statement of the Problem

The purpose of the researcher was to investigate attitudes toward reading of students in grades 1 through 6.

Rationale and Importance

"In this nation of 42 million children, 2 out of 3 youngsters can't read, won't read, or hates to read" (Trelease, 1989 p.3). Some children cannot read because of lack of ability. Others do not read because of the lack of materials, but, as educators, we should be concerned with the phenomenon that some children simply do not like to read.

"Reading is a basic life skill, the cornerstone for a child's success in school, and indeed, throughout life" (Anderson et al., 1985, p.1). The world is quickly moving into a technological age in which an increasing number of occupations require vast amounts of reading far above that of functional literacy. Without the ability to read well, opportunities for personal fulfillment and job success inevitably will be lost.

Research is needed to discover possible factors which influence the attitudes toward reading. If these factors can be determined, then parents, educators, and counselors can be better prepared to help the student.

The results of the present study provided information pertaining to the following questions:

(1.) Is there an association between participation status in a reading program and attitudes toward reading?

(2.) Is there an association between achievement in reading for those who participated in a reading program and attitudes toward reading?

(3.) Is there an association between gender for those who participated in a reading program and attitudes toward reading?

(4.) Is there an association between socioeconomic class status for those who participated in a reading program and attitudes toward reading?

(5.) Is there an association between tested intelligence for those who participated in a reading program and attitudes toward reading?

(6.) Is there an association between grade placement for those who participated in a reading program and attitudes toward reading?

Composite Null Hypotheses

All hypotheses were tested at the .05 level of significance.

(1.) The differences among mean Elementary Reading Attitude Survey scores (pretest scores as a covariant measure) according to participation status in a reading program will not be statistically significant.

(2.) The differences among mean Elementary Reading Attitude Survey scores (pretest scores as a covariant measure) for those who participated in a reading program according to achievement in reading will not be statistically significant.

(3.) The differences among mean Elementary Reading Attitude Survey scores (pretest scores as a covariant measure) for those who participated in a reading program according to gender will not be statistically significant.

(4.) The differences among mean Elementary Reading Attitude Survey scores (pretest scores as a covariant measure) for those who participated in a reading program according to socioeconomic class status will not be statistically significant.

(5.) The differences among mean Elementary Reading Attitude Survey scores (pretest scores as a covariant measure) for those who participated in a reading program

according to intelligence test scores will not be statistically significant.

(6.) The differences among mean Elementary Reading Attitude Survey scores (pretest scores as a covariant measure) for those who participated in a reading program according to grade placement will not be statistically significant.

Independent Variables and Rationale

The following independent variables were investigated: participation status, achievement in reading, gender, socioeconomic class status, intelligence test scores, and grade placement. These independent variables were selected because:

(1.) there were few studies found that specifically focused on attitudes toward reading,

(2.) there was a lack of recent studies pertaining to the variables, and

(3.) literature pertaining to the variables contained inconclusive results.

Definition of Variables

Independent Variables:

The following independent variables were investigated:

1. participation status--two levels,
level 1-treatment, and
level 2-those who did not receive treatment;

2. achievement in reading,
 levels determined post hoc from the Comprehensive Test of Basic Skills (CTBS) achievement test;
3. gender--two levels,
 level 1-female, and
 level 2-male;
4. socioeconomic class status--3 levels,
 level 1-participation in a free lunch program,
 level 2-participation in a reduced lunch program, and
 level 3-participation in a regular lunch program;
5. intelligence test scores,
 levels determined post hoc from the Test of Cognitive Skills (TCS) cognitive skills test;
6. grade placement--6 levels,
 level 1-first,
 level 2-second,
 level 3-third,
 level 4-fourth,
 level 5-fifth, and
 level 6-sixth.

Dependent Variables

The dependent variables were scores from the following scales of the ERAS:
Attitudes Toward Recreational Reading (10 items, possible score 10-40),

Attitudes Toward Academic Reading, (10 items, possible score 10-40), and

Total, (Recreational and Academic, 20 items, possible score 20-80).

Covariant variables

The pretest scores from the following scales of the ERAS were employed as covariant measures:

Attitudes Toward Recreational Reading,

Attitudes Toward Academic Reading, and Total.

Limitations

The following conditions may have affected the outcome of this study:

- (1.) the sample was not random,
- (2.) all the subjects were from the same geographical area, and
- (3.) the information was self reported.

Methodology

Setting and Subjects

The setting for this research was two schools, grades 1-6, in Western Kansas. The study was conducted during the 1992-93 school year. The school with the treatment program had an enrollment of 111 students in grades K-12. It was situated in a town of approximately 400 people, while the school with the control group had an enrollment of 286 students in grades K-12. It was located in a town

of approximately 900 people. The main sources of income in both towns are farming and farm related businesses.

Subjects

The sample which received treatment included children in grades 1 through 6. All children who had complete information were employed in the study. The researcher taught reading and reading related activities to these children 45 minutes a day during the 1992-93 school year. The first grade consisted of a class of 3 boys and 2 girls. The second grade consisted of 5 boys and 3 girls. The third grade had 7 who participated; 4 boys and 3 girls. The fourth grade consisted of a class of 8; 4 boys and 4 girls. The fifth grade consisted of 7 girls and 2 boys, and the sixth grade consisted of 6 girls and 2 boys. The treatment group consisted of 45 students; 25 girls and 20 boys.

The control group was from a similar community and school. The first grade consisted of 10 girls and 8 boys. The second grade consisted of 12 girls and 7 boys. The third grade had 14 who participated, 5 girls and 7 boys. The fourth grade had 29 children; 18 girls and 11 boys which was divided into 2 separate classes. Thirteen girls and 6 boys participated in the fifth grade, and the sixth grade consisted of 10 girls and boys. The control group consisted of 111 students; 68 were girls and 43 were boys.

The total sample consisted of 156 students; 93 girls and 63 boys.

Instrumentation

Two instruments were employed. The instruments used were the Elementary Reading Attitude Survey (ERAS) which was selected as a measure of attitudes toward reading, and a demographic sheet.

The ERAS was a four point Likert-type scale measuring pupils' attitudes toward reading with each test item having the uniform beginning, "How do you feel...." The instrument consisted of 20 items, each related to one of two aspects of attitude: (a) Attitude toward Recreational Reading (10 items with a possible score of 10-40), or (b) Attitude toward Academic Reading (10 items with a possible score of 10-40), and Total (combined Academic and Recreational reading attitudes for a possible score of 20-80) [McKenna & Kear, 1990].

The ERAS had a pictorial format depicting Garfield, the cartoon cat. This cartoon character was readily recognized by most children in grades 1 through 6. Garfield was posed in 4 camera-ready poses ranging from very happy to very upset. Each item was then assigned 1,2,3, or 4 points, a "4" indicating the happiest Garfield. The scoring sheet was used to organize this process and record Recreational, Academic, and Total scores (Appendix E).

The demographic sheet was constructed by the researcher. It contained information pertaining to the 6 independent variables (Appendix G).

McKenna and Kear, (1990, p. 639) stated the following:

"Evidence of construct validity was gathered by several means. For the recreation subscale, students in the national norming group were separated into 2 groups: those with library cards and those without. Cardholders had significantly higher ($.001$) recreation scores ($M=30.0$) than non cardholders ($M=28.9$), evidence of the subscale's validity in that scores varied predictably with an outside criterion.

"A second test compared students who presently had books checked out from their school library versus students who did not. The comparison was limited to children whose teachers reported not requiring them to check out books. The means of the two groups varied significantly ($p < .001$), and children with books checked out scored higher ($M=29.2$) than those who had no books checked out ($M=27.3$) [McKenna & Kear, p.639].

"The validity of the academic subscale was tested by examining the relationship of scores to reading ability. Teachers categorized norm-group

children as having low, average, or high overall reading ability. Mean subscale scores of the high-ability readers ($M=27.7$) significantly exceeded the mean of low-ability readers ($M=27.0$, $p<.001$), evidence that scores were reflective of how the students truly felt about reading for academic purposes (McKenna & Kear).

"The relationship between the subscales was also investigated. It was hypothesized that children's attitudes toward recreational and academic reading would be moderately but not highly correlated. Facility with reading is likely to affect these two areas similarly, resulting in similar attitude scores. Nevertheless, it is easy to imagine children prone to read for pleasure but disenchanted with assigned reading and children academically engaged but without interest in reading outside of school. The intersubscale correlation coefficient was .64, which meant that just 41% of the variance in one set of scores could be accounted for by the other. It is reasonable to suggest that the two subscales, while related, also reflect dissimilar factors--a desired outcome.

"Cronbach's alpha, a statistic developed primarily to measure the internal consistency of attitude scales (Cronback, 1951, cited by McKenna &

Kear, p.638), was calculated at each grade level for both subscales and for the composite score. These coefficients ranged from .74 to .89 ..." (Appendix G).

Treatment (Reading Program)

The treatment group was taught by the researcher for 45 minutes a day. The classes met approximately 155 times during the 1992-93 school year (Appendix I).

Design

A pretest-posttest single-factor design was employed. The following independent variables were investigated: participation status in a reading program, achievement in reading, gender, socioeconomic status, intelligence test scores, and grade placement. The dependent variables were the following: Attitude Toward Recreational Reading, Attitude Toward Academic Reading, and Total. Six composite null hypotheses were tested. Each composite null hypothesis was tested employing single-factor analysis of covariance employing pretest scores as a covariant measure.

McMillan and Schumacher (1989) identified 10 threats to internal validity. The 10 threats to internal validity were dealt with in the following ways:

(1.) history--pretest scores were employed as covariant measures;

(2.) selection--all students who had pretest and posttest scores were employed;

- (3) statistical regression--did not pertain because the present study had no extreme subjects;
- (4) testing--pretest and posttests were administered according to standard procedures (Appendix D);
- (5) instrumentation--the same instrument was employed for pretest and posttest measures;
- (6) mortality--4 subjects who took the pretest did not participate because they moved out of the district;
- (7) maturation--pretest scores were employed as covariant measures;
- (8) diffusion of treatment--all treatment was administered by the researcher;
- (9) experimenter bias--pretest and posttests were administered according to standard procedures by the researcher and the researcher administered all treatment (Appendix E);
- (10) statistical conclusion--one mathematical assumption was violated (random sampling), and the researcher did not project beyond the statistical procedures employed.

MacMillan and Schumacher (1989) identified 2 threats to external validity which were dealt with in the following ways:

- (1) population external validity--the sample was not random; therefore, the results should be generalized only to similar groups; and

(2) ecological external validity-- pretests and posttests were administered according to standard procedures (Appendix E).

Data Collection Procedures

The researcher contacted Dr. Dennis J. Kear of Wichita State University, Wichita, Kansas. Dr. Kear developed the ERAS and granted the researcher permission to administer the instrument to elementary school students in western Kansas (Appendix A,B).

The researcher contacted 2 school superintendents personally in order to explain the study and gain permission to use the students in the study (Appendix C). The researcher followed the personal interview with a formal letter. A time was set for the pretests to be delivered and administered in the schools. For the control group, each homeroom teacher administered the ERAS, while the researcher administered the ERAS to the treatment group.

Each student was given the instrument. The teacher was familiarized with it, and with the purposes for administration. The teacher read the items aloud twice as the students marked their responses. The scoring sheet that accompanied the instrument was used by the researcher to organize this process and record Recreational, Academic, and Total scores. A data sheet was prepared for mainframe computer analysis at Fort Hays State University.

Research Procedures

The following steps were implemented:

- (1.) an ERIC, Psych Lit, and Educational Index search of literature was completed,
- (2.) request of articles from hometown library,
- (3.) instrument was selected,
- (4.) demographic sheet was developed,
- (5.) proposal was compiled,
- (6.) proposal was defended before thesis committee,
- (7.) data were collected,
- (8.) final document written,
- (9.) final document defended, and
- (10.) editing of the final document.

Data Analysis

The following were compiled:

- (1.) appropriate descriptive statistics,
- (2.) single-factor analysis of covariance,
- (3.) least squared test of means, and
- (4.) tests for homogeneity of regression.

Results

The purpose of the researcher was to investigate the attitudes towards reading of Western Kansas students in grades 1-6. The sample consisted of 156 students; 93 girls and 63 boys. The participants included 45 students; 25 girls and 20 boys who received treatment. The control group

was from a similar school and community and it contained 111 students; 66 girls and 45 boys. The independent variables were participation status, achievement in reading, gender, socioeconomic class status, intelligence test scores, and grade placement. The dependent variables were scores from the scales of the ERAS. They were: Attitudes Toward Recreational Reading, Attitudes Toward Academic Reading, and Total. Pretest scores from the scales of the ERAS were employed as covariant measures and included Attitudes Toward Recreational Reading, Attitudes Toward Academic Reading, and Total. Six composite null hypotheses were tested at the .05 level of significance. Each composite null hypothesis was tested employing a single-factor analysis of covariance with pretest scores as covariant measure. The result section was organized according to composite null hypotheses for ease of reference. Information pertaining to each hypothesis was presented in a common format for ease of comparison.

It was hypothesized in composite null hypothesis number 1 that the differences among mean Elementary Reading Attitude Survey scores (pretest scores as a covariant measure) according to participation status in a reading program would not be statistically significant. Information pertaining to composite null hypothesis number 1 was presented in Table 1. The following information was cited in Table 1: variables, group sizes, pretest means, pretest standard deviations,

posttest means, posttest standard deviations, posttest adjusted means, F values, and p levels.

Table 1: A Comparison of Adjusted Posttest Mean of the Elementary Reading Attitude Survey Scores (Pretest Scores As a Covariant Measure) According to Participation Status in a Reading Program Employing a Single-Factor Analysis of Covariance.

Variable	N	pretest M/S	posttest M/S	posttest Adj. M	F value	p level
<u>Attitudes Toward Academic Reading</u>						
<u>Participation Status</u>						
Treatment	45	23.9*/6.15	27.4/6.24	29.0 ^a	6.38	.0125
No treatment	111	29.1 /7.11	26.7/7.39	26.0 ^b		
<u>Homogeneity of Regression</u>						
					0.17	.6795
<u>Attitudes Toward Recreational Reading</u>						
<u>Participation Status</u>						
Treatment	45	28.5/6.22	28.1/6.90	30.1	1.08	.3000
No treatment	111	31.7/6.32	29.6/6.49	29.1		
<u>Homogeneity of Regression</u>						
					0.61	.4372
<u>Total</u>						
<u>Participation Status</u>						
Treatment	45	51.9/11.26	56.3/12.18	59.7 ^a	5.18	.0242
No treatment	111	60.8/14.41	56.4/12.98	55.0 ^b		
<u>Homogeneity of Regression</u>						
					0.53	.4685

*The larger the value, the more positive the attitude.
 ab Difference statistically significant at the .05 level according to the least squares mean test.

Two of the 3 p values were statistically significant at the .05 level; therefore, the null hypotheses for these comparisons were rejected. The significant comparisons were for the independent variable participation status in a reading program and the dependent variables Attitude Toward Academic Reading scores and Total reading scores. The results cited in Table 1 indicated that those who participated in the program had statistically higher adjusted post mean scores for Attitude Toward Academic Reading and Total reading than those who did not participate. The assumption of homogeneity of regression was met.

It was hypothesized in composite null hypothesis number 2 that the differences among mean Elementary Reading Attitude Survey scores (pretest scores as a covariant measure) for those who participated in a reading program according to achievement in reading would not be statistically significant. Information pertaining to composite null hypothesis number 2 was presented in Table 2. The following information was cited in Table 2: variables, group sizes, pretest means, pretest standard deviations, posttest means, posttest standard deviations, posttest adjusted means, F values, and p levels.

Table 2: A Comparison of Adjusted Posttest Mean of the Elementary Reading Attitude Survey Scores (Pretest Scores As a Covariant Measure) for Those Who Participated in a Reading Program According to Achievement in Reading Employing a Single-Factor Analysis of Covariance.

Variable	N	pretest M/S	posttest M/S	posttest M/S	F value	p level
<u>Attitudes Toward Academic Reading</u>						
<u>Achievement in Reading</u>						
Low	8	23.8*/7.55	28.4/4.75	28.5	0.94	.4292
Med	11	23.9 /5.09	26.5/6.96	26.5		
Med High	13	24.7 /7.69	26.2/7.19	25.8		
High	13	23.3 /4.89	28.7/5.74	29.1		
<u>Homogeneity of Regression</u>						
					0.83	.4890
<u>Attitudes Toward Recreational Reading</u>						
<u>Achievement in Reading</u>						
Low	8	29.3 /3.88	30.8/3.33	30.3	1.20	.3231
Med	11	25.4 /5.65	25.8/9.00	27.6		
Med High	13	28.3 /6.30	27.0/7.57	27.1		
High	13	30.8 /7.22	32.1/4.15	30.7		
<u>Homogeneity of Regression</u>						
					1.41	.2567
<u>Total</u>						
<u>Achievement in Reading</u>						
Low	8	53.0/ 9.60	59.1/ 6.77	58.5	1.19	.3260
Med	11	47.5/12.75	52.3/15.27	55.0		
Med High	13	53.0/12.55	53.4/13.98	52.7		
High	13	54.0/ 9.65	60.8/ 8.75	60.0		
<u>Homogeneity of Regression</u>						
					1.31	.2845

*The larger the value, the more positive the attitude.

None of the 3 p values were statistically significant at the .05 level; therefore, the null hypotheses for these comparisons were retained. The results cited in Table 2 indicated no association between achievement in reading and attitudes toward reading for those who participated in a reading program. The assumption of homogeneity of regression was met.

It was hypothesized in composite null hypothesis number 3 that the differences among mean Elementary Reading Attitude Survey scores (pretest scores as a covariate measure) for those who participated in a reading program according to gender would not be statistically significant. Information pertaining to composite null hypothesis number 3 was presented in Table 3. The following information was cited in Table 3: variables, group sizes, pretest standard deviations, posttest standard deviations, posttest adjusted means, F values, and p levels.

Table 3: A Comparison of Adjusted Posttest Mean of the Elementary Reading Attitude Survey Scores (Pretest Scores As a Covariant Measure) for Those Who Participated in a Reading Program According to Gender Employing a Single-Factor Analysis of Covariance.

Variable	N	pretest M/S	posttest M/S	posttest Adj.M	F value	p level
<u>Attitudes Toward Academic Reading</u>						
<u>Gender</u>						
Female	25	30.0*/5.76	30.0/6.01	27.6	0.12	.7308
Male	20	26.6 /7.47	27.4/6.85	27.1		
<u>Homogeneity of Regression</u>					0.00	.9459
<u>Attitudes Toward Recreational Reading</u>						
<u>Gender</u>						
Female	25	30.0 /5.76	30.0/6.01	29.0	0.02	.8874
Male	20	26.6 /6.37	27.5/7.80	28.7		
<u>Homogeneity of Regression</u>					0.18	.6711
<u>Total</u>						
<u>Gender</u>						
Female	25	53.5 /8.44	57.4/10.74	56.4	0.02	.8974
Male	20	50.0/14.01	54.8/13.92	56.0		
<u>Homogeneity of Regression</u>					0.00	.9886

*The larger the value, the more positive the attitude.

None of the 3 p values were statistically significant at the .05 level; therefore, the null hypotheses for these comparisons were retained. The results cited in Table 3 indicated no association between gender and attitudes towards reading for those who participated in a reading program. The assumption of homogeneity of regression was met.

It was hypothesized in composite null hypothesis number 4 that the differences among mean Elementary Reading Attitude Survey scores (pretest scores as a covariant measure) for those who participated in a reading program according to socioeconomic class status would not be statistically significant. Information pertaining to composite null hypothesis number 4 was presented in Table 4. The following information was cited in Table 4: variables, group sizes, pretest means, pretest standard deviations, posttest adjusted means, F values, and p levels.

Table 4: A Comparison of Adjusted Posttest Mean of the Elementary Reading Attitude Survey Scores (Pretest Scores As a Covariant Measure) for Those Who Participated in a Reading Program According to Socioeconomic Class Status Employing a Single-Factor Analysis of Covariance.

Variables	<u>N</u>	pretest <u>M/S</u>	posttest <u>M/S</u>	posttest adj. <u>M</u>	<u>F</u> value	<u>p</u> level
<u>Attitudes Toward Academic Reading</u>						
<u>Socioeconomic Class Status</u>						
1 **	30	28.1*/6.32	28.5/5.78	28.4 ^a	3.66	.0346
2	12	23.4 /6.64	26.4/5.95	26.7		
3	3	24.3 /3.21	20.3/8.96	20.1 ^b		
<u>Homogeneity of Regression</u>						
					0.44	.6477
<u>Attitude Toward Recreational Reading</u>						
<u>Socioeconomic Class Status</u>						
1	30	28.5/ 5.70	29.1/6.15	29.1	1.95	.1552
2	12	28.4/ 6.84	29.8/7.77	29.8		
3	3	28.7/11.01	23.0/10.4	22.9		
<u>Homogeneity of Regression</u>						
					0.64	.5323
<u>Total</u>						
<u>Socioeconomic Class Status</u>						
1	30	52.6/ 9.90	57.6/11.11	57.2 ^a	3.29	.0474
2	12	50.0/14.62	56.2/12.23	57.4 ^{a c}		
3	3	53.0/12.77	43.3/19.35	42.7 ^b		
<u>Homogeneity of Regression</u>						
					1.29	.2863

*The larger the value, the more positive the attitude.

** 1 =full price lunch, 2= reduced price lunch, 3=free lunch.

^{a b c} means with different alphabet symbols are statistically significant at the .05 level according to least squares means.

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Two of the 3 p values were statistically significant at the .05 level; therefore, the null hypotheses for these comparisons were rejected. The statistically significant comparisons were for the independent variable socioeconomic class status and the dependent variables Attitude Toward Academic Reading and Total. Information cited in Table 4 indicated the following:

1. high socioeconomic class status students (pretest scores as a covariant measure) who participated in the reading program had a significantly higher adjusted posttest mean Attitude Toward Academic Reading score than low socioeconomic class status students, and

2. high socioeconomic class status students (pretest scores as a covariant measure) who participated in the reading program had a significantly higher adjusted posttest mean attitude towards Total reading score than low socioeconomic class status students. The assumption of homogeneity of regression was met.

It was hypothesized in composite null hypothesis number 5 that the differences among mean Elementary Reading Attitude Survey scores (pretest scores as a covariant measure) for those who participated in a reading program according to intelligence test scores would not be statistically significant. Information pertaining to composite null hypothesis number 5 was cited in Table 5. The following information was cited in Table 5: variables, group sizes, pretest means, pretest standard

deviations, posttest means, posttest standard deviations, posttest adjusted means, F values, and p levels.

Table 5: A Comparison of Adjusted Posttest Mean of the Elementary Reading Attitude Survey Scores (Pretest Scores As a Covariant Measure) for Those Who Participated in a Reading Program According to Intelligence Test Scores Employing a Single-Factor Analysis of Covariance.

Variable	<u>N</u>	pretest <u>M/S</u>	posttest <u>M/S</u>	posttest Adj. <u>M</u>	<u>F</u> value	<u>p</u> level
<u>Attitudes Toward Academic Reading</u>						
<u>Intelligence Test Scores</u>						
High	3	22.7*/4.62	22.3/2.31	23.0	1.21	.3090
Average	32	24.1 /6.93	27.5/6.50	27.4		
Low	10	23.9 /3.78	28.5/5.81	28.5		
<u>Homogeneity of Regression</u>					0.15	.8616
<u>Attitudes Toward Recreational Reading</u>						
<u>Intelligence Test Scores</u>						
High	3	28.3 /6.81	24.7/5.86	24.8	0.84	.4397
Average	32	28.3 /6.61	29.0/7.12	29.2		
Low	10	29.3 /5.23	29.5/6.60	29.0		
<u>Homogeneity of Regression</u>					0.35	.7056
<u>Total</u>						
<u>Intelligence Test Scores</u>						
High	3	51.0/11.36	47.0/ 7.55	47.6	1.23	.3035
Average	32	51.6/12.74	56.6/12.53	56.8		
High	10	53.2/ 5.49	58.0/11.80	57.2		
<u>Homogeneity of Regression</u>					0.45	.6395

*The larger the value, the more positive the attitude.

None of the 3 p values were statistically significant at the .05 level; therefore, the null hypotheses for these comparisons were retained. The results cited in Table 5 indicated no association between intelligence test scores and attitudes toward reading for those who participated in a reading program. The assumption of homogeneity of regression was met.

It was hypothesized in composite null hypothesis number 6 that the differences among mean Elementary Reading Attitude Survey scores (pretest scores as a covariate measure) for those who participated in a reading program according to grade placement would not be statistically significant. Information pertaining to composite null hypothesis number 6 was presented in Table 6. The following information was cited in Table 6: variables, group sizes, pretest standard deviations, posttest standard deviations, posttest adjusted means, F values, and p levels.

Table 6: A Comparison of Adjusted Posttest Mean of the Elementary Reading Attitude Survey Scores (Pretest Scores As a Covariant Measure) for Those Who Participated in a Reading Program According to Grade Placement in a Reading Program Employing a Single-Factor Analysis of Covariance.

Variable	<u>N</u>	pretest <u>M/S</u>	posttest <u>M/S</u>	posttest Adj. <u>M</u>	F value	p level
<u>Attitudes Toward Academic Reading</u>						
<u>Grade Level</u>						
First	5	30.0*/6.93	31.8/5.93	29.3 ^a	4.34	.0002
Second	8	20.8 /7.83	29.3/6.39	29.3 ^a		
Third	7	24.4 /5.35	27.4/5.06	27.2 ^a		
Fourth	8	26.8 /7.15	31.9/4.97	30.7 ^a		
Fifth	9	22.0 /2.29	25.0/4.97	25.8 ^b		
Sixth	8	22.3 /3.54	20.9/5.00	21.6 ^b		
<u>Homogeneity of Regression</u>					0.60	.6968
<u>Attitudes Toward Recreational Reading</u>						
<u>Grade Level</u>						
First	5	31.0 /3.87	31.4/2.41	29.8 ^a	5.32	.0008
Second	8	26.8 /6.56	28.5/7.07	29.6 ^a		
Third	7	25.7 /4.96	31.1/3.80	32.9 ^a		
Fourth	8	31.0 /5.81	34.5/2.98	32.9 ^a		
Fifth	9	29.2 /7.45	25.6/9.83	25.1 ^b		
Sixth	8	27.8 /7.00	23.6/6.59	24.1 ^b		
<u>Homogeneity of Regression</u>					2.60	.0436
<u>Total</u>						
<u>Grade Level</u>						
First	5	61.0/ 7.97	63.2/ 5.76	58.3 ^a	4.44	.0028
Second	8	47.4/12.58	57.8/13.06	60.2 ^a		
Third	7	50.1/ 9.19	58.6/ 8.14	59.5 ^a		
Fourth	8	57.8/11.85	66.4/ 5.93	63.2 ^a		
Fifth	9	48.9/13.00	50.6/12.41	52.2 ^b		
Sixth	8	50.0/ 7.48	44.8/11.08	45.8 ^b		
<u>Homogeneity of Regression</u>					0.95	.4648

*The larger the value, the more positive the attitude.

^a Difference statistically significant at the .05 level according to the least squares mean test.

Three of the p values were statistically significant at the .05 level; therefore, the null hypotheses for these comparisons were rejected. The following comparisons were statistically significant:

1. the independent variable grade level and the dependent variable Attitudes Toward Academic Reading,
2. the independent variable grade level and the dependent variable Attitudes Toward Recreational Reading, and
3. the independent variable grade level and the dependent variable Total reading score.

The results cited in Table 6 indicated the following:

1. fifth and sixth grade students had statistically lower mean Attitude Toward Academic Reading scores than students in grades 1-4,
2. fifth and sixth grade students had statistically lower mean Attitude Toward Recreational Reading scores than students in grades 1-4, and
3. fifth and sixth grade students had statistically lower mean Total reading scores than students in grades 1-4.

The assumption of homogeneity of regression was met for the dependent variables Attitudes Toward Academic Reading and Total reading scores, but was not met for Attitudes Toward Recreational Reading.

Discussion

Summary

The purpose of the researcher was to investigate the attitudes towards reading of Western Kansas students in grades 1 through 6. The population was from 2 schools, grades 1-6 in Western Kansas. The sample consisted of 156 students; 93 girls and 63 boys.

The independent variables were participation status, achievement in reading, gender, socioeconomic class status, intelligence test scores, and grade placement. The dependent variables were scores from the scales of the ERAS. They were: Attitudes Toward Recreational Reading, Attitudes Toward Academic Reading, and Full Scale. Pretest scores from the scales of the ERAS were employed as covariant measures and included Attitudes Toward Recreational Reading, Attitudes Toward Academic Reading, and Total.

Six composite null hypotheses were tested at the .05 level of significance. A total of 18 comparisons were made. Of the 18 comparisons, 7 were statistically significant at the .05 level. The following main effects were statistically significant:

1. the independent variable participation status and the dependent variable Attitudes Toward Academic Reading,
2. the independent variable participation status and the dependent variable Total reading score,

3. the independent variable socioeconomic class status and the dependent variable Attitudes Toward Academic Reading,
4. the independent variable socioeconomic class status and Total reading score,
5. the independent variable grade level and Attitudes Toward Academic Reading,
6. the independent variable grade level and Attitudes Toward Recreational Reading, and
7. the independent variable grade level and Total reading score.

The results indicated the following:

1. students who participated in the reading program had a statistically higher adjusted posttest mean for Attitudes Toward Academic Reading score than students who did not participate,
2. students who participated in the reading program had a statistically higher adjusted posttest mean for Total reading score than students who did not participate,
3. high socioeconomic class status students had a statistically higher adjusted posttest mean Attitude Toward Academic Reading score than low socioeconomic status students,
4. high socioeconomic class status students had a statistically higher adjusted posttest mean Total reading score than low socioeconomic class status students,
5. fifth and sixth grade students had a statistically lower adjusted posttest mean Attitude Toward Academic Reading score than students in grades 1-4,

6. fifth and sixth grade students had a statistically lower adjusted posttest mean Attitude Toward Recreational Reading score than students in grades 1-4, and

7. fifth and sixth grade students had a statistically lower adjusted posttest mean Total reading score than students in grades 1-4.

Results and Related Literature

The literature reviewed contained generalizations pertaining to attitudes toward reading and participation in a reading program. One generalization was that participation in a reading program would indeed create positive attitude change in elementary age school children. The results of the research of Cosgrove (1988) and Bullen (1970) supported this generalization. The results of the present study also supported this finding.

The present researcher found limited studies available pertaining to the association between achievement and attitudes toward reading. Evidence has indicated that associations were occasionally found between higher achievement and more positive attitude. The results of the studies of Askov and Fischbach (1973) and Roettger (1980) indicated that there was no close association between achievement in reading and attitudes toward reading. The results of the present study supported the findings of these studies.

Another generalization is "That girls read better than boys..." (Holbrook, 1988 p. 574). The reviewed literature presented a variety of findings. Holbrook's (1988), findings in

cross-cultural studies indicated that cultural rather than biological factors are involved. Denny, Terry, and Weintraub (1966) found no noticeable differences between boys and girls on the affective category. Walberg and Tasi (1985) found a significant correlation between gender and reading. Girls scored higher and expressed more interest in reading than boys. The results of the present study supported the generalizations of Holbrook (1988) and Denny, Terry, and Weintraub (1966).

Alexander and Filler (1976) maintained that it is assumed that lower socioeconomic class status students will have more negative attitudes toward reading and learning than those from higher levels. Walberg and Tsai (1985) and Heimberger (1970) concluded the general opinion that children from lower socioeconomic levels had poorer attitudes toward reading than students from upper levels was not true in their samples. The results of this study supported the findings of Alexander and Filler. High socioeconomic class status individuals had a significantly higher positive attitude score toward academic reading and total reading than low socioeconomic class status individuals.

Another generalization projected by many educators was that the higher the intellectual level of the learner, the more positive his/her attitudes toward reading. Hansen's (1969) and Groff's (1962, cited in Alexander & Filler, 1976) studies indicated that tested intelligence was not a valid predictor of

reading attitude. The results of the present study supported these findings.

Research results of Chall and Snow (1982), Holbrook (1988), and Heimberger (1970), indicated that children began to decline in reading proficiency and reading attitude at grade 4. The results of the present study supported the research of Chall and Snow, Holbrook, and Heimberger. Fifth and sixth grade students recorded less positive attitudes toward reading in all 3 scales.

Generalizations

The results of the present study appear to support the following generalizations:

1. students who participated in this reading program had higher positive attitudes toward reading,
2. high socioeconomic class status students who participated in this reading program had higher positive attitudes toward reading than low socioeconomic class status students,
3. fifth and sixth grade students who participated in this reading program had less positive attitudes toward reading than students in grades 1-4,
4. there was no association between gender and attitude toward reading for those who participated in this reading program, and
6. there was no association between tested intelligence and attitudes toward reading for those who participated in this reading program.

Recommendations

The results of the present study appear to support the following recommendations:

1. the study should be replicated with a larger random sample,
2. the study should be replicated in schools of varying sizes,
3. the study should be replicated using additional or different independent variables,
4. the study should be replicated including all grade levels and different organizational structures, and
5. the study should be replicated employing a different experimental design.

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APPENDIX A
Letter Requesting Permission
to Use Testing Instrument
(ERAS)

Box 518
Sharon Spgs. KS
67758
Aug. 22, 1992

Dear Dr. Kear,

I am a graduate student at FHSU and I am writing my thesis about attitudes and motivation towards reading in children. In my research, I have run across many articles by Anderson, Estes, Heathington, and others, but the article written by you and published in The Reading Teacher in May 1990 was by far the most current and informative for my needs.

The "user friendly" Garfield test is very interesting to me. I appreciate its simplicity and its interest-catching appeal. I need your permission to use this test in my thesis project. I would appreciate any additional information or help you can give me in this subject area.

Thank you,
Navene Rains
Navene Rains

APPENDIX B
Letter Granting Permission
to Use Testing Instrument
(ERAS)



The
Wichita
State University

Department of Curriculum and Instruction

January 8, 1993

Navene Rains
Box 518
Sharon Springs, KS 67758

Dear Navene:

I have uncovered a request from you to use the Elementary Reading Attitude Survey in your thesis research. We have had a number of such requests and have tried to respond in a timely fashion. While my record keeping is usually good, I do not have a record of responding to your request. Therefore, I'm responding now. If this is duplication, ignore it.

The directions on the survey state that the entire survey must be used. The Garfield people do not want the garfield illustrations separated. Other than that restriction, you may use the survey for your research.

Sincerely,

Dennis J. Kear

APPENDIX C
Letters Requesting Permission
to Use Students in Research

Box 518
Sharon Spgs, KS 67758
September 10, 1992

Mr. Allaire Homburg
Superintendent of Schools
USD 242
Weskan, KS 67762

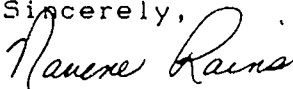
Dear Mr. Homburg,

I am writing this letter to ask your permission to use the students I teach in grades one through six in an experimental study. I will be measuring their attitudes toward reading and will attempt to construct a reading program that will promote positive attitudes toward reading. The main components of the treatment will be reading aloud, motivational activities, time for individual reading, and literature-based activities. Through my research, I am hoping to discover some factors that contribute to good or poor reading attitudes as expressed by the students. My hope is that better understanding of reading attitudes could bring about changes which will enable students to read more, read better, become lifelong readers, and thus be more productive students and adults.

Since you know well my qualifications, I won't list them, but if you have any questions or reservations about this work, you may call either or both of these men:

Masters Advisor
Dr. Tom Guss
Rarick 230
600 Park St.
Hays, KS 67601
Ph. 913/628-4520

Thesis Advisor
Dr. Bill Daley
Rarick Hall
600 Park St.
Hays, KS 67601
Ph. 913/628-5898

Sincerely,

Navene Rains

Box 518
 Sharon Spgs. KS 67758
 September 10, 1992

Mr. Fred Staker
 Superintendent of Schools
 USD 241
 Sharon Springs, KS 67758

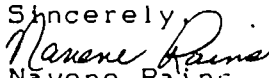
Dear Mr. Staker:

My name is Navene Rains and I am working toward an MS degree in guidance counseling from Fort Hays State University. I am writing this letter to ask your assistance in researching my thesis topic which is Reading Attitudes of Western Kansas Students in Grades One Through Six. The instrument I plan to use takes about 10 minutes to administer, and could be administered by myself or a homeroom teacher. I would like to use your students as a non-treatment group, while the students I teach will receive treatment as to affective growth in reading. Through my research, I am hoping to discover some factors that contribute to good or poor reading attitudes as expressed by elementary school students. My hope is that better understanding of reading attitudes could bring about changes which will enable students to read more, read better, and thus be more productive adults.

I have taught reading in USD #242, Weskan, Kansas for three years. Before teaching, I raised a family, and was active in many activities for the youth. I taught 4-H classes, Sunday School classes, and Scouting. I feel that I am conscientious and will take care to complete my research in a professional, efficient manner. If you would like to contact references concerning my work, please call any or all of the following men:

Super. of Schools	Masters Adv.	Thesis Adv.
Allaire Homburg	Dr. Tom Guss	Dr. Bill Daley
Box 155	Rarick 230	Rarick Hall
Weskan, KS	600 Park St.	600 Park St.
67762	Hays, KS 67601	Hays, KS 67601
Ph. 913/943-5417	Ph. 913/628-4520	Ph.
913/628-5898		

If I receive your permission to conduct my study, I will need to administer or have administered, the Elementary Reading Attitude Survey during the first week of October, and again as a post test during the first week of May. I can and prefer to use the information anonymously if a coding system is used.

Sincerely,

 Navene Rains

APPENDIX D
Letters Granting Permission to
Use Students in Research

Box 518
Sharon Spgs, KS 67758
September 10, 1992

Mr. Allaire Homburg
Superintendent of Schools
USD 242
Weskan, KS 67762

Dear Mr. Homburg,

I am writing this letter to ask your permission to use the students I teach in grades one through six in an experimental study. I will be measuring their attitudes toward reading and will attempt to construct a reading program that will promote positive attitudes toward reading. The main components of the treatment will be reading aloud, motivational activities, time for individual reading, and literature-based activities. Through my research, I am hoping to discover some factors that contribute to good or poor reading attitudes as expressed by the students. My hope is that better understanding of reading attitudes could bring about changes which will enable students to read more, read better, become lifelong readers, and thus be more productive students and adults.

Since you know well my qualifications, I won't list them, but if you have any questions or reservations about this work, you may call either or both of these men:

Masters Advisor
Dr. Tom Guss
Rarick 230
600 Park St.
Hays, KS 67601
Ph. 913/628-4520

Thesis Advisor
Dr. Bill Daley
Rarick Hall
600 Park St.
Hays, KS 67601
Ph. 913/628-5898

Sincerely,

Navene Rains
Navene Rains

Allaire Homburg

Wallace County Schools USD. No. 241

P.O. BOX 580
SHARON SPRINGS, KANSAS 67758
Phone: 913-852-4252

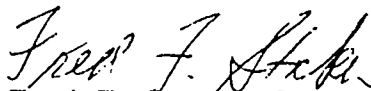
September 11, 1992

Navene Rains
Box 518
Sharon Springs, KS 67758

Dear Mrs. Rains:

This is to acknowledge receipt of your request to administer tests to students in Sharon Springs Grade School as part of your Master's thesis. Permission is hereby granted for this project.

Sincerely,



















Fred F. Staker, Superintendent
Unified School District No. 241

APPENDIX E
Elementary Reading Attitude Survey
(ERAS)

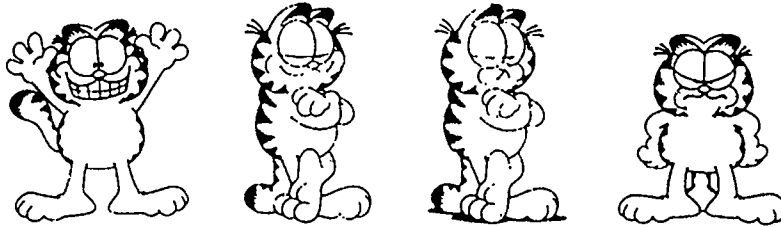
ELEMENTARY READING ATTITUDE SURVEY 66

School _____ Grade _____ Name _____

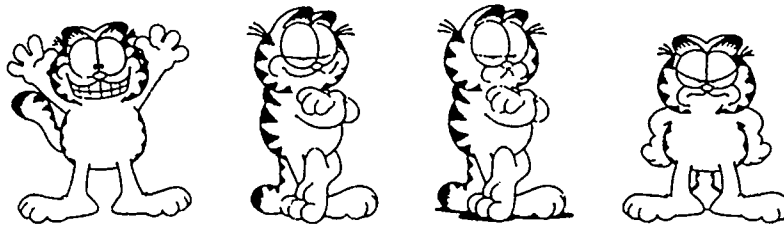
GARFIELD © 1978 United Features Syndicate, Inc.	1. How do you feel when you read a book on a rainy Saturday?				
	2. How do you feel when you read a book in school during free time?				
	3. How do you feel about reading for fun at home?				
	4. How do you feel about getting a book for a present?				

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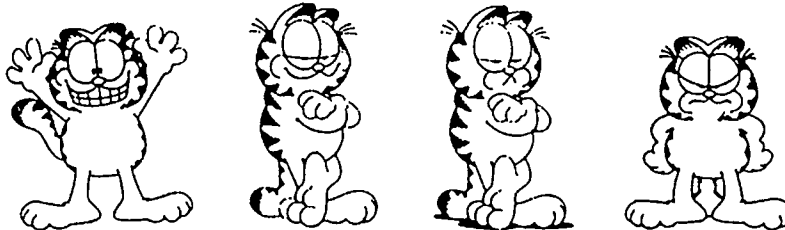
5. How do you feel about spending free time reading?



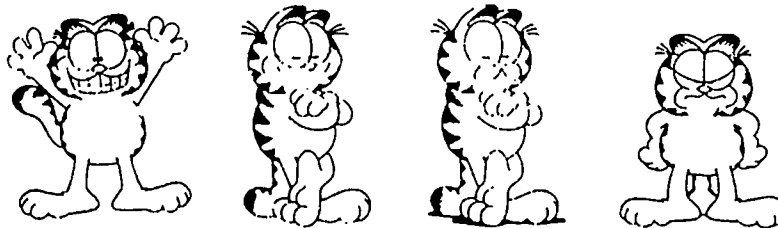
6. How do you feel about starting a new book?



7. How do you feel about reading during summer vacation?



8. How do you feel about reading instead of playing?



GARFIELD © 1978 United Feature Syndicate, Inc.

9. How do you feel about going to a bookstore?



10. How do you feel about reading different kinds of books?



11. How do you feel when the teacher asks you questions about what you read?



12. How do you feel about doing reading workbook pages and worksheets?

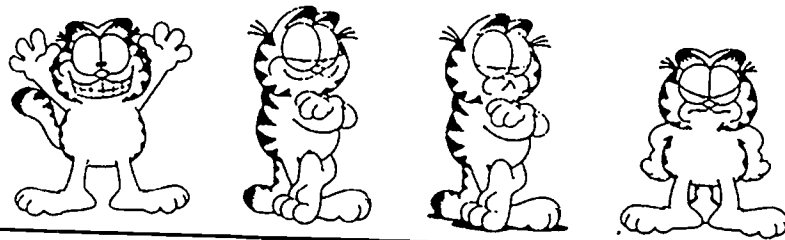


13. How do you feel about reading in school?

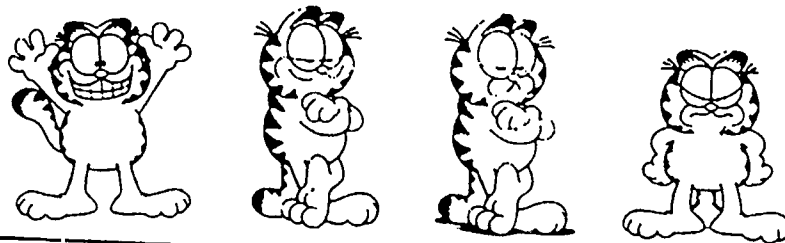
GARFIELD © 1978 United Feature Syndicate, Inc.



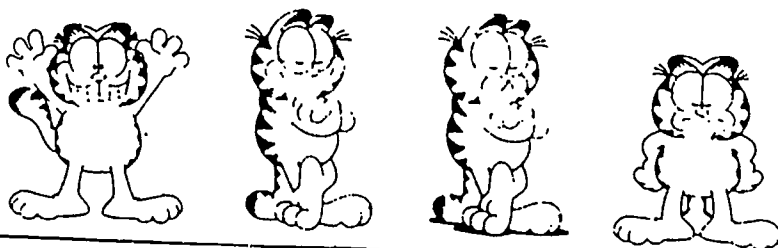
14. How do you feel about reading your school books?



15. How do you feel about learning from a book?

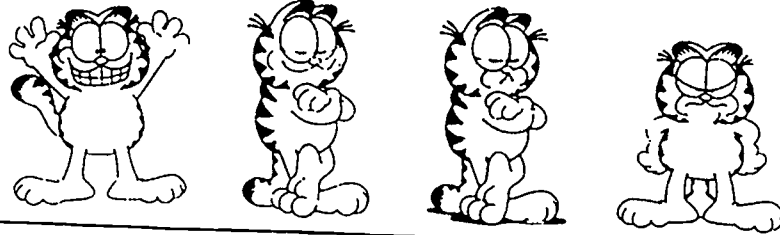


16. How do you feel when it's time for reading class?

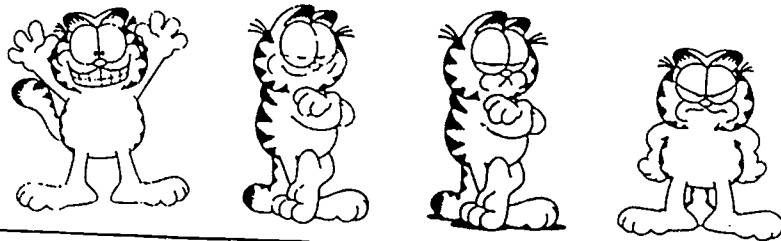


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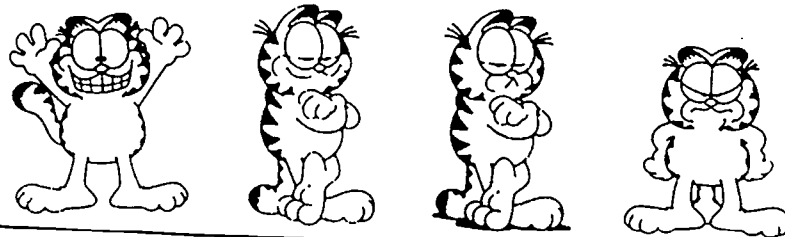
17. How do you feel about the stories you read in reading class?



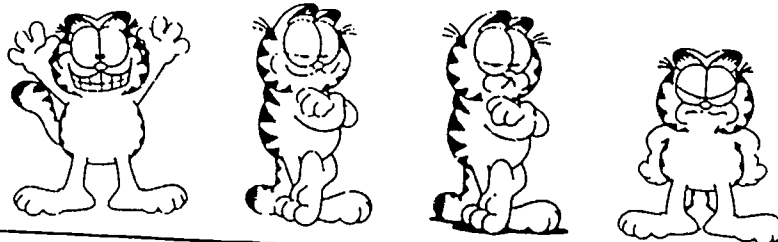
18. How do you feel when you read out loud in class?



19. How do you feel about using a dictionary?



20. How do you feel about taking a reading test?



Elementary Reading Attitude Survey Scoring sheet

Student name _____
 Teacher _____
 Grade _____ Administration date _____

Scoring guide	
4 points	Happiest Garfield
3 points	Slightly smiling Garfield
2 points	Mildly upset Garfield
1 point	Very upset Garfield

Recreational reading

- 1. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____
- 6. _____
- 7. _____
- 8. _____
- 9. _____
- 10. _____

Raw score: _____

Academic reading

- 11. _____
- 12. _____
- 13. _____
- 14. _____
- 15. _____
- 16. _____
- 17. _____
- 18. _____
- 19. _____
- 20. _____

Raw score: _____

Full scale raw score (Recreational + Academic): _____

Percentile ranks

Recreational

Academic

Full scale

APPENDIX F
Instructions for Administering the
ERAS

Elementary Reading Attitude Survey

Directions for use

The Elementary Reading Attitude Survey provides a quick indication of student attitudes toward reading. It consists of 20 items and can be administered to an entire classroom in about 10 minutes. Each item presents a brief, simply-worded statement about reading, followed by four pictures of Garfield. Each pose is designed to depict a different emotional state, ranging from very positive to very negative.

Administration

Begin by telling students that you wish to find out how they feel about reading. Emphasize that this is *not* a test and that there are no "right" answers. Encourage sincerity.

Distribute the survey forms and, if you wish to monitor the attitudes of specific students, ask them to write their names in the space at the top. Hold up a copy of the survey so that the students can see the first page. Point to the picture of Garfield at the far left of the first item. Ask the students to look at this same picture on their own survey form. Discuss with them the mood Garfield seems to be in (very happy). Then move to the next picture and again discuss Garfield's mood (this time, a *little* happy). In the same way, move to the third and fourth pictures and talk about Garfield's moods—a little upset and very upset. It is helpful to point out the position of Garfield's *mouth*, especially in the middle two figures.

Explain that together you will read some statements about reading and that the students should think about how they feel about each statement. They should then circle the picture of Garfield that is closest to their own feelings. (Emphasize that the students should respond according to their own feelings, not as Garfield might respond.) Read each item aloud slowly and distinctly; then read it a second time while students are thinking. Be sure to read the item *number* and to remind students of page numbers when new pages are reached.

Scoring

To score the survey, count four points for each leftmost (happiest) Garfield circled, three for each slightly smiling Garfield, two for each mildly upset Garfield, and one point for each very upset (rightmost) Garfield. Three scores for each student can be obtained: the total for the first 10 items, the total for the second 10, and a composite total. The first half of the survey relates to attitude toward recreational reading; the second half relates to attitude toward academic aspects of reading.

Interpretation

You can interpret scores in two ways. One is to note informally where the score falls in regard to the four nodes of the scale. A total score of 50, for example, would fall about mid-way on the scale, between the slightly happy and slightly upset figures, therefore indicating a relatively indifferent overall attitude toward reading. The other approach is more formal. It involves converting the raw scores into percentile ranks by means of Table 1. Be sure to use the norms for the right grade level and to note the column headings (Rec = recreational reading, Aca = academic reading, Tot = total score). If you wish to determine the average percentile rank for your class, average the raw scores first; then use the table to locate the percentile rank corresponding to the raw score mean. Percentile ranks cannot be averaged directly.

APPENDIX G
Validity and Reliability
(ERAS)

37	86	85	2	88	89	2	90	93	3	92	95	4	94	98	7	95	99	-
36	81	79	2	84	85	2	87	91	2	88	93	3	91	96	6	92	98	7
35	77	75	1	79	81	1	81	88	2	84	90	3	87	95	4	88	97	6
34	72	69	1	74	78	1	75	83	2	78	87	2	82	93	4	83	95	5
33	65	63	1	68	73	1	69	79	1	72	83	2	77	90	3	79	93	4
32	58	58	1	62	67	1	63	74	1	66	79	1	71	86	3	74	91	3
31	52	53	1	56	62	1	57	59	0	60	75	1	65	82	2	69	87	2
30	44	49	1	50	57	0	51	63	0	54	70	1	59	77	1	63	82	2
29	38	44	0	44	51	0	45	58	0	47	64	1	53	71	1	58	78	1
28	32	39	0	37	46	0	38	52	0	41	58	1	48	66	1	51	73	1
27	26	34	0	31	41	0	33	47	0	35	52	1	42	60	1	46	67	1
26	21	30	0	25	37	0	26	41	0	29	48	0	36	54	0	39	60	1
25	17	25	0	20	32	0	21	36	0	23	40	0	30	49	0	34	54	0
24	12	21	0	15	27	0	17	31	0	19	35	0	25	42	0	29	49	0
23	9	18	0	11	23	0	13	26	0	14	29	0	20	37	0	24	42	0
22	7	14	0	8	18	0	9	22	0	11	25	0	16	31	0	19	36	0
21	5	11	0	6	15	0	6	18	0	9	20	0	13	26	0	15	30	0
20	4	9	0	4	11	0	5	14	0	6	16	0	10	21	0	12	24	0
19	2	7		2	8		3	11		5	13		7	17		10	20	
18	2	5		2	6		2	8		3	9		6	13		8	15	
17	1	4		1	5		1	5		2	7		4	9		6	11	
16	1	3		1	3		1	4		2	5		3	6		4	8	
15	0	2		0	2		0	3		1	3		2	4		3	6	
14	0	2		0	1		0	1		1	2		1	2		1	3	
13	0	1		0	1		0	1		0	1		1	2		1	2	
12	0	1		0	0		0	0		0	1		0	1		0	1	
11	0	0		0	0		0	0		0	0		0	0		0	0	
10	0	0		0	0		0	0		0	0		0	0		0	0	

Reliability

Cronbach's alpha, a statistic developed primarily to measure the internal consistency of attitude scales (Cronbach, 1951), was calculated at each grade level for both subscales and for the composite score. Those coefficients ranged from .74 to .89 and are presented in Table 2.

It is interesting that with only two exceptions, coefficients were .80 or higher. These were for the recreational subscale at Grades 1 and 2. It is possible that the stability of young children's attitudes toward leisure reading grows with their decoding ability and familiarity with reading as a pastime.

Table 2
Descriptive statistics and internal consistency measures

Grade	N	Recreational Subscale				Academic Subscale				Full Scale (Total)			
		M	SD	S _e M	Alpha ^a	M	SD	S _e M	Alpha	M	SD	S _e M	Alpha
1	2,518	31.0	5.7	2.9	.74	30.1	6.8	3.0	.81	61.0	11.4	4.1	.87
2	2,974	30.3	5.7	2.7	.78	28.8	6.7	2.9	.81	59.1	11.4	3.9	.88
3	3,151	30.0	5.6	2.5	.80	27.8	6.4	2.8	.81	57.8	10.9	3.8	.88
4	3,679	29.5	5.8	2.4	.83	26.9	6.3	2.8	.83	56.5	11.0	3.6	.89
5	3,374	28.5	6.1	2.3	.86	25.8	6.0	2.5	.82	54.1	10.8	3.6	.89
6	2,442	27.9	6.2	2.2	.87	24.7	5.8	2.5	.81	52.5	10.6	3.5	.89
All	18,138	29.5	5.9	2.5	.82	27.3	6.6	2.7	.83	56.8	11.3	3.7	.89

^aCronbach's alpha (Cronbach, 1951).

Validity

Evidence of construct validity was gathered by several means. For the recreational subscale, students in the national norming group were asked (a) whether a public library was available to them and (b) whether they currently had a library card. Those to whom libraries were available were separated into two groups (those with and without cards) and their recreational scores were compared. Cardholders had significantly higher ($p < .001$) recreational scores ($M = 30.0$) than noncardholders ($M = 28.9$), evidence of the subscale's validity in that scores varied predictably with an outside criterion.

A second test compared students who presently had books checked out from their school library versus students who did not. The comparison was limited to children whose teachers reported not requiring them to check out books. The means of the two groups varied significantly ($p < .001$), and children with books checked out scored higher ($M = 29.2$) than those who had no books checked out ($M = 27.3$).

A further test of the recreational subscale compared students who reported watching an average of less than 1 hour of television per night with students who reported watching more than 2 hours per night. The recreational mean for the low televiewing group (31.5) significantly exceeded ($p < .001$) the mean of the heavy televiewing group (28.6). Thus, the amount of television watched varied inversely with children's attitudes toward recreational reading.

The validity of the academic subscale was tested by examining the relationship of scores to reading ability. Teachers categorized norm-group children as having low, average, or high overall reading ability. Mean subscale scores of the high-ability readers ($M = 27.7$) significantly exceeded the mean of low-ability readers ($M = 27.0$, $p < .001$), evidence that scores were reflective of how the students truly felt about reading for academic purposes.

The relationship between the subscales was also investigated. It was hypothesized that children's attitudes toward recreational and academic reading would be moderately but not highly correlated. Facility with reading is likely to affect these two areas similarly, resulting in similar attitude scores. Nevertheless, it is easy to imagine children prone to read for pleasure but disenchanted with assigned reading and children academically engaged but without interest in reading outside of school. The intersubscale correlation coefficient was .64, which meant that just 41% of the variance in one set of scores could be accounted for by the other. It is reasonable to suggest that the two subscales, while related, also reflect dissimilar factors—a desired outcome.

To tell more precisely whether the traits measured by the survey corresponded to the two subscales, factor analyses were conducted. Both used the unweighted least squares method of extraction and a varimax rotation. The first analysis permitted factors to be identified liberally (using a limit equal to the smallest eigenvalue greater than 1). Three factors were identified. Of the 10 items comprising the academic subscale, 9 loaded predominantly on a single factor while the 10th (item 13) loaded nearly equally on all three factors. A second factor was dominated by 7 items of the recreational subscale, while 3 of the recreational items (6, 9, and 10) loaded principally on a third factor. These items did, however, load more heavily on the second (recreational) factor than on the first (academic). A second analysis constrained the identification of factors to two. This time, with one exception, all items loaded cleanly on factors associated with the two subscales. The exception was item 13, which could have been interpreted as a recreational item and thus apparently involved a slight ambiguity. Taken together, the factor analyses produced evidence extremely supportive of the claim that the survey's two subscales reflect discrete aspects of reading attitude.

APPENDIX H
Demographic Sheets

Demographic Sheet
Control Group

Name _____

Sex: F _____, M _____

Classification: First, Second, Third, Fourth, Fifth, Sixth

ERAS Pretest Scores:

Recreational Reading..... _____

Academic Reading..... _____

Total Raw Score..... _____

ERAS Posttest Scores:

Recreational Reading..... _____

Academic Reading..... _____

Total Raw Score..... _____

Demographic Sheet
Treatment Group

Name _____

Sex: F _____, M _____

Classification: First, Second, Third, Fourth, Fifth, Sixth

Socio-economic class status:

Full price lunch, Reduced price lunch, Free lunch

ERAS Pretest Scores:

Recreational Reading..... _____

Academic Reading..... _____

Total Raw Score..... _____

ERAS Posttest ScoresL:

Recreational Reading..... _____

Academic Reading..... _____

Total Raw Score..... _____

CTBS Total Reading Score (Spring 1992)..... _____

CTBS Total Reading Score (Spring 1993)..... _____

TCS Score (Spring 1992)..... _____

TCS Score (Spring 1993)..... _____

APPENDIX I
Treatment
(Reading Program)

Treatment

"The single most important activity for building the knowledge required for eventual success in reading is reading aloud to children" (Anderson et al., 1985, p. 23).

The second phase of a reading lesson is the need for silent and oral reading. Frequent opportunities to read aloud make sense for the beginning reader, but it should not be discarded once children are fairly skilled readers. Opportunities to read aloud and listen to others read aloud are features of the literate environment, whatever the reader's level (Anderson et al., 1985).

Anderson (et al., 1985) maintained that "reading requires motivation" (p.14). "Teachers whose classes are motivated are described as business-like but supportive and friendly. Children taught by teachers rated as having these traits make larger-than-average gains on reading achievement test" (p.15).

The general rationale for Sustained Silent Reading (SSR) programs is that they will promote achievement, attitudes and interests in reading by providing time for students to enjoy reading. While research findings on the effect on reading achievement are mixed, the consensus is that SSR is useful in developing reading maturity and a more positive attitude towards reading (Sadoski, 1980).

Roettger (1980) found that fifth and sixth grade students would be encouraged to read if time would be allocated for silent reading whether the skill pages were finished or not, teachers should talk to the students about their hobbies and interests and help them find interesting books, and teachers should tell them about interesting books they are reading.

From the results of the studies listed above, and from the results of similar studies, the researcher established a reading program based on these components: oral reading by the teacher, a literature-based reading program (use of novels in the classroom for silent and oral reading according to interest and ability of the group), SSR, and motivational activities.

The researcher began each 45 minute class period by reading aloud to the students for approximately 10 minutes. The remaining time was spent in oral reading of the class novels, or in reading related activities such as story writing, poetry, story structure, or author studies. The motivational tool was the Accelerated Reader and prizes that could be "bought" with points earned on the Accelerated Reader.

The Accelerated Reader was a computerized reading program that scored and recorded students' progress. To use the Accelerated Reader, a student read a book from the program's acclaimed book list—a title from great

literature, children's classics, or award-winning contemporary books. The student then tested his/her knowledge and comprehension of the book by answering multiple choice questions on a computer. The computer immediately scored and presented the students with the results. The program offered several built-in motivators or benefits: students liked to use the computer, they enjoyed seeing the results of the test and their progress, and they enjoyed the challenge of the test. Careful, critical reading was necessary to pass an Accelerated Reader test.

The first 2 months of the treatment began with moderate success. All students were responding positively to the oral reading by the researcher, and were enjoying the novels read and studied during classtime, but independent reading was being done mainly by those who had always read. The researcher evaluated the program, and discovered that the main problem for the children was the difficulty in finding the right books for the Accelerated Reader.

The researcher visited the librarian and the librarian ordered more books, and placed them in a more accessible place. In addition, the researcher purchased paperback books for the classroom, and programmed 150 tests into the computer that the students were interested

in. When the books became easily available, especially in the classroom, the students began reading vigorously. Students, who, in the past, had only looked at the pictures, now began to read the words. The Accelerated Reader, the scores, prizes, and points began to work.

After a time, the students began to want free time for SSR during classtime. The researcher continued the read aloud time, but shortened the literature study and oral reading by the class, and left approximately 10 minutes at the end of each period for SSR. This was necessary for 2 reasons: the children needed time for silent reading, and time was needed for the students to alternately go to the computer and take computer tests.

The researcher observed several trends at this point: all students were participating in the program, almost all students had developed a habit of carrying a novel from class to class, younger readers began looking for longer books, and students began running into the classroom for a "book". Many students began to find the researcher during extra-curricular school activities to get permission to go to the classroom to "read and take computer tests". Prizes were the motivators at the beginning of the treatment plan, but while they were appreciated, the students became excited about their reading accomplishments. The students received computer

print-outs of their reading activity. As the lists grew longer, the students could see their success, and in this case, success bred success. The more they read, the more they wanted to read.