

THE READING APPERCEPTION TEST: AN  
EXPLORATION OF ATTITUDES  
TOWARD READING

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## CHAPTER I

### THE PROBLEM

#### Introduction

Numerous authorities in the area of reading have cited the importance of attitudes toward reading to reading performance. Specific attention has been focused on the necessity of coping with negative attitudes toward reading as a first step in remediation. However, the specific relationship of attitudes toward reading and levels of reading ability has not been intensively explored. In addition, the relationship between attitudes toward reading and actual behavior within the reading situation has not been investigated.

There appeared to be an implicit assumption that attitudes towards reading operate in an either/or fashion, negative or positive. There also appeared to be an implicit assumption in the discussion of attitudes towards reading, that attitudes towards reading are independent of the situation, that is, the specific psychological, social physical environment in which reading is performed. Such an assumption has not been held for the reading material itself, as readability and interest are taken into account.

#### Statement of the Problem

This study compared attitudes of average and severely disabled readers toward reading; in addition, attitudes toward reading were

compared to behavior observable in the reading situation. Attitudes toward reading were explored in several different situations, and the components of these attitudes as well as the intensity of these attitudes were investigated. The study attempted to explore the following questions:

1. Are there significant differences in attitudes toward reading between average and severely disabled readers?
- 2A. Are there significant differences in attitudes toward reading between severely disabled readers in grades 1-3 and grades 4-6?
- 2B. Are there significant differences in attitudes toward reading between average readers in grades 1-3 and grades 4-6?

The following questions were explored in terms of different reading situations:

- 3A. Are there significant differences between attitudes toward reading in different reading situations?
- 3B. Are there significant differences between average and severely disabled readers in different reading situations?

The following questions were explored in terms of attitudes toward reading and behavior in a reading situation:

- 4A. Are there significant relationships between attitudes toward reading and reading behavior in a reading group?
- 4B. Are there significant differences between the relationships of attitudes toward reading and reading behavior in average and severely disabled readers?

The following questions were explored in reference to types of behaviors in a group reading situation:

- 5A. Are there significant differences between average and severely disabled readers in terms of approach behaviors in an oral reading situation?
- 5B. Are there significant differences between average and severely disabled readers in terms of avoidance behaviors in an oral reading situation?
- 5C. Are there significant relationships between approach and avoidance behaviors in the oral reading situation?
- 5D. Are there significant differences between average and severely disabled readers approach behaviors in the silent reading situation?
- 5E. Are there significant differences between average and severely disabled readers in terms of avoidance behaviors in the silent reading situation?
- 5F. Are there significant relationships between avoidance and approach behaviors in the silent reading situation?
- 5G. Are there significant relationships between approach behaviors in the silent and oral reading situation; and between avoidance behaviors in the silent and oral reading situation?
- 5H. Are there significant differences between average and severely disabled readers in terms of anxiety in the oral reading situation?

The following questions were explored in reference to the internal characteristics of attitudes toward reading:

- 6. Are there significant relationships among the internal components of attitudes toward reading?

## Need for Study

The importance of attitudes toward reading and attitudinal change has been cited by many authors. Sherman (1949) stated that a prerequisite to remedial reading is the reduction of the individual's negative attitude toward reading and the reduction of his own feelings of inadequacy as a reader. Burfield (1949) categorically stated that before any substantial progress can be made in reading, negative attitudes must be alleviated. If the child's negative attitudes are not dealt with, repression and avoidance of reading may result (Kunst, 1949). These authorities did not, however, suggest how to measure attitudes, nor did they investigate empirically the importance of reading attitudes toward reading. Although the literature is replete with investigations of the different factors associated with reading disability, research on the importance of attitudes toward reading has been lacking. This study attempted to explore this new frontier.

## Definition of Terms

In order to measure attitudes toward reading, a highly structured projective instrument was constructed. Attitudes were conceptualized as having three components: cognitive, affective and fantasy. Attitudes were then categorized in terms of approach and avoidance statements. Approach attitudes were defined as verbal statements which move the child psychologically toward the reading situation. Avoidance attitudes were defined as verbal statements which move the child away from the reading situation. The Reading Behavior Rating Scale was constructed for this study to measure behavior in the reading situation. (See Appendix A) Approach behavior was defined as behavior that moves

the child toward the reading situation as indicated by scores on the Reading Behavior Rating Scale. Avoidance behavior is defined as behavior that moves the child away from the reading situation, as indicated by scores on the Reading Behavior Rating Scale.

In terms of attitudes, the reading situations were represented by different visual and verbal stimuli. In the case of behavior, the reading situation was either oral reading or silent reading in a group. For the purposes of this study, the investigator devised the following reading classifications:

Average Reader was defined as a child in the first to third grade whose grade equivalent score on the Gates-MacGinitie Reading Test was less than five months above or below his Reading Expectancy, or a child in the fourth to sixth grade whose grade equivalent score was less than one year above or below his Reading Expectancy.

Severely Disabled Reader was defined as a child in the first to third grade whose grade equivalent on the Gates-MacGinitie Reading Test was one or more years below his Reading Expectancy, or a child in the fourth to sixth grade whose grade equivalent score was two or more years below his Reading Expectancy.

Reading Expectancy was defined as the level at which a child may be expected to read in terms of his mental ability and opportunity for learning. In this study, the Bond Formula was used to compute reading expectancy:  $\left( \text{Years in school} \times \frac{I.Q.}{100} \right) + 1.00$  (Bond and Tinker, 1967).

#### Delimitations

Scope of the Study: This investigation included the testing and analysis of test scores of students who participated in the Summer

Reading Program at the Oklahoma State University Reading Center. One hundred and ten students were randomly selected from this population and tested. Females were eliminated because of their small number; a number of other subjects were eliminated because of incomplete data. Thus the final study consisted of 72 males.

This study was concerned with the exploration of approach and avoidance attitudes and behavior in reading situations. This investigation was not concerned with the methods of teaching reading or reading improvement.

### Organization of the Study

Chapter I has given an introduction to the problem to be studied. It included the need for the study, the statement of the problem, and the definition of terms used.

Chapter II presents a review of the literature as it pertains to the hypotheses being tested and to the measuring instruments constructed.

Chapter III describes the population used, methods of investigation, the tests used to measure reading attitudes and behavior, and the statistical methods used to test the significance of differences in attitudes and behaviors, as well as the relationship between them.

Chapter IV contains a statistical analysis of the data. This chapter suggests the degree to which the hypotheses are confirmed or rejected.

Chapter V presents a discussion of the results and implications of this study and includes recommendations regarding future research in this area.



## CHAPTER II

### REVIEW OF THE LITERATURE

#### Introduction

The review of the literature has been divided into two major categories: (1) research related to the area of attitudes toward reading and (2) research related to the development of the Reading Apperception Test.

#### Attitudes Toward Reading

As far back as 1925, Meek noted that there are many individual differences in children in their emotional attitudes toward reading. Blanchard (1935) stressed the significance of a "conditioned emotional response or unfavorable attitude to reading." She suggested that such an attitude is in addition to etiological factors in reading disability and must be dealt with if reading performance is to improve. Blanchard, Sherman (1949), and Burfield (1949) were in agreement when they categorically stated that before any substantial progress can be made in reading, negative attitudes toward the reading situation must be alleviated. Kunst (1949) reported that in treating reading problems, the child must be given the opportunity to re-experience in smaller doses, in a safer setting, "the conflict he has avoided" i.e. the reading situation. Implicit in conflict is both approach-avoidance attitudes and behaviors. Following somewhat the same rationale, Hanesworth (1962)

used a desensitization approach in reducing avoidance behavior to reading. His major assumption was that underachievers in reading tended to use a number of avoidant behaviors designed to remove them from their unpleasant contact with books. He used two groups of retarded readers. The experimental group received 5 weeks of desensitization. Auditory, visual, motor and environmental aspects of the reading situation were manipulated by slow gradual steps to bring subjects from activities remote from reading to the remedial situation. After this period they received seven weeks of remedial reading. The control group did not participate in the desensitization period, but rather received 12 weeks of remedial reading. Both the experimental and control groups contained both high and low level readers. The findings reflected that the lower level reading group profited by the experimental situation and the high level group did better with the regular procedures. All findings were statistically significant. Operant levels of approach and avoidance behavior were not reported. In addition, approach and avoidance behavior of good and poor readers were not compared. No attempt was made to measure attitudes toward reading or to predict approach-avoidance behavior.

Garner (1962) did one of the few specific studies on attitudes toward reading. He took the lowest 27% of scores on an attitude questionnaire on reading. He found that 50% were poor readers, 9% were superior, while 41% were average readers. Since the questionnaire was not reported, it is not known whether test items contained cognitive, affective, and fantasy components of attitudes. It is also not known how the reading situation was defined or if the test items treated reading as an unitary situation or in terms of different situations.

It must also be pointed out that the data he reported was not treated statistically so that it was not known if there were significant differences in attitudes of good, average and poor readers. He did report favorable changes were found for all groups, except the poor readers. He concluded that poor readers are most resistant to attitudinal change.

Using a permissive group-remediation approach to reading disabilities, Delacato and Delacato (1952) claimed that all their 11 Ss showed improvement in attitudes toward reading, as well as general social and emotional adjustment. This study may be criticized for a lack of pertinent information, and inadequate statistical treatment of data.

Mazurkiewicz (1960) explored attitudes toward reading in terms of masculine and feminine orientation. In a pilot study, he took a poll of university male faculty members, in which they classified such activities as sewing, mountain climbing, hiking, reading, football etc., as either masculine or feminine activities. He reported that there was strong agreement that reading was a feminine activity. A further preliminary study with a college population supported the attitudes expressed by the faculty members. He thus assumed that males, in general, view reading as a feminine activity. The major part of his study was an attempt to determine the relationship between a father's attitude toward reading (masculine or feminine) and his son's attitude, and the relationship of the child's attitude towards reading to his reading ability. Results indicated a small variance (not significant) in the fathers and sons responses on the masculinity or femininity of reading. There were no significant differences between those subjects who viewed reading as masculine and those who viewed it as feminine in

terms of reading ability. However, the author noted that boys who classify reading as feminine tend to be slightly less able in reading than those who classify reading as masculine. The author failed to note how many subjects had reading disabilities. It is quite possible that the instructions given in the questionnaire may have introduced a set which favored reading as a feminine activity. In addition there was a lack of structuring in the term reading activity as used in this study--it implied a general activity with no specific situation as a referent. Thus, situations with different referents may elicit different attitudes. A scientist reading his research may elicit different attitudes than a child reading in front of the class.

Natchez (1961) noted that the literature emphasized the role of frustration in reading disability. Accepting this as a hypothesis, she specifically tried to determine whether children with reading disabilities are, in general, characterized by a high level of frustration and how such frustration may interact within the oral reading situation. Two hypotheses were stated: (1) retarded readers display more frustration-type behavior in classroom reading situations than non-retarded readers; (2) retarded readers react to the reading situation in the way they react to frustration in general. Two groups of 30 Ss each, one group of retarded readers and one of nonretarded readers, were matched on the basis of race, school, class grade, age and intelligence. Ss were observed in classroom reading situations. As they read aloud, readings were recorded by the investigator and by a reading specialist on the Check Sheet to Record Frustration Reactions (Natchez, 1961). Frustration reactions were considered to be evidenced by three types of behavior: dependence, aggression, and withdrawal. These

types of behavior were not defined. The author found that children with reading disabilities demonstrated a significantly higher proportion of frustration reactions than children without reading disabilities. She therefore proposed that the retarded reader perceives the reading situation as frustration. The second hypothesis was also supported. Whether the child who reacts with frustration in the reading situation perceives this situation as frustrating remains to be demonstrated. An interesting question to ask in terms of the above study was whether or not the children with reading problems had an attitude toward reading or developed one that reflected frustrated feeling.

Some studies address themselves to how readers evaluate their own reading ability. This statement may be restated as a question. What is the attitude of readers in terms of how they rate their own reading performance?

Preston (1940) noted that 20% of the retarded readers rated themselves as good readers. Ramsey (1962) had both good and poor readers rate their reading proficiency. Of the good readers, 50% rated their reading as good or very good, 47% rated themselves as average, while 3% rated their reading as poor. When the poor readers rated themselves, 18% saw themselves as good readers, 49% as average, and 33% as poor or very poor. The above results appear to contradict the findings of Bouise (1955) who stated that most children were aware of their reading problems. The contradiction may possibly be explained as Preston (1940) suggests, in that many of the poor readers may rate themselves as good to protect themselves, i.e., their ratings reflect an attitude of over-sensitivity, rather than indifference or lack of

awareness. It would be interesting to investigate the attitudes of such children to reading. For example, do poor readers who rate themselves as good readers have "good" attitudes toward reading, as might be suggested by a model of cognitive dissonance.

Robinson (1949) noted that the most seriously maladjusted readers were those who accepted the blame for their reading failure and those who had developed socially very strong needs to succeed by avoiding failure. The question to be asked was whether or not these children had positive or approach attitudes and behavior toward reading? The least maladjusted were those who developed socially approved methods of explaining their failure. Thus the poor reader who mis-rates himself in terms of reading performance may be attempting to avoid the threat of failure. His ability to accept or recognize failure may be related to such variables as ego strength and parental attitudes toward his reading, as well as his teacher's attitude toward his reading.

It may be interesting to investigate the relationship of self-rating of reading to attitudes toward reading and how such attitudes would be related to approach-avoidance reading behavior. The mere suggestion of help or actual tutoring may be self-defeating in that it results in an avoidance of the reading situation. Thus the child may avoid remedial reading either physically or psychologically. As Axline (1947) pointed out, even though children may have the capacity to read, an active participation is needed to bring forth sounds and specific meaning from the printed symbols, i.e., words.

Vinache (1955) noted that in word perception the attitudes of the reader toward the words themselves were important. They may be regarded as mysterious and incomprehensible, as difficult and unnecessary.

Using a psychoanalytical reference, Hamil (1936) suggested that in some cases there may be a fear of words that can lead to evasions that interfere with learning to read. Looking ahead to avoid "trouble" may lead to difficulty with recognition or pronunciation of the words at hand and result in avoidance attitudes toward reading.

Perhaps no other statement better reflects the importance of attitudes toward reading than:

... for him to find it rewarding, the reading situation must prove satisfying to the child. And only if it is rewarding will he identify himself positively with it. Not only does inadequate achievement in reading lead to negative identification with reading itself, but it makes other aspects of school, including persons identified with it, unattractive. (Smith and Dechant, 1962, p. 298)

Attitudes toward reading appear to be important in cases of reading disability. Once again no clear relationship has been demonstrated. Are attitudes toward reading independent of reading ability and performance? What types of attitudes are beneficial or detrimental to reading improvement and growth? How can we measure such attitudes? These are but a few questions that need to be answered. The importance of dealing with implicit negative attitudes of poor readers has been demonstrated by the use of a desensitization technique. Thus it does appear that avoidance behavior and attitudes may be effectively dealt with by breaking down the remedial reading program into small units. These positive results suggest a superior methodology in reading research by focusing on specific behavior and attitudes toward different reading situations. Thus how the child conceptualizes the reading situation, i.e., his attitudes toward silent and oral reading and remedial work both in group and on an individual basis need to be explored.

## The TAT

Countless articles have been published on the Thematic Apperception Test. No attempt has been made here to review all of this literature; instead, a selected review of the existing literature has been offered.

### History of the TAT

One of the first studies to use pictures to explore imagination was reported by Brittain (1907). Nine highly structured pictures were presented to a group of boys and girls ranging in age from 13 to 20. The subjects were instructed to write stories suggested by the pictures. Stories were analyzed in terms of subjects' use of the first person, and of detail; in terms of length, unity, and explanatory power; and in terms of the occurrence of religious, moral, and social themes and elements. Brittain found that girls' stories reflect concern with religious, moral, and social factors, as well as interest in clothing and the preparation of food. Boys, on the other hand, were seen as being more concerned with eating the food, and less interested in people. Brittain hypothesized that the sex differences were due to a constitutional difference inherent in the individuals. Perhaps a more parsimonious explanation is that the stimulus pull of the pictures was more stimulating to the boys than to the girls i.e., the pictures depicted Indians, broncos, etc.

In 1908, Libby studied children aged 10 to 14. Students were asked to write stories to pictures such as one entitled "A Young Lady Stands at an Old Fashioned Gate Weeping, and in the Background a Horseman in a White Suit and Cocked Hat is Riding Away." Libby noted that



the older students told more subjective stories than the younger students and hypothesized that the older children have a richer emotional life than the younger.

Clark (1926) reported a study in which he had his patients try to imagine the feelings, attitudes, and behaviors of their infancy. He thought this a useful technique for understanding the personalities of his patients.

However, it was not until 1932 that the thematic method for studying personality was developed. Schwartz (1932), in his work with delinquent boys, developed the Social Situation Picture Test. The Test consisted of eight highly structured pictures depicting situations of a moral nature. In one picture, for example, two boys were coaxing two prepubescent girls into a clubhouse. Subjects were asked to describe what they saw. If they offered only an objective description, Schwartz gave the boys a verbal set. For Example: "Here is a boy coming from school. A bad boy is in a boxcar and he is calling him over. It is dangerous to be there." Then, in order to get the boys to project their feelings and attitudes onto the picture, Schwartz asked questions such as: "What does the boy in the boxcar want? What is the other boy thinking about?" This Test did not, however, arouse much interest.

Henry Murray, the father of the Thematic Apperception Test, and Christiana Morgan first introduced the TAT in 1935. They believed that when people told stories about the pictures, they projected their own unconscious fantasies, feelings, and attitudes; thus, the pictures could help in unlocking the unconscious.

### Scoring Systems for Analyzing the TAT

Many systems are available for scoring the TAT protocols. Basically, they can be categorized as either quantitative or nonquantitative in nature. This review is concerned with the quantitative systems only.

Dana (1959) devised a scoring system which takes three factors into consideration: perceptual organization, perceptual range, and perceptual personalization. Perceptual organization refers to the subjects' ability to follow the standard directions. Perceptual range refers to the number of different stimuli to which the subject responds. Three separate stimuli properties were ascribed to each card. Subjects are then scored plus or minus for these stimuli, depending on whether or not they respond to them. Perceptual personalization includes those words or phrases which do not seem to belong with the rest of the story and do not add anything to the story. Basically, this category refers to the "rarity" of a response.

Interjudge reliability ratings for this scoring system ranged from 88 to 94 percent of agreement (Dana, 1959). The high reliability ratings suggested that counting procedures are useful in arriving at scores. However, a question can be raised as to whether this scoring system has any utility other than discriminating between certain psychiatric categories. Also, it may be noted that this scoring system is not applicable to children.

Eron (1950) used a normative statistical approach in scoring the TAT. Norms are based on all 20 TAT cards for adult males. Stories are rated for emotional tone and for outcomes. Emotional tone is scored:

- 2: Complete failure, submission to fate, death, severe guilt, etc.
- 1: Conflict with attempt at adjustment, rebellion, fear, worry, regret, illness, loneliness, etc.
- 0: Description, lack of affect, balance of positive and negative feelings.
- +1: Aspirations, desire for success and doubt about outcome, description with cheerful feeling, feeling of security.
- +2: Justifiably high aspirations, complete satisfaction and happiness, reunion with loved ones.
- ?: Can't make up a story. (Eron et al., 1950, p. 475)

Interjudge reliability ratings for this scoring system were usually in the middle 80's (Eron, Terry, and Callahan, 1950). Outcomes are scored in similar fashion as emotional tone.

Eron (1950), using this scoring system, concluded that the TAT was not a useful instrument for distinguishing psychiatric groups. He also noted that the average score for all subjects on emotional tone was six. He pointed out that certain pictures tended to pull certain responses, and therefore, he emphasized the importance of the stimulus properties themselves in evaluating responses.

McClelland et al. (1953) developed a scoring system which was concerned with the achievement motive only. This system involves three major categories which are considered to be mutually exclusive. They are: Unrelated imagery - there is no reference to an achievement goal; Doubtful achievement imagery - there is some reference to achievement but the story fails to meet one of the three criteria for achievement imagery; Achievement imagery - there must be some reference to an achievement goal which is defined as success in competition with some standard of excellence.

The McClelland system represented a departure from the holistic

approach generally employed by clinical psychologists. McClelland was concerned with the measurement of one specific dimension of behavior. He and his associates were not interested in validating the TAT but rather in the study of motivation. Thus, the TAT was viewed only as an instrument in the study of motivation.

### Theoretical Models

Miller (1948, 1951) and Murstein (1962) both developed a model based on learning theory and the "Approach-Avoidance" concept. Miller used an approach-avoidance model to deal with the psychoanalytic concepts of conflict and displacement. This model has been used widely with projective techniques, including the TAT. The major assumptions of his system are:

- a. The tendency to approach a goal is stronger the nearer the subject is to the goal. This is called the gradient of approach.
- b. The tendency to avoid a fear stimulus is stronger the nearer the subject is to it. This is called the gradient of avoidance.
- c. The strength of the avoidance gradient increases more rapidly with nearness than does that of the approach gradient. In other words, the gradient of avoidance is steeper than that of approach.
- d. The strength of tendencies to approach or avoid varies with the strength of the drive upon which they are based. In other words, an increase in drive raises the height of the entire gradient.
- e. When two incompatible responses are in conflict, the stronger one will occur. (Miller, 1951, p. 90)

Secondary assumptions are:

- f. The direct response to the original stimulus generalizes to other similar stimuli, with the amount of generalization becoming smaller the less similar the stimuli. It follows, then, that if father generates hostility, a TAT picture depicting a father-figure should be more

likely to arouse hostility than the presentation of a Rorschach inkblot.

- g. The response which conflicts with the occurrence of a direct response to the initial stimulus generalizes to other similar stimuli, decreasing in strength with decreasing similarity. If, therefore, "father" generates anxiety, the presentation of an inkblot is less likely to arouse anxiety than a TAT card depicting a father-figure.
- h. The net strength of a response is its strength minus that of any incompatible response which is excited at the same time. (Miller, 1951, p. 90)

Since Miller's model was originally built to deal with physical behaviors, certain changes in it are necessary for it to be applicable to the TAT which deals with verbal behaviors. Thus, the term "verbal expression" has sometimes been substituted for approach, while the term "verbal inhibition" has sometimes been substituted for avoidance. In Miller's model, conflict refers to overt behavioral response tendencies. In the TAT, conflict is thought to be a response involving both "thematic expression" and "inhibition." As Murstein (1960, p. 70) noted, these responses may or may not be independent of overt behavior.

Murstein (1962) offered an illustration of an application of Miller's model. To illustrate this model, he used a young adolescent who has a strong sex drive but at the same time, strong guilt feelings about his sexual interests. The conflict situation is depicted in Figure 1. In this figure, a is the origin, representing the stimulus value of a nude female; a' is a provocative picture of a nude female; b is a somewhat more demure photo of a clothed Hollywood pinup; c is a picture of a Midwestern farm woman taken from a Grant Wood painting; and d is a picture of the Brooklyn Bridge. Murstein hypothesized that the adolescent would be too inhibited to express verbally any sexual needs in response to figure a, but would be more likely to respond to a

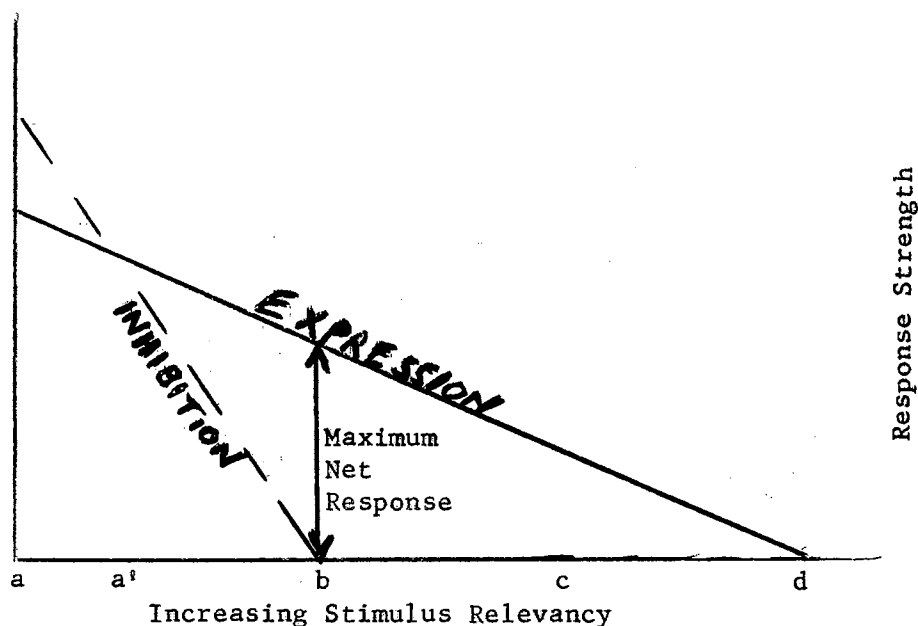


Figure 1. An Approach-Avoidance Gradient

somewhat less anxiety-producing, but still potent picture at b; c might have some tendency to elicit responses suggestive of sexual need; however, at d the stimulus would not be sufficiently relevant to evoke sexual responses.

As has already been mentioned, Miller stated that in an approach-avoidance conflict situation, the avoidance gradient is usually steeper than the approach gradient. The rationale given is that since most inhibitions are learned, the generalization gradient will have a double effect in a situation in which the cues are similar to the original ones. First, the gradient of generalization of reinforcement will weaken the response tendency to withdraw; second, it will weaken the "fear" also which is motivating this response tendency.

It should be noted that Miller's theory is not primarily concerned

with learned drives, while the TAT usually is; rather, his theory is concerned with primary drives. Primary drives are quite dependent on physiological factors and Miller suggested that different stimulus situations will not affect the strength of motivation, although they will affect the tendency to respond. Learned drives, on the other hand, are more influenced by external cues than by physiological factors, and different stimuli situations will affect the strength of response tendencies. Since Miller was concerned primarily with primary drives, his theoretical model is of limited utility in dealing with the TAT, because projective techniques tend to focus more on learned drives.

Epstein (1961) departed from Miller's theoretical model. He viewed motive arousal as a source of cues, and disagreed with Miller who believed that motive arousal affects the response tendency. Epstein differed from Miller also in his conception of inhibition. Whereas Miller hypothesized that inhibition is a function of anxiety and guilt, Epstein suggested that there are three different kinds of inhibition: reality-oriented, drive-reducing, and guilt-reducing. Reality-oriented inhibition refers to the "fact" that drive states which interfere with everyday concerns or with important goal-behavior are ignored, suppressed, or repressed. In other words, less important needs are subordinated to the more important ones as dictated by the reality of the situation at hand. Drive-reducing inhibition refers to the homeostatic mechanism of an individual which serves to compensate for strong deprivation. Guilt-reducing inhibition refers to unresolved conflicts which are avoided, misinterpreted, and misperceived in such a way that the conflict remains submerged. Epstein also differed from Miller in

his concept of the approach and avoidance gradients. Whereas Miller saw these as independent of one another, Epstein suggested that the approach and avoidance gradients can interact with each other. For example, an increase in sexual drive may simultaneously arouse an increase in sexual guilt.

Epstein set forth three hypotheses on conflict as follows:

- a. Conflict is indicated by a sharp rise in activation as a function of increasing stimulus relevancy.
- b. Conflict is indicated by a relative increase in strength of approach responses to stimuli of low relevance and a relative decrease in strength of approach responses to stimuli of high relevance.
- c. Conflict, when of sufficient magnitude, is indicated by a decrease in adequacy of performance as a function of increasing stimulus relevancy. (Epstein, 1961, p. 5)

Activation, referred to in hypothesis (a), is usually measured and defined in terms of autonomic responses, specifically galvanic skin responses. There is some support for this hypothesis (Fenz and Epstein, 1962). Epstein's studies relating to sex, hostility, hunger, and fear lent some support to hypothesis (b) (Leiman and Epstein, 1961; Fenz and Epstein, 1962). Hypothesis (c) has not been supported (Fenz and Epstein, 1962). However, Strigner (1961) found that high-stimulus-relevant cards measured drives best. Indirect support is given by Lesser (1958) who found a correlation of .26 ( $p < .05$ ) between overt peer ratings of aggression and a specially constructed thematic test. When he used the ratio of fantasy aggression anxiety over instigation of aggression, the correlation increased to .50 ( $p < .01$ ). It seems that this last hypothesis requires further investigation.

These approach-avoidance models seem to be oriented toward the exploration of different types of drives. It has already been noted



that Miller was concerned primarily with primary drives and his model is not, therefore, easily applicable to thematic responses. More significantly, the entire concept of drives may be misleading, simplistic, and perhaps even inappropriate to the area of thematic research. References to certain drives often seem to make the implicit assumption that there is a one-to-one correspondence between the drive and behavior. This may be questioned. The use of drive is usually given as an intervening variable in the initial research. However, surplus meaning of the concept drive does not appear to be extinguished when results are reported in broad generalizations. In addition, it may be appropriate and useful to talk of drive in reference to sexual behavior, but the utility of the concept in reference to other areas seems to be questionable. For example, is it accurate to speak of a drive to do arithmetic, a drive to read, a drive to go to the movies. The use of the concept drive in these latter examples is perhaps reminiscent of the instinct-theories of the 1920's (Boring, 1957). Finally, making up stories is a cognitive, as well as a motivational, task; the drive component is not to be denied, but neither is the cognitive aspect.

Rotter (1960) using social learning theory, postulated that behavior is a function of expectancy and reinforcement. His approach is molar, in that his emphasis is on the selection of alternative behaviors rather than on the acquisition of responses. Rotter held that the probability of any given behavior occurring is a function of the person's expectancy of reinforcement as a consequence of this behavior, and the importance of the reinforcement in the individual's value system.

As relates to this paper, the major significance of Rotter is his

emphasis on the situation. He emphasized that the individual's expectancy of reinforcement and its values to him is anchored to a specific situation. For example, anxiety must be measured in a specific physical and psychological environment, as a function of that particular environment, and not in terms of a drive or internal state independent of external variables.

The basic assumption of all these studies is that responses to thematic instruments correspond to the associations and the responses a person would have in actual similar situations. The validity of the assumption is an empirical question which must be related to a specific individual in a specific situation.

#### Attitudes and the TAT

It is significant to note that most of the theoretical research on the TAT has been done in terms of motivation and expectancy. Little has been done which relates TAT associations to attitudes. Attitudes are hypothetical constructs concerning the individual's orientation toward aspects of his personal and impersonal environment and toward himself. The concept of attitude is most frequently formulated in terms of a "state of readiness for motive arousal" or a "readiness to act" toward a specified class of stimuli. Kretch and Crutchfield (1948, p. 152) further stated that attitudes have cognitive, affective, and conative components. Attitudes are often conceptualized as negative or positive, and "behaviors" (responses) as approach or avoidance; no theoretical model has been formulated to incorporate both systems.

### Summary

This chapter has been a review of the literature of (1) attitudes toward reading and (2) relevant research done with the Thematic Apperception Test in terms of the history of its development, scoring systems, and theoretical models.

The review indicates that attitudes toward reading are considered to be an important variable in reading. The review has also suggested that attitudes toward reading may be a function of the reading situation as well as the level of reading ability. However, many of the studies reported were weak in design in that statistical tests of significance were not applied.

The review of the TAT suggested that highly structured stimuli are a useful tool for exploring attitudes. The importance of the specific psychological and physical situation reinforced the importance of having relevant structured stimuli on TAT-like tests. This review also summarized some different theoretical systems of which the approach-avoidance model seems most suited to an investigation of attitudes toward reading. Major scoring systems used on the TAT were reviewed and their limitations were noted. The development of a TAT scoring system appears to be dependent on the theoretical model used in the investigation of particular studies. The validity of a scoring system independent of a theoretical model is a meaningless question.

## CHAPTER III

### DESIGN AND METHODOLOGY

#### Introduction

This study was conducted in the summer of 1967 at the Reading Center of Oklahoma State University. The summer program at the Reading Center offered highly individualized reading instruction to children in small groups. Each reading group was composed of 4-6 children and taught by an experienced reading teacher. In turn, the reading teachers were supervised by highly specialized reading clinicians.

#### The Reading Apperception Test

In order to measure attitudes toward reading, a highly structured pictorial test was constructed. The underlying assumption was that different pictures, combined with verbal reinforcement, would represent different reading situations. Based on the review of the literature on attitudes toward reading and the TAT it was further assumed that attitudes are not only related to a process (in this case reading) but that they are also dependent on the situation in which the process occurs. Thus, attitudes toward reading in front of a classroom may differ from attitudes toward reading by oneself.

Since the subjects in this study were children in grades one through six, it was thought that both visual and verbal stimuli were the best method of representing different reading situations.

The Reading Apperception Test (RAT) as originally constructed consisted of 35 photographs of children in different reading situations. The pictures were taken in a rural school. The different reading situations photographed were suggested by experts in the area of reading. The original pictures were taken with a 35 mm camera. Prints were then developed to 3 x 5, from which 20 pictures were selected. These 20 pictures were enlarged to 5 x 7 and mounted. A pilot study consisting of 25 children was conducted as a preliminary exploration of the test. These children (male and female) were presented all 20 cards. As a result of the redundancy of some of the picture cards and the time factor (total average time was 2 hours 5 minutes) the test was reduced to 5 cards.

Card I depicts a close-up picture of 14 second graders (8 males and 6 females) reading at their desks. No teacher is present. Card II shows a boy standing up in the front of a 2nd grade classroom, reading a book which he is holding in front of him. The rest of the children (5 females and 6 males) are reading their books at their seats, with the exception of 2 boys. No teacher is present. Card III shows a 5th grade boy sitting in his seat reading a book. He is by himself in the classroom, and is surrounded by empty chairs and desks. In the back of the room are shelves of books. Card IV shows five children (one female and four males) in a semi-circle, facing the teacher who is dividing a word into syllables on the blackboard. The card also shows one girl at her desk and away from the group. Card V is a close-up of a 3rd grade boy reading a book at his desk. On one of the pages of the book is a picture of a circus lion tamer. All that is present is the boy, book, and the top part of his desk. (See Appendix B)

### Test Administration

The RAT was administered to 76 children who were selected from the Summer Program on a random basis. Each RAT was administered individually by the investigator. The investigator had had four years experience in working with children as well as in administering psychological tests. The average time per administration of the RAT was 25 minutes. At least 5 minutes of the initial testing period was devoted to establishing rapport with the child. On those occasions where the child remained anxious, the remaining test period was devoted to drawing and play. Four children fell into that category. They were not included in the study. When rapport was thought to have been established, the child was asked if he wanted to play a new game. The initial instructions were: "I have some pictures I want to show you. It's not a test. You don't have to worry about getting good marks. It's a game." Specific instructions for each card followed. Card I was handed to the child. The specific instructions were: "Look at this picture. Here are children reading in a class. They are reading. Tell me a story about them." After a period of 10 seconds of silence, the child is asked three questions. "What are the children thinking of? How do they feel? What do the children wish?" Card II is then handed to the child. "Here is a picture of a boy reading out loud to the class. Tell me a story about him." After a period of 10 seconds of silence, the child is again asked three questions. "What is the boy thinking about? How does he feel? If he had a wish, what would he wish?" Card III is then handed to the child. "Here is a picture of a boy reading a book. Tell me a story about him. After a period of 10 seconds of silence, the child is asked three questions. "What is the

boy thinking about? How does he feel? If the boy had a wish, what would he wish?" Card IV is then handed to the child. "Here is a picture of children in a reading circle. They are in a reading circle. Tell me a story about them." After a period of 10 seconds of silence, the child is asked three questions. "What are the children thinking about? How do the children feel? If the children had a wish, what would they wish?" Card V is handed to the child. "Here is a picture of a boy reading a book. He is reading a book. Tell me a story about him." After a period of 10 seconds of silence, the child is asked three questions: "What is the boy thinking about? How does the boy feel? If the boy had a wish, what would he wish?"

It can be seen that for each card presented to the child, he was asked to respond to three verbal sets or questions. The verbal set "What is the boy or children thinking" was assumed to elicit a cognitive statement. The verbal set "What are the children or boy feeling" was assumed to elicit affective statements. The verbal set "What would they or the boy wish if they or he had a wish" was assumed to elicit fantasy statements. If a child responded to one of the verbal sets with a one word response, he was encouraged to say more. The child was encouraged by using a nondirective approach or a reflection of his response. For example, if the child said he feels sad, the investigator would respond, "You said the boy feels sad" and would follow this by a period of silence. Often the children would then elaborate on their response.

All children were tested without prior knowledge of their reading ability.

Scoring System - Rationale

The conceptualization of the scoring system was based on an approach-avoidance model. Responses to the verbal sets or questions think, feel, wish, were analyzed in terms of approach and avoidance categories. Responses were defined in terms of the child's verbal associations to the verbal sets, think, feel, and wish. The approach category was defined as including verbal associations that moved the child closer to the reading situation. Thus the child's responses to the verbal sets think, feel, wish, were each scored in terms of the approach category for each card. It was assumed that the approach category contained three numerical quantities on an interval scale. The first quantity was zero which represented responses which did not move the child toward or away from the reading situation. The second quantity was one, which represented a movement toward the reading situation. The third quantity was two and represented a closer movement to the reading situation than did one. The distance between zero and one and between one and two was assumed to be equal. Verbal responses which suggest empathy were scored two. Empathy was defined as thoughts, feelings, or wishes by which the child in the pictures is described as identifying with a child or children in the story he is reading. For example, if the child responded to Card V by stating the boy wished he was in a circus like the story he was reading about, his response received a score of two. A score of two was also given for categories other than empathy (See Appendix C).

All verbal responses to questions on think, feel, and wish, for each card were scored also in terms of an avoidance category. The avoidance category was defined as verbal associations which moved the



child away from the reading situation. An interval scale of three quantities was also assumed for the avoidance category. The quantity zero represented a score which neither moved the child away from or toward the reading situation. The score one represented a movement away from the reading situation. The third quantity two was assumed to move the child further away from the reading situation than one. The distance between zero and one and one and two was assumed to be equal.

For example, in response to Card II, child C may respond to the question, "How does the boy feel" by stating that he is unhappy reading to the class. He would receive a score of one. Child D may respond to the same question by stating he feels sick and hates it, thus receiving a score of two. Thus, scores of one and two indicate an increase in intensity of response strength. These scores are then conceptualized in terms of respective psychological distance to or away from the reading situation. All verbal statements made in response to the verbal stimuli are scored in terms of approach and avoidance categories. (See Appendix C)

### Reliability

Two approaches were used to determine the reliability of the RAT. The first approach is concerned with the reliability of the test itself, while the second approach is concerned with the reliability of the scoring system.

In order to determine the reliability of the test, a test-retest reliability procedure was used. The RAT was given to 38 freshman college students by group administration. Subjects were asked to

respond to the same instructions as those given to the children in the study. However, the college students were asked to record their own verbal statements. The same students were readministered the RAT at the end of a one week interval. Significant correlations were obtained for both the total avoidance scores ( $r = .61, < .01$ ) and for the total approach scores ( $r = .75, < .01$ ) using Pearson's product-moment correlations. College students were chosen for the reliability study because it was assumed that they were more stable in their attitudes toward reading than elementary school children and thus they would be more useful in getting at variation in attitudes due to the testing instrument, as opposed to variation in the attitudes themselves.

In order to determine the reliability of the scoring system, protocols were scored independently by three raters. Inter-rater reliability was reflected in the following correlations: AB,  $r = .90$ ; AC,  $r = .94$ ; BC,  $r = .93$ . All correlations were statistically significant at the .01 level.

#### The Reading Behavior Rating Scale

The Reading Behavior Rating Scale was constructed to measure children's behavior in the reading situation. Behavior was conceptualized in terms of two categories, approach and avoidance, for two different reading situations: oral reading, and silent reading. Thus, there was an approach oral reading category, avoidance oral reading category, an approach silent reading category, and an avoidance silent reading category. The following items included oral approach behavior: volunteers to read, enjoys oral reading. Items included under the

category of avoidance oral reading behavior were: refusal to read, stammering, stuttering, facial grimaces, tics, fidgety and excessive movements, giggling, laughter, losing one's place. Items included under the category of approach silent reading behavior were: asks for help, talks about what he reads to the teacher, reads on own initiative, asks for extra material. Items included under the category of avoidance silent reading behavior were: asks to leave room, fidgety, excessive movement, facial grimaces, easily distractable, complains of headaches.

Items were checked present if the specific behavior was observed during a 50 minute reading period. Twenty teachers participated in the ratings of children's behavior in the reading situation. Each teacher was instructed to check each item on the Rating Scale at the end of each reading period as being either present or absent. No teacher had to rate more than four children for any particular period. Children were rated over a two week period for a total number of ten sessions. Behaviors indicated as being present were summed by items in a category (i.e. approach oral reading) and divided by ten, the total number of days. Thus, total scores on four categories of reading behavior were present for each child rated.

#### Reliability of the Reading Rating Behavior Scale

In order to determine the inter-rater reliability for the Rating Scale, an independent study was undertaken. Rater A and B rated the reading behavior of 25 children (2nd and 3rd grade) over a four day period. A reliability coefficient was obtained which was significant ( $r = .78$ ,  $p < .01$ ), using a Pearson product-moment correlation.

## Reading Classification and Reading Tests

The Gates-MacGinitie Reading Test was administered to the children by their reading teachers at the beginning of the reading program. Each child was given the appropriate form of the Gates-MacGinitie Reading Test as determined by his grade achieved in school. The following tests were given.

Grade 1: Gates-MacGinitie Reading Test, Primary A, A Forms 1 2.

Grade 2: Gates-MacGinitie Reading Test, Primary B, B Forms 1 2.

Grade 3: Gates-MacGinitie Reading Test, Primary B, B Forms 1 2.

Grades 4-6: Gates-MacGinitie Reading Test, Survey D, D Forms  
1 2 3.

The reading tests were scored by the standard procedures.

In order to determine the reading level of the Ss, the Bond Reading Expectancy formula was used. Reading Expectancy = no. of years in school  $\times \frac{I.Q.}{100} + 1$  (Bond and Tinker, 1967). An average reader was defined as a child in the first to third grade whose grade equivalent score on the Gates-MacGinitie Reading Test was less than 5 months above or below his Reading Expectancy, or a child in the 4th to 6th grade whose grade equivalent score was less than one year above or below his Reading Expectancy. A severely disabled reader was defined as a child in the first to third grade whose grade equivalent on the Gates-MacGinitie Reading Test was one or more years below his Reading Expectancy, or a child in the fourth to sixth grade whose grade equivalent score was two or more years below his Reading Expectancy.

## Intelligence Test

The Peabody Picture Vocabulary Test was used as a measure of

intelligence. Each child was individually administered the Peabody Test by his reading teacher. Children with IQs below 80 and above 120 were referred for further testing with the Wechsler Intelligence Scale for Children. For those children, the WISC was used as a measure of intelligence.

#### Additional Tests - Anxiety

Since this study was concerned with approach-avoidance behaviors and attitudes, two measures of anxiety were included for exploratory purposes. The Childrens Manifest Anxiety Scale (McCandless and Castanedo, 1956) was administered individually to the subjects by two trained and experienced testers. The second measure of anxiety was created from the RAT and was an attempt to measure anxiety in an oral reading situation. The scale was constructed from verbal associations to Card II. The following items were used as scoring criteria for the Oral Anxiety Scale:

Responses scored 1 point: frightened, scared, awful, terrible  
horrible, embarrassed.

Responses scored 2 points: concern over adequacy of performance,  
other children laughing.

Responses scored 3 points: anticipation of punishment.

#### Description of Subjects

Final Ss consisted of 72 males divided into two reading groups: severely retarded readers and average readers. Each group consisted of 36 Ss. Each reading group was subdivided into two sub-groups: 1st to 3rd graders, and 4th to 6th graders. All Ss came from a middle-class socio-economic background. Socio-economic status was determined

by parental education and occupation in accordance with Reiss et al., 1961. No distinctions between low-middle, middle-middle, and upper-middle social class were made.

Two by two analysis of variance were used to analyze the following variables among Ss: age, two measures of anxiety, and intelligence.

In terms of age, there was no significant difference between reading groups or between reading groups and grades, but there was a significant difference between children in grades 1-3 and 4-6 in terms of age. (See Table I) The significant difference between grade levels and age was to be anticipated since older children are usually in the higher grades. These findings do, however, suggest that the population is typical, at least in terms of age. (See Table II for mean ages)

TABLE I  
AN ANALYSIS OF VARIANCE TABLE OF AGE BY SEVERELY  
RETARDED AND AVERAGE READERS BY GRADES 1-3  
AND GRADES 4-6

Source of Variation	Degrees of Freedom	Sum of Squares	MS	F
Reading Group	1	2.05031	2.05031	N.S.
Grades	1	161.01149	161.01149	*
Reading Groups Grades	1	4.83086	4.83086	N.S.
Within	68	90.93498	1.33728	
Total	71	258.82764		

\* Significant at the .01 level.

N.S. Not significant

TABLE II  
MEAN AGES FOR BOTH READING GROUPS  
BY GRADE LEVEL

Reading Group	Grade Level	Mean Age
Average	1-3	7.68
Average	4-6	11.19
Severe	1-3	8.54
Severe	4-6	11.00

Results of the Analysis of Variance for the Children's Manifest Anxiety Scale indicates that there were no significant differences among the subjects based on reading level or grade level. There were no significant differences between severely retarded readers and average readers on the CMAS or between children in grades 1-3 and 4-6, as measured by the CMAS. (See Table III) See Table IV for mean scores on the Children's Manifest Anxiety Scale.

Results of the analysis of variance for oral anxiety indicates that there were no significant differences between severely retarded readers and average readers or between grade levels. (See Table V) See Table VI for mean scores of oral anxiety.

TABLE III

AN ANALYSIS OF VARIANCE TABLE FOR CHILDREN'S MANIFEST  
ANXIETY SCALE FOR READING GROUPS BY GRADE LEVEL

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F
Reading Groups	1	0.68056	0.68056	N.S.
Grade Levels	1	3.12500	3.12500	N.S.
Reading Groups by Grade Level	1	17.01384	17.01384	N.S.
Within Variation	68	5114.05475	75.20669	
Total	71	5134.87415		

N.S. - Not Significant

TABLE IV

MEAN PERFORMANCE ON CMAS BY READING GROUP  
AND GRADE LEVEL

Reading Group	Grade Level	Mean CMAS
Average	1-3	17.33
Average	4-6	16.17
Severe	1-3	16.78
Severe	4-6	17.56



TABLE V  
AN ANALYSIS OF VARIANCE TABLE OF ORAL ANXIETY (RAT)  
BY READING GROUP AND GRADE LEVEL

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Squares	F
Reading Groups	1	3.55556	3.55556	N.S.
Grade Levels	1	3.55556	3.55556	N.S.
Reading Groups Grade Levels	1	12.50005	12.50005	N.S.
Within Variance	68	303.88884	4.46895	
Total	71	323.50000		

N.S. - Not Significant

TABLE VI  
MEAN PERFORMANCE ON ORAL ANXIETY (RAT) BY READING GROUP  
AND BY GRADE LEVEL

Reading Group	Grade Level	Mean Oral Anxiety
Average	1-3	2.61
Average	4-6	1.33
Severe	1-3	1.33
Severe	4-6	1.72

Results of the analysis of variance for intelligence indicated that there were no significant differences between children in grades 1-3 and grades 4-6. However, there was a significant difference in IQ between children in the average reading group and children in the severely disabled reading group. (See Table VII) Comparing means by t-tests, it was found that the severely retarded readers in grades 1-3 were significantly lower in IQ scores than average and severely retarded readers in grades 4-6. Differences were significant at the .05 level. Average readers in grades 1-3 and severely retarded readers in grades 1-3 were not statistically significant. (See Table VIII for Mean IQ Scores)

TABLE VII  
AN ANALYSIS OF VARIANCE TABLE OF INTELLIGENCE BY  
READING GROUP AND BY GRADE LEVEL

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F
Reading Group	1	1275.12508	1275.12508	8.15*
Grade Level	1	66.12502	66.12502	
Reading Group Grade Level	1	78.12491	78.12491	
Within Variance	68	10631.27529	156.34228	
Total	71	12050.65027		

\* - Significant at the .05 level

TABLE VIII  
MEAN IQ SCORES FOR READING GROUPS  
BY GRADE LEVEL

Reading Group	Grade Level	Mean IQ
Average	1-3	100.722
Average	4-6	107.222
Severe	1-3	96.722
Severe	4-6	107.055

#### Statistical Design

The statistical method selected for testing the significance of approach-avoidance attitudes toward reading was a  $5 \times 3 \times 2 \times 2 \times 2$  factorial design with repeated measures, Case 1, (Winer, 1962). The first factor represented the RAT and has 5 levels. Each level represents one of the 5 pictures or a different reading situation. The second factor represented the cognitive, affective, and fantasy levels of think, feel, and wish and thus has 3 levels. The third factor represented approach-avoidance and contains 2 levels, approach and avoidance. The fourth factor represented reading ability or group and has 2 levels: average and severely retarded readers. The fifth factor represented grade level and includes two levels: grades 1-3 and grades 4-6.

Raw score data, approach and avoidance scores from the RAT, were used for the factorial design.

The statistical computations for this factorial design were done at the University Computer Center, Oklahoma State University.

Pearson product-moment correlations were calculated between the Reading Rating Behavior Scale and total scores for approach and avoidance attitudes on the RAT. Other variables were also correlated using the Pearson product-moment correlation coefficient.

These correlations were also calculated at the University Computer Center.

### Summary

This chapter has described the Summer Reading Program at Oklahoma State University, the sample selected for the study, the tests used to measure attitudes toward reading and the tests used to measure reading performance and behaviors.

The sample consisted of male children with one to six years of grade school. Subject variables of age, intelligence, and anxiety were investigated by the use of a 2 x 2 analysis of variance.

The measuring instrument of attitudes toward reading was the RAT. The RAT was constructed to ascertain attitudes toward reading and it was assumed that pictorial and verbal methods were the best media to represent different reading situations. Inter-rater reliability coefficients in the .90s were reported for the scoring system which suggest high reliability. Test-retest reliability coefficients appear to be consistent with reliability coefficients for other projective techniques. However, most fail to report such statistics (Murstein, 1963).

The major statistical design used to analyze attitudes toward

reading was a  $5 \times 3 \times 2 \times 2 \times 2$  factorial design. Pearson product-moment correlations were used to measure relationships between different variables.

## CHAPTER IV

### STATISTICAL RESULTS

#### Introduction

This chapter contains a detailed account of the statistical treatment of the data, the analysis of the results, and the extent to which the various hypotheses were supported or rejected. The chapter is divided into two major sections: the first presents the results of the factorial design of approach and avoidance attitudes and the second contains the correlational analyses of the data.

#### Factorial Design of Approach and Avoidance Attitudes

The factorial design of approach and avoidance scores indicated that there were significant differences and interactional effects. (See Table IX)

Factor 1 (Reading Groups) was found to be significant, which indicated that there were significant differences between average and severely retarded readers in their approach and avoidance attitudes. Factor 2 (Grade Level) was found to be not significant by itself, in terms of differences in approach and avoidance scores. The interaction of Factor 1 (Reading Groups) and Factor 2 (Grade Level) was not significant. Factor 3 (Pictures = Different Reading Situations) was found to be significant, which indicated that there was significant differences

between attitudes toward reading in terms of different reading situations. The interaction between Factor 1 (Reading Groups) and Factor 3 (Pictures) and the interaction between Factors 3, 1, and 2 were not significant. However, the interaction between Factor 3 (Pictures) and Factor 2 (Grade Level) was significant. Factor 4 (Approach-Avoidance Scores) was found to be not significant by itself. However, there was a significant interaction between Factor 4 (Approach and Avoidance Scores) and Factor 1 (Reading Groups), which indicated that approach and avoidance scores were significantly different for average and severely retarded readers. The interactions of approach and avoidance scores with grade level and with reading groups and grade level were not significant. Factor 5 (Think, Feel, Wish) was found to be significant which indicated that there were significant differences among the components of attitudes. There were no significant differences between Factors 5 and 2, 5 and 1, or among Factors 5, 1, and 2. This indicated that there were significant differences among think, feel, and wish aspects of attitudes which were not related to reading groups or grade level.

There was a significant interaction between Pictures and Approach and Avoidance, and between Pictures and Think, Feel, and Wish, as well as a significant interaction between Pictures, Approach and Avoidance, and Think, Feel, and Wish. These interactions indicated that there were significant differences in attitudes toward reading based on the reading situation, approach and avoidance, and the components think, feel, and wish. The interaction between Approach and Avoidance scores, the components of Think, Feel, and Wish, and Reading Groups was not significant.

TABLE IX

AN ANALYSIS OF VARIANCE TABLE OF APPROACH AND AVOIDANCE  
 SCORES IN TERMS OF SEVERELY RETARDED AND AVERAGE  
 READERS, GRADE LEVEL, PICTURES, APPROACH-  
 AVOIDANCE, AND THINK, FEEL, WISH

Source	df	MS	F	
BETWEEN SUBJECTS	71			
1 (Reading Groups)	1	5.60185	11.31846	**
2 (Grade Level)	1	.18519		
12	1	.26667		
S/12	68	.49493		
WITHIN SUBJECTS	2088			
3 (Pictures)	4	.96134	4.44653	**
31	4	.19329		
32	4	.70949	3.28163	*
312	4	.20069		
3xS/12	272	.21620		
4 (Approach- Avoidance)	1	14.01666	3.45176	N.S.
41	1	85.60184	21.08045	**
42	1	2.40000		
412	1	.18519		
4xS/12	68	4.06072		
5 (Think, Feel, Wish)	2	4.05185	22.28985	**
51	2	.45741	2.51628	N.S.
52	2	.09074		
512	2	.40555	2.23099	N.S.
5xS/12	136	.18178		
34	4	5.69607	5.49193	**
341	4	1.76042		
342	4	1.21829		
3412	4	1.46412		
34xS/12	272	1.03717		
35	8	.54954	2.64087	**
351	8	.19815		
352	8	.12893		
3512	8	.21458		
35xS/12	544	.20809		



TABLE IX (Continued)

Source	df	MS	F	
WITHIN SUBJECTS				
45	2	24.10555	35.91089	**
451	2	2.03519	3.03189	N.S.
452	2	.95000		
4512	2	.09630		
45xS/12	136	.67126		
345	8	1.28842	3.05529	**
3451	8	.63472		
3452	8	.26134		
34512	8	.18031		
345xS/12	544	.42170		
TOTAL	2159			

\* Significant at the .01 level

\*\* Significant at the .05 level

N.S. Not Significant

Tests of significance of the differences between all possible pairs of means were made by the use of the Newman-Keuls Procedures (Winer, 1962, p. 309). All differences reported were significant.

#### Differences Between Average and Disabled Readers

In all cases where there were significant differences between average and severely disabled readers in terms of their avoidance scores, the disabled readers had significantly higher scores. This indicated that disabled readers had significantly greater avoidance attitudes toward reading than average readers.

On a number of cards, the disabled readers had significantly

higher avoidant wish scores than did the average readers. Disabled readers in the 1st-3rd grades had significantly higher avoidant wish responses on Card IV than: (1) average readers in the 1st-3rd grades on Cards II, III, IV, and V, and (2) average readers in the 4th-6th grades on Cards IV and V. Disabled readers in the 4th-6th grades had significantly higher avoidant wish responses on Cards I and V than: (1) average readers in the 1st-3rd grades on Cards II, III, and V, and (2) average readers in the 4th-6th grades on Cards IV and V. (See Table X)

TABLE X<sup>1</sup>

DIFFERENCES BETWEEN AVERAGE AND SEVERELY DISABLED  
READERS IN AVOIDANT WISH RESPONSES

	Pictures:	1	2	3	4	5
Group 3			x	x	x	x
Group 4					x	x
Group 1					x	
Group 2		x				x

<sup>1</sup> A similar coding system has been used for Tables X-XXV. Group 1 represents disabled readers in Grades 1-3. Group 2 represents disabled readers in Grades 4-6. Group 3 represents average readers, grades 1-3. Group 4 represents average readers, Grades 4-6. On each table, identical letters above and below the dividing double line are significantly different from each other. For example, in Table X, all letters above the double line are significantly different than those letters below this line. The same is true for all other letters used in other tables. In addition, the higher scores are found represented on the bottom half of the table. For example, in Table X, an x below the double line means this particular score was significantly higher than all x's above the line. This coding holds for Tables X-XXV.

Disabled readers had significantly higher avoidant think responses on a number of cards than did the average readers. Disabled readers in the 1st-3rd grades had significantly higher avoidant think responses on Cards II, III, and V than: (1) average readers in the 1st-3rd grades on Cards II, III, IV, and V and (2) average readers in the 4th-6th grades on Cards I and V. Disabled readers, grades 4-6, had significantly higher avoidant think responses on Cards I, III, and V than: (1) average readers, grades 1-3, on Card II, and (2) average readers, grades 4-6, on Card I and V. (See Table XI)

TABLE XI  
DIFFERENCES BETWEEN AVERAGE AND SEVERELY DISABLED  
READERS IN AVOIDANT THINK RESPONSES

	Pictures: 1	2	3	4	5
Group 3		e, x, b, c, d	x	x	x
Group 4	x, c, d				a, c
Group 1		e	x		a
Group 2	b		c		d

Disabled readers had significantly higher avoidant feel responses on a number of cards than average readers. Disabled readers, grades 1-3, had significantly higher avoidant feel responses on Card III than:

(1) average readers, grades 1-3, on Cards I and V, and (2) average readers, grades 4-6, on Cards I, III, IV, and V. Disabled readers, grades 4-6, had significantly higher avoidant feel responses on Cards II and V than: (1) average readers, grades 1-3, on Card I, and (2) average readers, grades 4-6, on Cards I, III, IV, and V. (See Table XII)

TABLE XII  
DIFFERENCES BETWEEN AVERAGE AND SEVERELY DISABLED  
READERS IN AVOIDANT FEEL RESPONSES

	Pictures: 1	2	3	4	5
Group 3	a,x,c				a,x
Group 4	a,x		a,x	x	x
Group 1			x		
Group 2		a,x			c

When think responses of average readers were compared to wish responses of disabled readers, there were some significant differences. (See Table XIII) It is interesting to note, however, that there were no significant differences in avoidant think responses of average readers on Cards II, III, and IV (grades 4-6) and avoidant wish responses of disabled readers.

TABLE XIII  
DIFFERENCES BETWEEN AVOIDANCE THINK RESPONSES  
OF AVERAGE READERS AND AVOIDANCE WISH  
RESPONSES OF DISABLED READERS

		Pictures: 1	2	3	4	5
THINK	Group 3	z	z,x,m,o	x,m,o	x,m,o	a,b,o
	Group 4	x				x,z,m,o
WISH	Group 1	z	z	b	x	o
	Group 2	a,x	m	a,x	a,x	a,x

There were some significant differences between avoidant think responses of average readers and avoidant feel responses of disabled readers. The former were significantly lower than the latter. (See Table XIV)

Disabled readers had some significantly higher avoidant think responses than avoidant feel responses of average readers. (See Table XV) In addition, disabled readers had may higher avoidant wish responses than avoidant feel responses of average readers. (See Table XVI)

TABLE XIV

DIFFERENCES BETWEEN AVOIDANCE THINK RESPONSES  
OF AVERAGE READERS AND AVOIDANCE FEEL  
RESPONSES OF DISABLED READERS

		Pictures: 1	2	3	4	5
THINK	Group 3		b,a,o	b,o	b	b
	Group 4		o,b,z			b,o
FEEL	Group 1			b		
	Group 2		b	a,z		o

TABLE XV

DIFFERENCES BETWEEN AVOIDANCE FEEL RESPONSES  
OF AVERAGE AND AVOIDANCE THINK RESPONSES  
OF SEVERELY DISABLED READERS

		Pictures: 1	2	3	4	5
FEEL	Group 3	a,c				a
	Group 4			a	a	a
THINK	Group 1			a		c
	Group 2					

TABLE XVI  
DIFFERENCES BETWEEN AVOIDANCE FEEL RESPONSES OF  
AVERAGE READERS AND AVOIDANCE WISH RESPONSES  
OF SEVERELY DISABLED READERS

		Pictures:	1	2	3	4	5
FEEL	Group 3		b,x,m,z	x	a		x,m,z
	Group 4			x	x	x,m	a,m
WISH	Group 1					b,x	
	Group 2		a,x,b	z	a,x,b	a,x	a,x,m

Differences in Approach Attitudes of Average and Disabled Readers

Disabled and average readers did not differ as frequently in their approach scores as they did in their avoidance scores. The only significant differences existed between disabled and average readers wish approach scores and between disabled wish approach scores and average feel approach scores.

Average readers had significantly higher approach wish scores on Card V than disabled readers, grades 4-6, on Cards II, III, and IV. There were no significant differences between disabled readers, grades 1-3, and good readers on wish approach scores. (See Table XVII)

Average readers had some significantly higher approach feel scores than disabled readers wish approach scores. (See Table XVIII)

TABLE XVII  
DIFFERENCES BETWEEN SEVERELY DISABLED  
AND AVERAGE READERS IN APPROACH  
WISH RESPONSES

	Pictures:	1	2	3	4	5
Group 1						
Group 2			a	a,x	x	
Group 3						x
Group 4						a

TABLE XVIII  
DIFFERENCES BETWEEN APPROACH WISH RESPONSES  
OF SEVERELY DISABLED READERS AND APPROACH  
FEEL RESPONSES OF AVERAGE READERS

		Pictures:	1	2	3	4	5
WISH	Group 1						
	Group 2		a	x	b,x	x	
FEEL	Group 3		a,x			x	
	Group 4		b				



Disabled Approach and Average Avoidance Attitudes

There were some significant differences between approach attitudes of disabled readers and avoidance attitudes of average readers. In cases where significant differences existed, the avoidance scores of average readers were higher than the approach scores of disabled readers. (See Tables XIX, XX, and XXI)

TABLE XIX

DIFFERENCES BETWEEN APPROACH WISH RESPONSES  
OF DISABLED READERS AND AVOIDANCE WISH  
RESPONSES OF AVERAGE READERS

	Pictures: 1	2	3	4	5
Group 1			x,a	x,a	
Group 2	a,x	a,x	x,a	x	x
Group 3			x		
Group 4			a		

TABLE XX

DIFFERENCES BETWEEN APPROACH THINK RESPONSES  
OF DISABLED READERS AND AVOIDANCE WISH  
RESPONSES OF AVERAGE READERS

		Pictures:	1	2	3	4	5
APPROACH THINK	Group 1						
	Group 2				a,x		
AVOID. WISH	Group 3				x		
	Group 4				a		

TABLE XXI

DIFFERENCES BETWEEN APPROACH FEEL RESPONSES  
OF DISABLED READERS AND AVOIDANCE WISH  
RESPONSES OF AVERAGE READERS

		Pictures:	1	2	3	4	5
AVOID. FEEL	Group 1		a				
	Group 2				x		
APPROACH WISH	Group 3				x		
	Group 4				a		

### Differences Within Reading Groups

Results indicated that there were significant differences within the group of average readers, as well as within the group of disabled readers. All of these within group differences were in the avoidance responses. Thus, within the group of average readers there were some significant differences in their avoidance scores and within the group of disabled readers there were some significant differences in their avoidance scores.

### Intra-group Differences Among Average Readers

There were some significant differences among average readers in their avoidance scores. Wish avoidance responses, grades 4-6, on Card III were significantly higher than the think avoidance responses of 1st-3rd graders. In addition, the wish avoidance responses of 1st-3rd graders were significantly higher than their think avoidance responses. (See Table XXII)

TABLE XXII

DIFFERENCES BETWEEN AVOIDANCE THINK AND AVOIDANCE  
WISH RESPONSES OF AVERAGE READERS

		Pictures:	1	2	3	4	5
THINK	Group 3		x	x	x	x	x
WISH	Group 3				x		
	Group 4				x		

There were also some significant differences between the feelings and wishes of good readers in the 1st-3rd grades and 4th-6th grades.

(See Table XXIII)

TABLE XXIII  
DIFFERENCES BETWEEN AVOIDANCE FEEL AND AVOIDANCE  
WISH RESPONSES OF AVERAGE READERS

		Pictures: 1	2	3	4	5
FEEL	Group 3	x				x
WISH	Group 3			x		
	Group 4			x		

#### Intergroup Differences Among Disabled Readers

Disabled readers differed among themselves in their avoidance scores. This was consistent with the finding for average readers.

On a number of cards, wish avoidance responses of disabled readers, grades 4-6, were significantly higher than the think avoidance responses of disabled readers, grades 1-3. Wish avoidance responses of 4th-6th graders were also higher than their think avoidance responses. (See Table XXIV)

TABLE XXIV

DIFFERENCES BETWEEN AVOIDANCE THINK AND AVOIDANCE  
WISH RESPONSES FOR DISABLED READERS

		Pictures:	1	2	3	4	5
THINK	Group 1		b,c,z,a,x	a,x,e		a,x	
	Group 2			a,x,e		a,z,e,d	
WISH	Group 1					x	
	Group 2		a,d	e	x	c	z

Wish avoidance scores, grades 4-6, were significantly higher than  
feel avoidance scores, grades 1-3, on many cards. (See Table XXV)

TABLE XXV

DIFFERENCES BETWEEN AVOIDANCE FEEL AND AVOIDANCE  
WISH RESPONSES OF DISABLED READERS

		Pictures:	1	2	3	4	5
FEEL	Group 1		a,x,z	a		a	a
	Group 2					a,x	
WISH	Group 1					x	z
	Group 2		a		x		z

## Correlational Analysis

Pearson's product-moment correlations were used to measure the relationships between the variables correlated in this section.

Components of Attitudes

Significant relationships were found among the components of approach attitudes toward reading. Think, feel, and wish approach scores were related to each other for both average and severely disabled readers. (See Table XXVI)

TABLE XXVI  
CORRELATIONS BETWEEN COMPONENTS OF APPROACH ATTITUDES

Group	N	Think and Feel Approach	Think and Wish Approach	Feel and Wish Approach
1	18	.42 N.S.	.69 **	.43 N.S.
2	18	.73 **	.65 **	.40 N.S.
Total	36	.57 **	.65 **	.41 *
3	18	.61 **	.54 *	.38 N.S.
4	18	.25 N.S.	.34 N.S.	.65 **
Total	36	.46 *	.44 *	.48 **
Overall Total	72	.55 **	.59 **	.52 **

N.S. Not Significant

\*\* Significant at the .01 level

\* Significant at the .05 level

There were significant relationships among the components of avoidance attitudes. Think, feel, and wish, avoidance scores were related to each other for both average and severely disabled readers. All correlations were significant. (See Table XXVII)

TABLE XXVII  
CORRELATIONS BETWEEN COMPONENTS OF AVOIDANCE ATTITUDES

Group	N	Think and Feel Avoidance	Think and Wish Avoidance	Feel and Wish Avoidance
1	18	.58 **	.66 **	.62 **
2	18	.77 **	.73 **	.49 **
Total	36	.66 **	.68 **	.57 **
3	18	.54 *	.69 **	.46 N.S.
4	18	.64 **	.69 **	.70 **
Total	36	.59 **	.69 **	.56 **
Overall Total	72	.68 **	.74 **	.61 **

N.S. Not Significant

\*\* Significant at the .01 level

\* Significant at the .05 level

#### Approach and Avoidance Attitudes

Approach and avoidance attitudes were significantly related to each other. The relationships were negative. Correlation coefficients ranged from  $-.73$  to  $-.92$ . All were significant at the .01 level. (See Table XXVIII)

TABLE XXVIII  
CORRELATIONS BETWEEN TOTAL APPROACH AND TOTAL  
AVOIDANCE ATTITUDES

Group	N	Approach and Avoidance
1	18	-.87 **
2	18	-.92 **
Total	36	-.90 **
3	18	-.74 **
4	18	-.74 **
Total	36	-.73 **
Overall Total	72	-.85 **

\*\* Significant at the .01 level

#### Attitudes, Age, and IQ

There were no significant relationships between attitudes toward reading and intelligence or age for the average and severely disabled readers. (See Table XXVIX)

#### Attitudes and Reading Behavior

There were no significant relationships between attitudes toward reading and reading behavior in a group situation. (See Table XXX)



TABLE XXIX  
CORRELATIONS BETWEEN APPROACH AND AVOIDANCE  
ATTITUDES AND IQ AND AGE

Group	N	Approach and IQ	Avoidance and IQ	Approach and Age	Avoidance and Age
1	18	-.20 N.S.	.32 N.S.	.38 N.S.	-.43 N.S.
2	18	.32 N.S.	-.34 N.S.	.22 N.S.	-.21 N.S.
Total	36	.02 N.S.	.00 N.S.	.11 N.S.	.16 N.S.
3	18	-.18 N.S.	.22 N.S.	.23 N.S.	-.30 N.S.
4	18	.36 N.S.	.02 N.S.	.15 N.S.	.00 N.S.
Total	36	.06 N.S.	.10 N.S.	.06 N.S.	.04 N.S.
Overall Total	72	.18 N.S.	.12 N.S.	.03 N.S.	.00 N.S.

N.S. Not Significant

TABLE XXX  
CORRELATIONS BETWEEN APPROACH AND AVOIDANCE ATTITUDES  
AND APPROACH AND AVOIDANCE READING BEHAVIOR

Reading Group	N	Oral Avoid. Behavior & Avoid. Att.	Oral Approach Behavior & Approach Att.	Silent Avoid. Behavior & Avoid. Att.	Silent App. Behavior & App. Att.
Average	27	-.01 N.S.	-.11 N.S.	.06 N.S.	-.11 N.S.
Disabled	26	.15 N.S.	.01 N.S.	.01 N.S.	.18 N.S.

N.S. Not Significant

### Reading Behavior

There were no significant relationships between oral approach and avoidance behavior, and silent approach and avoidance behavior. There were significant relationships between silent and oral avoidance behavior for both average and severely disabled readers. There was also a significant relationship between silent and oral approach behavior for average readers. This relationship was not significant for severely disabled readers. (See Table XXXI)

TABLE XXXI  
CORRELATIONS BETWEEN APPROACH AND AVOIDANCE  
READING BEHAVIOR

Reading Group	N	Oral App. & Avoid.	Silent App. & Avoid.	Silent & Oral App.	Silent & Oral Avoid.
Disabled	33	.22 N.S.	-.22 N.S.	.06 N.S.	.68 **
Average	36	-.23 N.S.	-.22 N.S.	.80 **	.77 **

N.S. Not Significant

\*\* Significant at the .01 level

### Reading Behavior, Age, and IQ

There were no significant relationships between reading behavior and age or intelligence. (See Tables XXXII and XXXIII)

TABLE XXXII  
CORRELATIONS BETWEEN ORAL APPROACH AND AVOIDANCE  
READING BEHAVIOR AND IQ AND AGE

Reading Group	N	Oral App. Behavior & IQ	Oral Avoid. Behavior & IQ	Oral App. Behavior & Age	Oral Avoid. Behavior & Age
Average	27	.17 N.S.	-.30 N.S.	.01 N.S.	.16 N.S.
Disabled	26	.25 N.S.	-.22 N.S.	-.21 N.S.	-.07 N.S.

N.S. Not Significant

TABLE XXXIII  
CORRELATIONS BETWEEN SILENT APPROACH AND AVOIDANCE  
READING BEHAVIOR AND IQ AND AGE

Reading Group	N	Silent App. Behavior & IQ	Silent Avoid. Behavior & IQ	Silent App. Behavior & Age	Silent Avoid. Behavior & Age
Average	27	.03 N.S.	-.11 N.S.	.00 N.S.	-.11 N.S.
Disabled	26	.12 N.S.	-.04 N.S.	-.18 N.S.	.22 N.S.

N.S. Not Significant

### Attitudes and Anxiety

There were significant relationships between attitudes toward reading and anxiety as measured by the Children's Manifest Anxiety

Scale. There was a negative relationship between approach attitudes and anxiety for the average readers. The relationship between approach attitudes and anxiety for the severely disabled readers was positive. The relationship between avoidance attitudes and anxiety for the severely disabled readers was negative; for the average readers, it was positive. (See Table XXXIV)

TABLE XXXIV  
CORRELATIONS BETWEEN APPROACH AND AVOIDANCE ATTITUDES  
AND THE CHILDREN'S MANIFEST ANXIETY SCALE (CMAS)

Group	N	Approach and CMAS	Avoidance and CMAS
1	18	.43 N.S.	-.34 N.S.
2	18	.37 N.S.	-.38 N.S.
Total	36	.39 *	-.35 *
3	18	-.59 **	.49 *
4	18	-.27 N.S.	.14 N.S.
Total	36	-.48 **	.34 *
Overall Total	72	-.06 N.S.	-.02 N.S.

N.S. Not Significant

\*\* Significant at the .01 Level

\* Significant at the .05 level

#### Oral Anxiety

There were no significant relationships between oral anxiety and oral approach behavior in the reading situation. There was a significant

relationship between oral anxiety and oral avoidance behavior for the average readers but not for the severely disabled readers. There was no significant relationship between oral anxiety and anxiety measured by the Children's Manifest Anxiety Scale. (See Table XXXV)

TABLE XXXV  
CORRELATIONS BETWEEN ORAL ANXIETY AND ORAL APPROACH  
AND AVOIDANCE BEHAVIOR AND CMAS

Reading Group	N	Oral Approach and Anxiety	Oral Avoid. and Anxiety	Oral Anxiety and CMAS
Disabled	26	-.15 N.S.	.06 N.S.	-.24 N.S.
Average	27	.20 N.S.	.61 **	-.07 N.S.

N.S. Not Significant

\*\* Significant at the .01 level

#### Anxiety and Reading Behavior

There were no significant relationships between anxiety as measured by the Children's Manifest Anxiety Scale and reading behavior in the oral and silent reading situation. (See Table XXXVI)

TABLE XXXVI  
CORRELATIONS BETWEEN ANXIETY AND APPROACH AND  
AVOIDANCE READING BEHAVIOR

Reading Group	N	Oral Avoid. & CMAS	Oral App. & CMAS	Silent Avoid. & CMAS	Silent App. & CMAS
Disabled	27	-.10 N.S.	-.21 N.S.	-.17 N.S.	-.04 N.S.
Average	26	.10 N.S.	.06 N.S.	.08 N.S.	-.08 N.S.

N.S. Not Significant

#### Mean Performance of Reading Behavior

The average readers had significantly higher approach behaviors in the oral and silent reading situations than the severely disabled readers. Also, the severely disabled readers had significantly higher avoidance behaviors in the oral reading situation than the average readers. There were no significant differences between the reading groups in avoidance behavior in the silent reading situation. (See Table XXXVII)

TABLE XXXVII

MEAN SCORES ON ORAL APPROACH AND AVOIDANCE  
 READING BEHAVIOR, AND SILENT APPROACH  
 AND AVOIDANCE READING BEHAVIOR  
 BY READING GROUPS

Group	N	Oral Approach	Oral Avoid.	Silent App.	Silent Avoid.
Average	36	1415.888 **	1950.444	2183.833 **	1219.972 N.S.
Disabled	33	892.424	2949.151 *	1492.727	1654.364

N.S. Not Significant

\*\* Significant at the .01 level

\* Significant at the .05 level

## CHAPTER V

### DISCUSSION AND SUMMARY

#### Introduction

Attitudes toward reading were conceptualized in terms of approach and avoidance categories, including three components for each attitude: think, feel, and wish. Reading behavior was also conceptualized in terms of approach and avoidance categories.

This chapter provides a discussion of results, suggestions for additional research, and a summary of the study. The statistically significant findings were:

1. There were differences in attitudes toward reading between reading ability groups.
2. There were no differences in attitudes based on grade level.
3. There were differences in attitudes based on the different reading situations.
4. There was an interaction between grade level and pictures.
5. There was an interaction between approach-avoidance and reading groups.
6. There were differences between components of attitudes.
7. There was an interaction between pictures and approach-avoidance.
8. There was an interaction among pictures, approach-avoidance, and components of attitudes.



9. Disabled readers had higher think, feel, and wish avoidance scores than average readers.
10. Avoidant wish responses of disabled readers were higher than think and feel avoidance responses of average readers.
11. Avoidance feel and think responses of disabled readers were higher than think and feel avoidance responses of average readers.
12. Average readers had higher approach scores than disabled readers.
13. Card III elicited higher avoidance scores for average readers than approach scores for disabled readers.
14. There were differences between avoidance scores for average readers.
15. There were differences between avoidance scores for disabled readers.
16. The components of attitudes were related to each other.
17. There was a relationship between approach and avoidance attitudes.
18. There was no relationship between attitudes and age or IQ.
19. There was no relationship between attitudes and reading behavior.
20. There was no relationship between approach and avoidance behavior.
21. There were relationships between approach silent and oral reading behavior and avoidance silent and oral reading behavior.
22. There was no relationship between reading behavior and age

or IQ.

23. There were relationships between attitudes and anxiety (CMAS).
24. There was a relationship between oral anxiety and reading behavior.
25. There was no relationship between anxiety (CMAS) and reading behavior.
26. There were differences between reading groups in terms of reading behavior.

### Significant Differences

The major results of this study supported the hypothesis that there was a significant difference in attitudes toward reading and reading level of achievement. Differences in attitudes toward reading were also related to the specific reading situation, the specific components of attitudes - think, feel, wish - and the nature of the attitudes, approach or avoidance. These findings suggested that attitudes toward reading were quite complex and were involved with other factors. Thus, one cannot discuss attitudes toward reading without taking into consideration reading ability, the particular reading situation used as a referent, grade level, the direction of attitudes - approach or avoidance - and the components of attitudes.

### Severely Disabled Readers

The severely disabled readers displayed significantly higher avoidance attitudes toward reading than the average readers. In terms of avoidance attitudes, the components of think, feel, wish were significantly higher for the severely disabled readers than for the average

readers. It is interesting to note that the wish avoidance attitudes of disabled readers were significantly higher than the wish and the think and feel avoidance attitudes of the average readers. However, in no case was the think and feel components of avoidance attitudes of disabled readers significantly higher than the wish avoidant attitudes of average readers. Thus, the wish component of avoidance attitudes appeared to reflect the strongest intensity of avoidance attitudes. When wish avoidance attitudes of both average and disabled readers were compared, the remedial reading situation elicited the strongest avoidance attitudes for the 1st to 3rd grade disabled readers. When avoidance attitudes were compared among the disabled readers, the remedial reading situation still elicited the strongest avoidance attitudes. Thus, for the disabled reader in the 1st to 3rd grade, the remedial reading situation elicited stronger avoidant responses than reading in class (Card I) and reading by oneself (Card V), and the oral reading situation (Card II). The one reading situation, remedial reading, which is perhaps most crucial in helping the young disabled reader was perceived as being the most unpleasant reading situation. A possible explanation is that Card IV which may be similar to a remedial reading situation showed the reading group segregated from the rest of the class. Many of the verbal responses to this card reflected statements of embarrassment and a desire to return back to one's seat among the rest of the class.

For the severely disabled readers in the 4th-6th grades, there was not a specific reading situation which elicited more negative responses than other reading situations. Rather, these disabled readers displayed significantly higher avoidant attitudes on all cards and in

all reading situations than average readers. When the avoidance attitudes to different cards were compared, the disabled readers in the 4th-6th grades had significantly higher avoidance scores on Card I, Card II, and Card IV, than the disabled readers in the 1st to 3rd grades. However, the difference appeared to be a function of comparing the wish components to the think and feel components. It was noted, however, that the wish avoidance responses to Card III by the 4th-6th grade disabled readers were significantly higher than the think and feel avoidance responses of disabled readers in the 1st-3rd grades to Cards I, II, and IV. A possible explanation of the high wish avoidance scores to Card III was suggested by the verbal statements of the disabled readers. Many of their statements reflected their thoughts that "the boy reading in the empty classroom" was being punished for various misdeeds. An implicit assumption suggested by such statements was that the disabled reader had been punished by having to stay by himself and read. If this assumption were true, then perhaps a teacher may inadvertently condition avoidance attitudes toward reading by having a child stay after school or stay in from recess and read during this period of confinement. We would not, necessarily, suggest that the method of punishment be changed; rather, the unpleasant feelings associated with such punishment should not be linked to the reading process. This is especially important with children who already have a reading problem.

The severely disabled readers did not display higher approach scores when compared to average readers. There were also no significant differences between disabled readers in terms of approach scores to the different reading situations. Thus, the specific reading

situation is not an important factor in approach attitudes for disabled readers.

### Average Readers

There were fewer significant approach attitudes expressed by average readers than avoidance attitudes expressed by disabled readers. In comparing approach with attitudes for average and disabled readers, Card V elicited the only significant differences. Approach feel responses of average readers were significantly higher for Cards I and IV than with approach responses of the disabled readers were for Cards I and IV. These findings were applicable only to the 4th-6th grade levels of the severely disabled readers. These results indicated that this disabled reading group displayed the lowest approach attitudes to all reading situations. It was interesting to note that for the average readers, grades 1-3, the remedial reading situation elicited one of the strongest approach scores. These findings suggested that the reading circle is perceived favorably by average readers, but not by disabled readers. The average readers in grades 1-3 also had high approach scores to Card I.

A speculative explanation as to why average readers in the 1st-3rd grades had high approach scores to Card I and IV may be related to the fact that these two cards depicted other children participating in the reading process. Although other children were also present in Card II, anxiety over oral reading performance may account for the absence of strong approach responses. Some support was lent to this hypothesis by the verbal statements of average readers to Card II. They reflected great concern over adequacy in reading. Thus, young children without

reading problems may receive more pleasure when reading with their peers than when reading by themselves. Although such findings were not proven by this study, it does suggest an interesting hypothesis for further research.

When avoidance responses of average readers were compared to approach responses of disabled readers, only Card III elicited strong avoidance responses. When avoidance responses of average readers were compared to each other, Card III also elicited the strongest responses. A possible explanation suggested is that average readers also viewed this reading situation as a form of punishment.

### Correlational Analysis

#### Components of Attitudes

The components of attitudes (think, feel, wish) were significantly related to each other for both approach and avoidance attitudes. However, some relationships for the specific sub-reading groups were not significant. For approach scores, feel and wish were not significant for average readers, grades 1-3 and for disabled readers, grades 1-3, and grades 4-6. The intercorrelations between think and feel, and think and wish approach scores, as well as the intercorrelations between feel and wish avoidance scores were not significantly related for the average readers in the 1st-3rd grades. The lack of relationship for these specific results suggested the influence of the different reading situations. However, the overall correlation did support the hypothesis that attitudes do contain at least these three components.

### Approach and Avoidance Attitudes

The correlations between approach and avoidance attitudes reflected a marked negative relationship. High approach scores were associated with low avoidance scores, and high avoidance scores were associated with low approach scores.

### Attitudes, Age, and IQ

There were no significant relationships between attitudes toward reading and intelligence or age. Thus the child's attitude toward reading appeared to be dependent on his reading experiences, especially in terms of reading achievement, and independent of intellectual and age factors.

### Attitudes and Reading Behavior

One of the most interesting findings was that attitudes toward reading were not related to reading behavior in a group situation. Thus, approach or avoidance attitudes had no relationship to approach or avoidance behavior in the oral or silent reading situation. One possible explanation for the lack of relationship may lie within the Reading Behavior Rating Scale. Perhaps the items contained in the Rating Scale were not indicative of approach or avoidance behavior but were related to some unknown third factor. Another explanation may be related to the specific reading situations themselves. Since the reading situations usually contained only 4 or 6 children and a specially trained teacher, attitudes may have been modified by the environment, or not allowed to operate and affect behavior. An interesting question suggested for further research is whether or not atti-

tudes toward reading are related to reading improvement and if attitude change is related to reading improvement. Research is currently under way by this investigator exploring the relationship of college students' attitudes toward reading and college achievement.

### Reading Behavior

There were no significant relationships between oral approach and avoidance behavior, nor between silent approach and avoidance reading behavior. Unlike attitudes toward reading, reading approach and avoidance behaviors were not related to each other. However, there were marked positive relationships between avoidance behaviors in the oral and silent reading situations. There was also a positive relationship for average readers between approach behavior in the oral and silent reading situations. Thus those students who avoided the oral reading situation also avoided the silent reading situation. For average readers, those who approached the oral reading situation also approached the silent one. This was not true for disabled readers. Disabled readers who approached the silent reading situation did not necessarily approach the oral reading situation.

It is interesting to note that average readers had significantly higher approach behaviors in the oral and silent reading situations than disabled readers. The severely disabled readers had significantly higher avoidance behaviors in the oral reading situation. In terms of avoidance reading behavior, the reading situation is quite important. When discussing reading behavior, as well as attitudes, one must also be concerned with the specific reading situation.



### Reading Behavior, Age and IQ

There were no relationships between reading behavior and age or intelligence. Thus, reading behavior appeared to be related only to variables within the reading situation or other factors not tested.

### Attitudes and Anxiety

There were significant relationships between anxiety as measured by the Childrens' Manifest Anxiety Scale and attitudes toward reading. There was a negative relationship between approach attitudes toward reading and anxiety, for the average readers. Thus, the higher the anxiety scores, the lower the approach attitudes. There was also a positive relationship between anxiety and avoidance attitudes for the average readers; the higher the anxiety scores, the higher the avoidance attitudes.

For the disabled readers, the relationships between attitudes and anxiety were in the opposite direction. Approach attitudes were positively related to anxiety, while avoidance attitudes were negatively related to anxiety. Thus, high anxiety scores were associated with high approach attitudes and low anxiety scores were associated with high avoidance scores. These results suggested that the reading situations may be seen as anxiety-producing by some disabled readers, but that this anxiety operates as a drive factor for these disabled readers. Another hypothesis might be that the high approach attitudes of disabled readers may result in more contact with reading situations, which may, in turn, be more anxiety producing.

### Anxiety and Reading Behavior

There were no significant relationships between anxiety as measured by the Children's Manifest Anxiety Scale and reading behavior. The absence of a relationship between anxiety and reading behavior suggested that the CMAS was not sensitive in measuring anxiety related to behavior. The fact that the Oral Anxiety Scale was not related to the CMAS lent support to the hypothesis.

### Oral Anxiety Scale and Reading Behavior

Oral anxiety as measured by the RAT was significantly related to oral avoidance behavior for the average readers, but not for the disabled readers. Thus, average readers who scored low on the Oral Anxiety Scale had low avoidance scores, while those who scored high on the Anxiety Scale had high avoidance behaviors. This may suggest the avoidance items of the Reading Behavior Rating Scale were actually measuring anxiety behaviors as opposed to avoidance behaviors. Perhaps anxiety and avoidance behaviors both interacted and resulted in a confounded measurement. This hypothesis could explain the lack of relationship between attitudes and behavior. The fact that there were no significant differences between silent avoidance behaviors lent further support to the insensitivity of the Reading Behavior Rating Scale.

The fact that the oral anxiety scale was not negatively related to oral approach behaviors of disabled and average readers was not unusual since the oral approach and avoidance behaviors were not related to each other.

The ambiguous findings of the relationships between reading behavior and other variables suggested the need for additional research.

Additional instruments for measuring Reading Behavior should be constructed and correlated with one another. The relationship of reading behavior to reading improvement needs to be explored. The relationship of reading behavior to specific skills as well as that between the skills themselves and reading improvement may be of critical importance. Thus, for example, if a child has good word attack skills but avoids using them, the focus of remedial treatment should be on the avoidance behaviors and not on the skills. Additional research could also investigate the relationship of attitudes toward reading and specific reading skills. Perhaps, approach and avoidance attitudes are directly related to reading skills and not reading behavior. These are a few questions raised by this study.

#### Attitude Change

One implication of the finding that disabled readers did not have any significantly high approach scores is that approach attitudes need to be cultivated among these readers. Since approach and avoidance attitudes are related to each other, this further suggests that avoidance attitudes should be reduced. Thus, we would recommend that a remedial reading program should simultaneously work on decreasing avoidance attitudes and increasing approach attitudes toward reading. The remedial program should also take into consideration that attitudes contain three components - think, feel, and wish. Therefore, a remedial reading program should attempt to change attitudes on a cognitive, affective, and fantasy level. This research suggests tentatively that the fantasy level would be the most difficult, but probably the most fruitful level on which to bring about change.

We would further suggest that the RAT may be used to ascertain attitudes toward reading in general and for the specific reading situation. If a child were to have strong avoidance attitudes toward reading, in general, or to a specific reading situation, he might be asked - through the use of the RAT - what would make the reading situation fun. It is our own strong bias that children are more capable of knowing what will be fun for them than many authorities in the field. Thus, it is suggested that the RAT might be used as an adjunct tool in remedial work.

### Summary

This investigation explored the relationship between attitudes toward reading and reading ability. A specific projective-type test, The Reading Apperception Test, was constructed to ascertain such attitudes. The instrument was found to have both test-retest and inter-score reliability. Attitudes were conceptualized in terms of approach and avoidance categories, including three components to each attitude: think, feel and wish. A factorial design and correlational analysis lent support to this conceptualization of attitudes.

The relationships of attitudes toward reading and reading behavior, as well as the relationship between reading behavior and reading ability, were also investigated. Reading behavior was also conceptualized in terms of approach and avoidance categories and measured by the Reading Behavior Rating Scale. Various correlational analyses suggested that the Scale may be measuring a confounded variable.

Subjects consisted of 72 males children enrolled in the Oklahoma State University Summer Reading Program. The children were classified

into two major reading groups: average readers and severely disabled readers. Each reading group was further divided into two sub groups: those in grades 1-3, and those in grades 4-6.

The general findings indicated that attitudes toward reading were related to reading ability, the specific reading situation, the components of attitudes: think, feel, and wish, and the direction of attitudes: approach or avoidance.

The severely disabled readers displayed significantly higher avoidance attitudes toward reading than the average readers. The reading situation similar to a remedial reading situation elicited the strongest avoidance attitudes among the disabled readers, grades one through three. Many of the disabled readers perceived the remedial reading situation as the most unpleasant reading situation. The disabled readers and the average readers perceived the picture of the child in an empty classroom as a punitive situation. The implications of punishing children by requiring that they read were discussed. The disabled readers did not have any significant approach attitudes toward any of the five reading situations.

The average readers had significantly higher approach attitudes toward reading than the disabled readers. The high approach attitudes of the average readers, grades 4-6, appeared to be positively related to the presence of other children in the reading situation. One exception was the situation of a child reading in front of the classroom; in this situation, the approach attitudes of the average readers were not significantly high.

The components of attitudes were positively intercorrelated with each other. This suggested that attitudes contain at least three com-

ponents: think, feel, and wish. Approach and avoidance attitudes were negatively related to each other. Approach and avoidance attitudes were related to anxiety. The direction of the relationship depended on the level of reading ability and on the direction of attitudes: approach or avoidance.

There was a lack of a relationship between attitudes and reading behavior. The fact that oral anxiety and oral approach behavior were related suggested that the Reading Behavior Rating Scale might have measured behaviors confounded with anxiety. The Summer Reading Program might also have modified attitudes, without modifying behaviors. In terms of reading behavior, those average readers who approached the oral reading situation also approached the silent reading situation. However, disabled readers who approached the silent reading situation did not necessarily approach the oral reading situation. Average readers had significantly higher approach behavior in both oral and silent reading situations than disabled readers. The disabled readers had significantly higher avoidance behavior in the oral situation than average readers.

Specific results were discussed in detail and suggestions made for additional research.

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**APPENDIX A**  
**READING BEHAVIOR RATING SCALE**

## READING BEHAVIOR RATING SCALE

Oral Reading Behavior

## Avoidance

- |                                 |                             |
|---------------------------------|-----------------------------|
| 1. Breathes deeply              | <u>/ present / absent /</u> |
| 2. Perspires                    | <u>/ present / absent /</u> |
| 3. Facial grimaces, tics        | <u>/ present / absent /</u> |
| 4. Voice tense, highly pitched  | <u>/ present / absent /</u> |
| 5. Fidgety, excessive movement  | <u>/ present / absent /</u> |
| 6. Stuttering, stammering       | <u>/ present / absent /</u> |
| 7. easily distractable          | <u>/ present / absent /</u> |
| 8. giggling, laughter           | <u>/ present / absent /</u> |
| 9. complains of headaches, etc. | <u>/ present / absent /</u> |
| 10. loses place                 | <u>/ present / absent /</u> |
| 11. coughs, clears throat       | <u>/ present / absent /</u> |
| 12. refuses to read             | <u>/ present / absent /</u> |

## Approach

- |                               |                             |
|-------------------------------|-----------------------------|
| 13. volunteers to read        | <u>/ present / absent /</u> |
| 14. enjoys reading to class   | <u>/ present / absent /</u> |
| 15. child reads ahead of turn | <u>/ present / absent /</u> |

Silent Reading

## Avoidance

- |                                 |                             |
|---------------------------------|-----------------------------|
| 1. Perspires                    | <u>/ present / absent /</u> |
| 2. Facial grimaces, tics        | <u>/ present / absent /</u> |
| 3. Fidgety, excessive movement  | <u>/ present / absent /</u> |
| 4. easily distractable          | <u>/ present / absent /</u> |
| 5. complains of headaches, etc. | <u>/ present / absent /</u> |

6. asks to go to bathroom, drink,  
etc.  / present / absent /

Approach

7. reads on own initiative  / present / absent /  
8. asks for extra material  / present / absent /  
9. asks for help  / present / absent /  
10. talks about what he reads to  
teacher  / present / absent /

**APPENDIX B**  
**THE READING APPERCEPTION TEST**

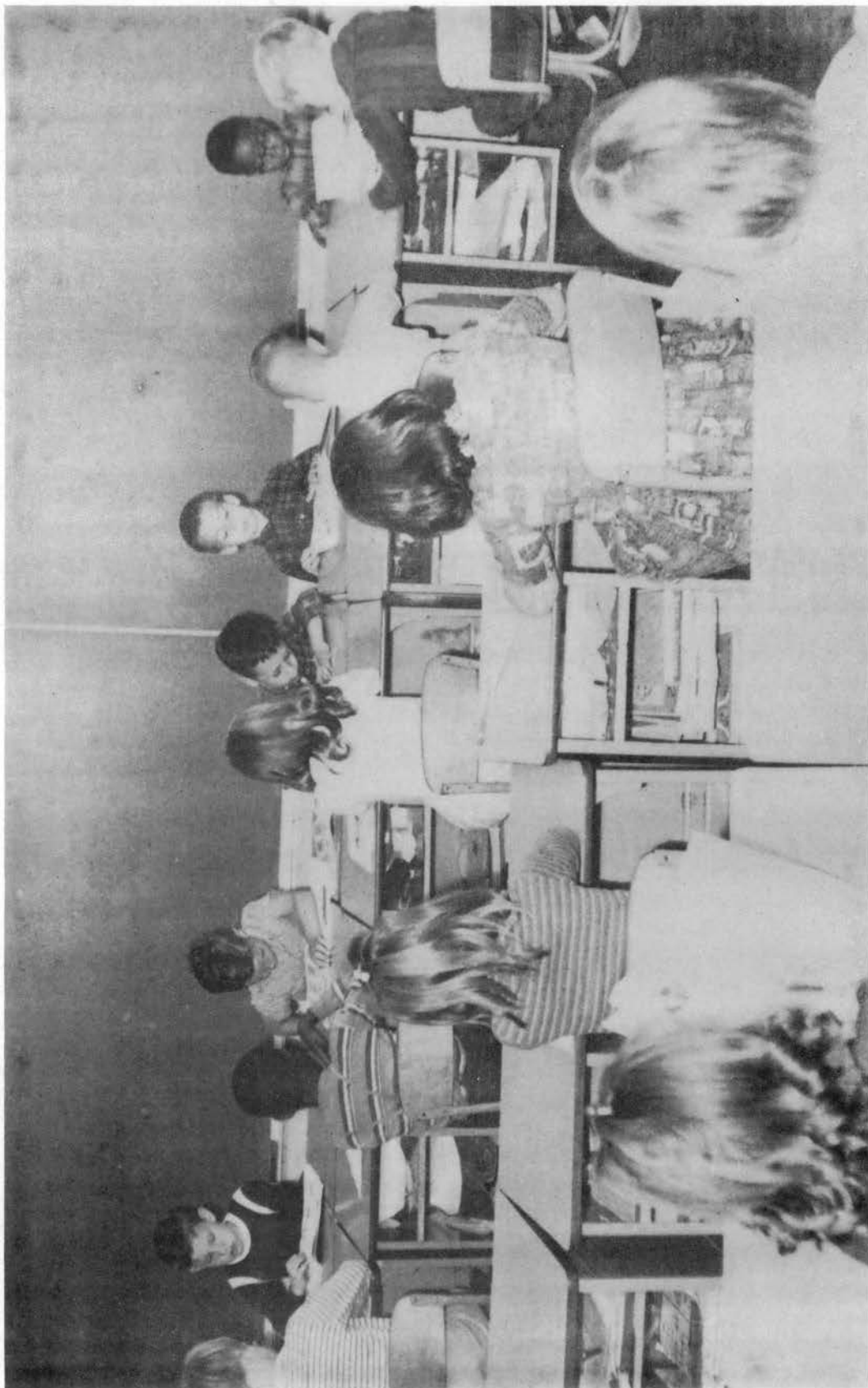


Figure 2. Card I

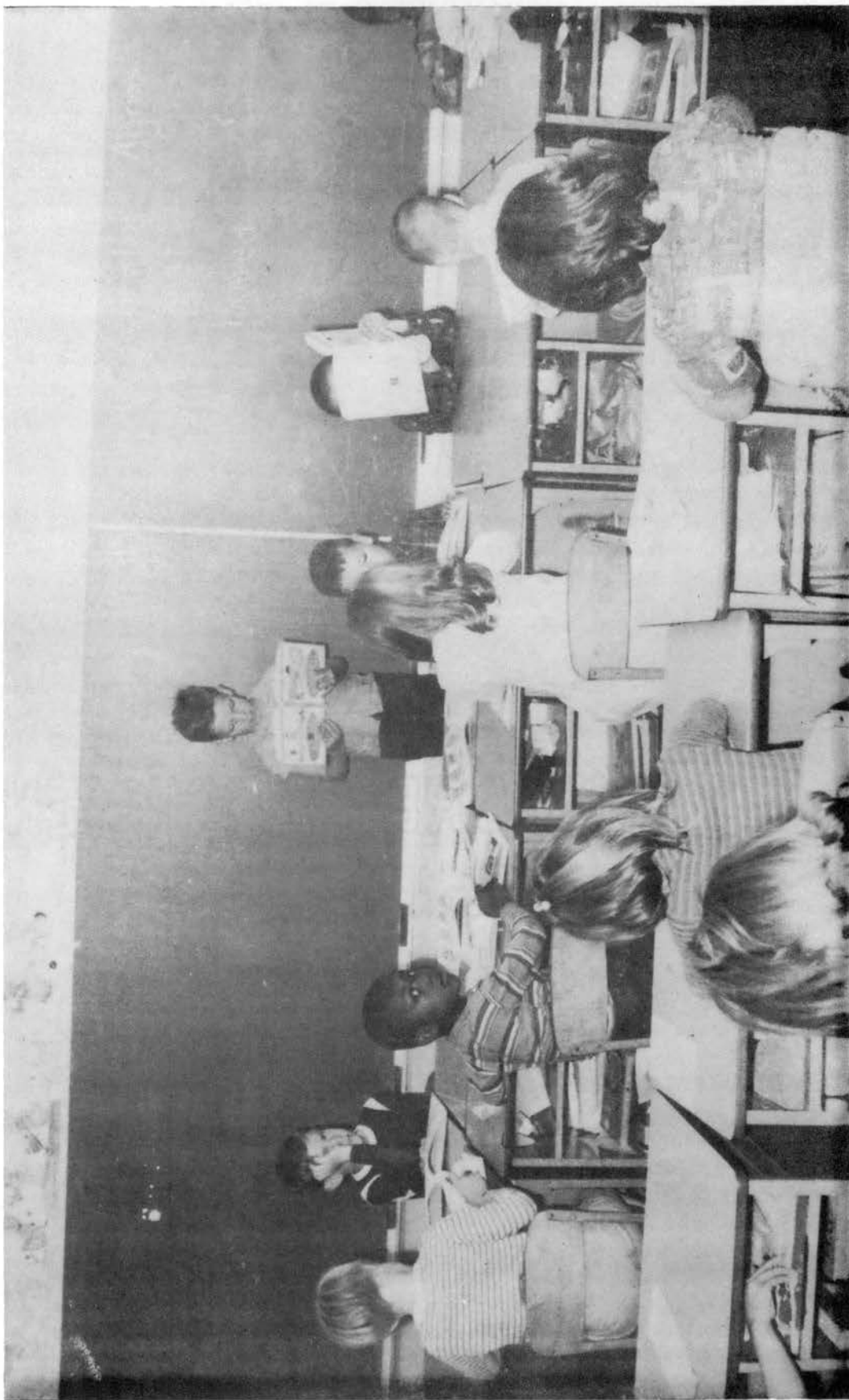


Figure 3. Card II

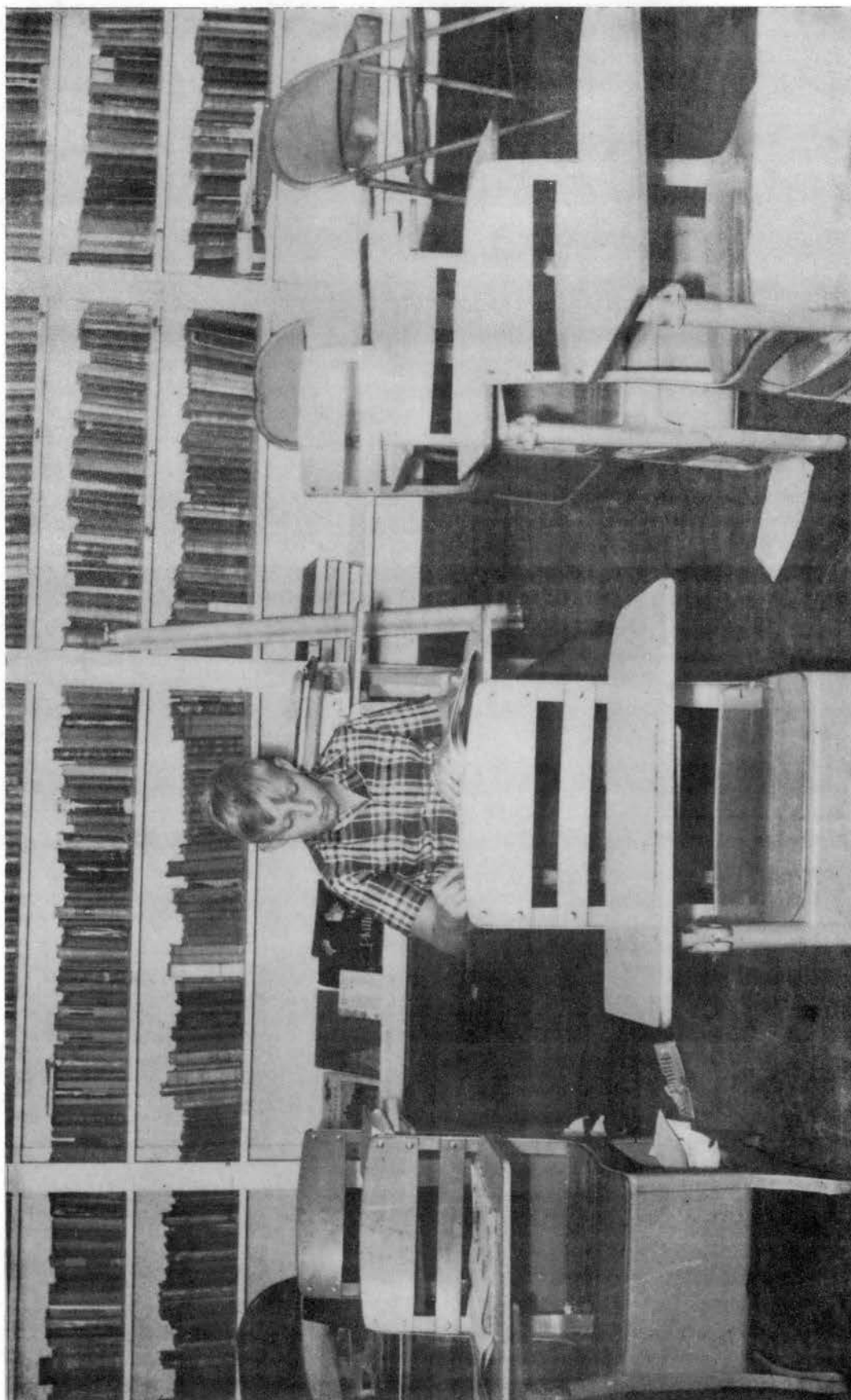


Figure 4. Card III



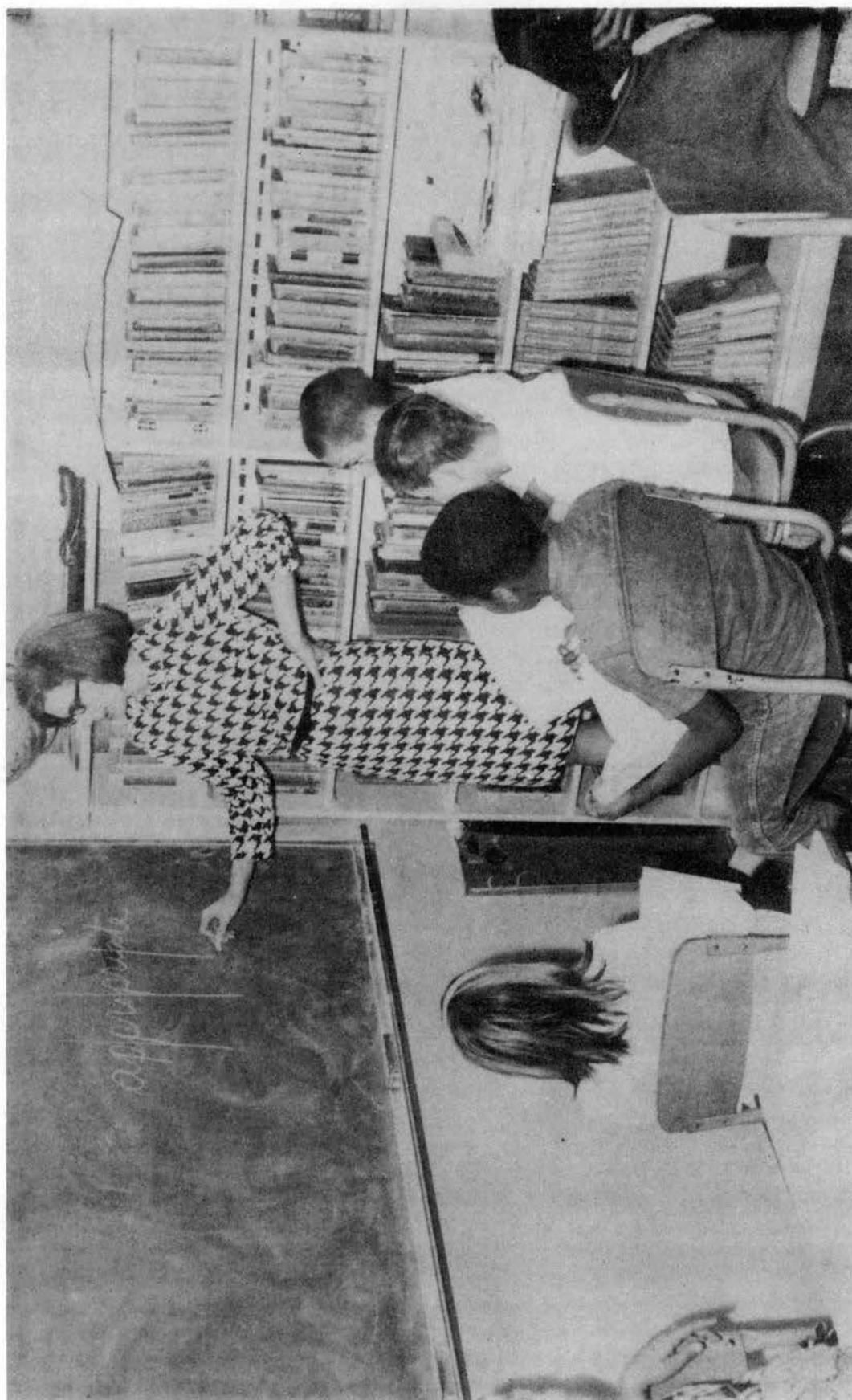


Figure 5. Card IV



Figure 6. Card V

APPENDIX C  
SCORING MANUAL FOR RAT

## MANUAL FOR RAT CARDS I, II, III, IV, V

ThinkApproach Category

Score

Think: about reading, about book about story, about words about character, about understanding, about getting work done, about reading hard, about lesson, about picture (cards 1 or 5), about learning, about doing well.

= 1

Think: about looking forward to it, likeing to read, whats going to happen next, about reading on own, about reading to the class, about being in the story, about reading more; thinking of story in detail

= 2

Avoidance Category

Think: about not having to read, not having to stay there, teacher not nice, about coloring, about sitting down, tired of standing, about nothing, about being mad, about unpleasant drawing, about test, worried, not paying attention, getting back to seat, anxious

= 1

Think: about going home, school being over, playing, taking a nap, out of school, quitting, getting out of there, get back, recess, getting sick, hating school, messing up school, burning down school; themes of punishment.

= 2

All Statements Prefaced by "I" Scored 2 points.

WishApproach Category

Score

Wish: read, read book, read story, someone would help, get work done, good grades, read good, better reader, could read, work better, read well, learn it, like teacher, understand, children listen to him.

= 1

Wish: to help others, read more, school longer, stay all day, do all work, read all the time to the class, be in story, be like person in the story, want to read, new books, or more books.

= 2

Avoidance Category

Score

Wish: don't like to read, didn't have to read, didn't have to work, wish for arithmetic, toys, not happy, want to color, wish for no tests, want to sit down, somebody else to read, tired, go back to seat with other children, do something else. = 1

Wish: could go home, could play, didn't have to go to school, new teacher, didn't have a teacher, no more school, go to sleep, get sick, get out, fishing, swimming, never had to read, day didn't begin. = 2

All Statements Prefaced by "I" Scored 2 points.

FeelApproach Category

Feel: good, happy, well, interested, glad, fun, excited, all right, OK, fine, wonderful, pleasant, proud, read better, read good. = 1

Feel: like to read, like it, concentrating, should learn, like in story, how story feels (i.e. empathy) want to read, be in story, read more, read on own, depends on story. = 2

Avoidance Category

Feel: sad, mad, tired, lonely, unhappy, bad, terrible, bored, ashamed, scared, frightened, worried, uncomfortable, don't want to be up there, embarrassed, stupid. = 1

Feel: don't like to read, somebody might laugh, can't stand it, like crying, like going to sleep, like going away, like going back to chair, like going outside, like no school, like playing, going home, going fishing, swimming, themes of punishment, have to read, burn book, burning school, weekend was here. = 2

All Statements Prefaced by "I" Scored 2 points.

Statements not fitting into an approach or avoidance category (above criteria) were scored zero.

APPENDIX D

ATTITUDES, ANXIETY, AGE, AND IQ OF SEVERELY DISABLED  
AND AVERAGE READERS: GRADES 1-3 AND 4-6

ATTITUDES, ANXIETY, AGE, AND IQ OF SEVERELY  
DISABLED READERS: GRADES 1-3

Subjects	Approach			Avoidance			Age	IQ	CMAS	Oral Anxiety
	Think	Feel	Wish	Think	Feel	Wish				
94	1	3	0	7	8	10	7.33	105	14	2
1	2	5	4	4	1	4	7.75	83	26	0
3	0	0	0	8	8	10	6.75	104	3	0
45	1	0	0	8	7	8	7.33	100	20	2
80	3	5	2	1	1	4	8.83	114	11	0
41	4	3	1	2	3	7	8.75	89	37	1
62	2	4	2	6	4	8	8.08	128	21	0
42	6	6	4	0	0	5	9.00	98	25	1
54	5	2	5	3	4	3	8.75	88	29	0
52	2	4	1	6	0	7	9.17	99	12	0
91	2	2	1	4	8	10	7.33	91	15	5
15	6	2	6	2	1	2	8.33	96	6	0
49	4	2	0	3	4	7	11.25	82	11	0
48	4	4	1	1	0	5	9.00	80	23	0
59	2	1	0	6	7	7	8.67	105	15	5
64	5	2	2	2	7	4	8.33	93	22	3
76	0	0	0	8	4	7	7.50	98	3	0
30	3	4	2	4	3	8	11.50	88	9	5

ATTITUDES, ANXIETY, AGE, AND IQ OF SEVERELY  
DISABLED READERS: GRADES 4-6

Subjects	Approach			Avoidance			Age	IQ CMAS		Oral Anxiety
	Think	Feel	Wish	Think	Feel	Wish				
35	4	4	0	1	3	4	11.00	104	19	0
103	3	1	1	5	7	7	11.50	103	14	3
73	6	5	5	0	1	1	10.42	131	20	2
81	3	0	0	5	7	8	10.33	93	24	0
79	2	0	0	8	8	9	10.33	105	16	6
82	0	0	0	9	8	10	9.42	93	21	1
36	3	6	0	1	1	6	10.75	113	22	0
16	3	3	1	2	2	5	10.33	96	25	0
93	5	4	4	0	2	4	11.75	89	30	5
68	4	4	1	1	5	6	11.17	98	10	0
17	4	6	0	0	2	7	13.33	93	16	3
8	1	1	0	8	8	10	11.42	97	3	10
32	0	0	0	7	10	6	8.83	101	17	6
86	4	2	0	4	7	7	10.33	80	15	2
9	2	2	1	5	2	8	10.75	109	10	0
87	4	5	1	4	1	10	10.83	102	24	1
23	2	1	0	4	7	9	13.67	108	24	2
60	2	0	0	4	7	9	12.00	98	2	6



ATTITUDES, ANXIETY, AGE, AND IQ OF AVERAGE  
READERS: GRADES 4-6

Subjects	Approach			Avoidance			Age	IQ CMAS		Oral Anxiety
	Think	Feel	Wish	Think	Feel	Wish				
77	4	5	8	2	2	1	12.33	110	14	2
50	3	5	3	0	0	0	10.25	95	17	0
100	3	2	0	4	7	9	11.25	98	17	1
19	4	0	2	4	9	8	10.75	115	16	3
65	4	5	6	0	0	0	9.83	113	8	2
89	5	2	3	3	4	6	13.25	134	21	0
69	6	5	4	0	1	4	13.17	126	14	0
58	2	2	1	5	3	7	10.58	87	17	0
90	7	6	6	0	3	2	10.33	123	6	2
7	3	5	5	2	2	2	8.92	112	15	2
70	6	3	2	1	2	4	11.25	118	15	1
71	5	2	3	1	4	3	10.83	95	14	0
92	4	4	2	0	2	4	12.08	80	25	0
21	3	3	3	1	5	5	10.00	92	22	5
38	4	6	5	1	2	1	13.92	100	34	2
55	4	6	2	2	1	5	10.17	111	6	4
51	3	1	1	1	2	7	11.08	115	20	0
47	5	3	3	0	2	3	11.42	103	10	0

ATTITUDES, ANXIETY, AGE, AND IQ OF AVERAGE  
READERS: GRADES 1-3

Subjects	Approach			Avoidance			Age	IQ	CMAS	Oral Anxiety
	Think	Feel	Wish	Think	Feel	Wish				
6	6	4	4	0	0	1	8.33	136	18	0
95	4	4	4	0	3	2	9.00	102	13	2
83	6	7	5	0	0	0	6.67	91	18	0
2	4	3	1	2	2	5	8.08	83	3	1
74	1	0	2	2	7	5	7.75	114	16	6
40	4	5	0	2	2	10	7.00	106	19	2
22	5	6	6	0	0	0	7.08	102	9	2
10	5	3	5	0	1	1	8.00	114	14	3
5	4	10	1	1	1	8	6.83	104	27	0
24	3	2	2	1	5	4	7.75	111	26	6
34	6	5	6	0	4	3	7.75	99	5	2
96	4	1	4	1	5	3	8.42	123	38	2
4	4	7	8	0	0	0	9.42	105	6	1
78	2	4	4	0	0	0	7.50	92	22	0
20	4	5	5	0	3	2	6.92	102	8	3
11	4	7	5	2	2	4	8.00	120	9	0
67	0	0	0	8	6	9	6.83	118	38	0
37	0	1	2	1	1	6	6.92	108	27	1

## VITA

William J. O'Connor

Candidate for the Degree of

Doctor of Education

Thesis: THE READING APPERCEPTION TEST: AN EXPLORATION OF ATTITUDES  
TOWARD READING

Major Field: Educational Psychology

### Biographical:

Personal Data: Born in New York City, New York, March 22, 1940.  
Married to Beverly Lois Comman, 1965.

Education: Graduated from Martin Van Buren High School, Queens, New York, in 1957; received the Bachelor of Science degree from New York University, 1962; did graduate work in clinical psychology at Hofstra University, 1962-1964; received the Master of Science degree from the Oklahoma State University, with a major in Psychology, in May, 1967; completed the requirements for the Doctor of Education degree in July, 1968.

Professional Experience: Graduate assistant at the Reading Center, Oklahoma State University, 1965-1967 and conducted the psychological testing; Summer, 1967, supervised the graduate reading practicum at the Reading Center; Psychologist, Comanche County Guidance Center, Lawton, Oklahoma, Summer 1965; Psychological Consultant, Kingfisher School System, Kingfisher, Oklahoma, 1966-1967; Assistant Professor of Psychology, Kansas State College of Pittsburg, Pittsburg, Kansas, 1967-1968; during this time, taught and worked with students at the College Counseling Center; Psychological consultant, Crawford County Mental Health Clinic, Pittsburg, Kansas, 1967-1968.