THE UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

THE TEMPORAL ORIENTATION OF THE RETARDED READER

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

degree of

DOCTOR OF PHILOSOPHY

BY

AGNES ANN MANNEY

Norman, Oklahoma

1957

Downloaded from SHAREOK. Persistent Handle URL: https://hdl.handle.net/11244/230

THE TEMPORAL ORIENTATION OF THE RETARDED READER

APPROVED BY

P. T. Teska

F. F. Gaither

D. Hulman

W B Ragan

M Davison

DISSERTATION COMMITTEE

ACKNOWLEDGMENT

This dissertation could not have been brought to completion without the cooperation of many people.

To Dr. P. T. Teska, who directed the dissertation, I am sincerely grateful for assistance and for continuous encouragement.

I am indebted to the Cincinnati Public Schools for the privilege of obtaining subjects from among the children enrolled in several elementary schools. I am especially grateful to the principals and teachers for their whole-hearted cooperation.

TABLE OF CONTENTS

		Page
LIST OF TABLES		v
Chapter		
I.	INTRODUCTION	1
	Research Studies of Reading Retardation and Personality	6
	Temporal Orientation	14
II.	STATEMENT OF THE PROBLEM	25
III.	PROCEDURE OF THE STUDY	27
	The Subjects	27
	Instrument of Measure	29
	The Experimental Tasks	31
	Treatment of the Data	33
IV.	THE RESULTS	36
	Temporal Direction Responses to Each Stimulus	47
	Temporal Span Responses to Each Stimulus	48
	Reliability of Children's Estimates of Temporal Span	49
V.	DISCUSSION OF RESULTS	50
VI.	SUMMARY	56
BIBLIOGRAPHY		60
APPENDIX		64

LIST OF TABLES

Table		Page
1.	Comparison of 36 Good Readers and 36 Poor Readers on the Variable of Temporal Direction	36
2.	Comparison of 36 Good Readers and 36 Poor Readers on the Variable of Temporal Span	37
3.	Comparison of 36 Good Readers and 36 Poor Readers on the Variable of Temporal Fluency	37
4.	Comparison of 36 Lower Class Subjects and 36 Middle Class Subjects on the Variable of Temporal Direction	38
5.	Comparison of 36 Lower Class Subjects and 36 Middle Class Subjects on the Variable of Temporal Span	38
6.	Comparison of 36 Lower Class Subjects and 36 Middle Class Subjects on the Variable of Temporal Fluency	39
7.	Comparison of 18 Good Readers and 18 Poor Readers of the Middle Class on the Variable of Temporal Direction	40
8.	Comparison of 18 Good Readers and 18 Poor Readers of the Middle Class on the Variable of Temporal Span	40
9.	Comparison of 18 Good Readers and 18 Poor Readers of the Middle Class on the Variable of Temporal Fluency	41
10.	Comparison of 18 Good Readers and 18 Poor Readers of the Lower Class on the Variable of Temporal Direction	42

Table		Page
11.	Comparison of 18 Good Readers and 18 Poor Readers of the Lower Class on the Variable of Temporal Span	42
12.	Comparison of 18 Good Readers and 18 Poor Readers of the Lower Class on the Variable of Temporal Fluency	43
13.	Comparison of 18 Lower Class, Good Readers and 18 Middle Class, Good Readers on the Variable of Temporal Direction	43
14.	Comparison of 18 Lower Class, Good Readers and 18 Middle Class, Good Readers on the Variable of Temporal Span	44
15.	Comparison of 18 Lower Class, Good Readers and 18 Middle Class, Good Readers on the Variable of Temporal Fluency	44
16.	Comparison of 18 Lower Class, Poor Readers and 18 Middle Class, Poor Readers on the Variable of Temporal Direction	45
17.	Comparison of 18 Lower Class, Poor Readers and 18 Middle Class, Poor Readers on the Variable of Temporal Span	46
18.	Comparison of 18 Lower Class, Poor Readers and 18 Middle Class, Poor Readers on the Variable of Temporal Fluency	46
19.	Temporal Direction Responses of 36 Good Readers and 36 Poor Readers to Each of the Five Stimuli .	65
20.	Temporal Direction Responses of 36 Lower Class Subjects and 36 Middle Class Subjects to Each of the Five Stimuli	66
21.	Temporal Span Responses of 36 Good Readers and 36 Poor Readers to Each of the Five Stimuli	67
22.	Temporal Span Responses of 36 Lower Class Subjects and 36 Middle Class Subjects to Each of the Five Stimuli	68

THE TEMPORAL ORIENTATION OF THE RETARDED READER

CHAPTER I

INTRODUCTION

As long as there are laws which force all children to continue in school, and as long as so much of school activity is dependent upon reading, the retarded reader will represent one of the most serious challenges to educators. The upward extension of compulsory education and the increasingly rigid enforcement of attendance laws keep the retarded reader in school although he is unable to perform effectively in the curriculum areas which require skill in reading. Compulsory education has, therefore, necessitated focusing attention on the retarded reader. Most children are subject to considerable instruction in learning to read and, thereby, to many success and/or failure experiences. Unfortunately, some children do not acquire the expected degree of skill in reading or do not progress at the expected rate. Children who have difficulty, who are retarded, in learning to read have been studied extensively and intensively in order that their difficulties may be discovered, understood, and corrected or avoided.

There have been many attempts to get at the causes of reading difficulty. Such factors as below-average mentality; physical defects, particularly those involving sight and hearing; dominance or handedness; lack of readiness for reading in terms of mental, physical, social, and emotional immaturity are frequently reported as causes of reading retardation. All these factors have been studied extensively. The cause to which retardation in reading is attributed influences not only the treatment of the difficulty but also the attitudes toward the child. Educators recognize that children of less than average intelligence will achieve in reading to a limited extent. Teachers are alert for evidences of faulty sight and hearing. Special facilities and teaching techniques may be provided for children with physical involvement. The typical school takes corrective steps for the more obvious causes of reading difficulty. However, these special cases account for only a small per cent of the children who are retarded in reading. There are many children of at least normal intelligence with none of the obvious physical defects who read inadequately for their ages and grade levels and who, over a period of years, make little or no progress in learning to read. This group of children is of major concern to educators.

---

[1]Robert U. Jameson and Gillet E. Ketchum, "Common Sense about Children's Reading," Saturday Evening Post, April 7, 1956, p. 23.

The initial attempts to deal with reading difficulty were concerned with the more obvious factors. Remedial reading meant the checking and correction of physical defects; tests were made of visual acuity, and eye movement was analyzed in terms of regressions and fixations. Further analysis was made of reversals, substitutions, and omissions in reading. Few people believed there was any need for psychological evaluation in such procedures. The normal child who was unable to read was believed to have been taught poorly, and his reading retardation was thought to center around the number and type of errors that he made. Reading difficulty was thought to be a collection of poor habits, and the purpose of remedial reading was to correct the habits. Errors in reading were looked upon as causes of poor reading rather than as symptoms of the difficulty. Few people thought that there was other cause of reading retardation in normal children than poor reading habits. There was little or no regard for the operation of personality factors, although Blanchard noted in 1936 that "emotional reactions and emotional difficulties may be too little taken into account and interpreted too superficially, in many cases, as resulting from the trouble with reading rather than as preceding and producing it."[1] Even so, there was little thought that a child might

---

[1]Phyllis Blanchard, "Reading Disabilities in Relation to Personality and Emotional Development," Mental Hygiene, XX (1936), pp. 384-413.

be using inability to read as a means of expressing hostility toward his parents or himself, or that experiences in learning to read might be related to how the child felt about himself as a person.

More recently, investigations of the nature of reading difficulty have been concerned with the child's personality structure, with his feelings about himself, his parents, his role in the family, and his place in the social order. Personality studies of poor readers have employed projective techniques. The results of such studies of the personality of poor or retarded readers force recognition of the fact that poor reading is related to personality organization. The results further indicate that poor readers are social deviates. Maladjustment may precede retardation in reading, or it may follow in the school environment in which good reading is important, or maladjustment and poor reading may reinforce each other. Strang suggested that a wide variety of factors, ranging from hereditary and physical defects to poor interpersonal relationships and poor instruction, could give a child an inadequate start in reading. She indicated that inability to read then brings increased pressure from parents and loss of prestige which in turn augment the original difficulties.[1]

---

[1]Ruth Strang, "Reading and Personality Formation," Personality, I (1951), pp. 131-140.

The poor reader is frequently characterized by such terms as unhappy, frustrated, inadequate, insecure, anxious, repressed. These terms are indicative of social maladjustment. Harris and Roswell stated that "it is quite unusual to find a case of reading disability with no emotional difficulty. . . ."[1] Other estimates of the extent of emotional involvement in reading difficulty vary from less than 50 per cent to all or nearly all cases. Robinson attributed the controversy in the area of personality and reading to differing beliefs concerning reading, learning, and personality which result in differences in appraisal and interpretation.[2]

Expert opinion based on research indicates that reading difficulty and personality maladjustment are related although the nature and extent of the relationship is not clearly understood. Gates, for example, concluded that a factor which may be considered a "cause" of poor performance in one case may bring about superior performance in another.[3] Smith reported that usually both emotional disturbances and

---

[1]Albert J. Harris and Florence G. Roswell, "Clinical Diagnosis of Reading Disability," Journal of Psychology, XXXVI (1953), pp. 323-339.

[2]Helen M. Robinson, "Personality and Reading," in Modern Educational Problems, ed. A. E. Traxler. Report of the 17th Educational Conference, held under the auspices of the Educational Records Bureau and the American Council on Education, 1952.

[3]A. I. Gates, "The Role of Personality Maladjustment in Reading Disability," Journal of Genetic Psychology, LIX (1941), pp. 77-83.

reading difficulties result from a constellation of causes.[1]

Research Studies of Reading Retardation and Personality

Research studies of reading retardation and personality maladjustment have attempted, on the basis of the factors being investigated, to differentiate poor readers from children making normal progress or to identify the personality characteristics of poor readers. Jackson, after an extensive survey of 300 retarded and 300 superior readers in grades two through six, concluded that greater attention should be given to personality traits and home conditions as factors influencing success in reading.[2] Robinson, on the basis of a five year study by twelve specialists of thirty seriously retarded readers, reported "that the mere presence of anomalies does not justify conclusion that they are causes of reading failure."[3] Robinson concluded that "more attention should be given to home and family problems of severely retarded readers."[4]

---

[1]Nila B. Smith, "Research on Reading and the Emotions," School and Society, LXXXI (January 8, 1955), pp. 8-10.

[2]Joseph Jackson, "A Survey of Psychological, Social, and Environmental Differences Between Advanced and Retarded Readers," Journal of Genetic Psychology, LXV (1944), pp. 113-131.

[3]Helen M. Robinson, Why Pupils Fail in Reading (Chicago: University of Chicago Press, 1946), p. 221.

[4]Ibid., p. 236.

A number of studies have been made of the home and family relationships of retarded readers. These studies tend to concentrate on the personality characteristics of the parents of poor readers. Beck found that the individual case histories of retarded readers revealed the importance of the parent-parent relationship.[1] Gann suggested that personality difficulties of poor readers "have originated in the home situation, and that the insecurity and instability have resulted from unfortunate parent and sibling relationships."[2] Missildine studied the emotional backgrounds of thirty retarded readers of normal intelligence. The mothers of these children were found to be hostile, tense, critical, or coercive in attitude.[3] Siegel found the parents of both his maladjusted group and his poor reading group to be rejecting in attitude.[4] In contrast, Stewart found that parents of inferior readers seemed to be more indulgent, overprotective and

---

[1]Harriett B. K. Beck, "Relationship of Emotional Factors in Early Childhood to Subsequent Growth and to Achievement in Reading" (unpublished Ph.D. dissertation, University of Michigan, 1951).

[2]Edith Gann, Reading Difficulty and Personality Organization (New York: King's Crown Press, 1945), p. 139.

[3]W. H. Missildine, "The Emotional Background of Thirty Children with Reading Disabilities with Emphasis on Its Coercive Elements," Nervous Child, V (1946), pp. 263-272.

[4]Max Siegel, "The Personality Structure of Children with Reading Disabilities as Compared with Children Presenting Other Clinical Problems" (unpublished Ph.D. dissertation, New York University, 1951).

capricious than they were rejecting.[1] Boyd found that the mothers of retarded readers received high masculinity ratings and the fathers high feminity ratings.[2]

The results of these studies of the home and family relationships and of the personality characteristics of parents of poor readers do not show a consistent pattern in relation to reading difficulty. While these studies provide some support for the school's tendency to blame family relationships and home background for a child's difficulties in learning to read, they do not tell of the possible contribution of the child's difficulty in school to the pattern of maladjustment. Even though a child comes to school with an unfavorable family background, failure or success in learning to read may not be without effect on his further development. It seems possible that continuing failure in the school situation may augment the personality traits developed in relation to the home and family.

Many studies have attempted to discover the personality characteristics of retarded readers. In general the aims were to discover patterns of personality traits which are typical of retarded readers or which differentiate them from

---

[1]Robert S. Stewart, "Personality Maladjustment and Reading Achievement," American Journal of Orthopsychiatry, XX (1950), pp. 410-417.

[2]Robert Dean Boyd, "Reading Retardation as Related to Personality Factors of Children and Their Parents" (unpublished Ph.D. dissertation, University of Michigan, 1953).

children making normal progress in reading. The general procedure was to administer one or more tests, usually of the projective type, to a selected group of children with reading disabilities. The results were quantified in part and were examined for patterns for that one group or they were compared with the results obtained from a control group. Some investigators selected their subjects from children attending elementary school while others obtained their subjects from referrals to a reading clinic. Some groups of subjects had an age range of several years, while others were limited to a single age and/or grade level. Some groups included both boys and girls; others were composed solely of boys. Some groups were selected on the basis of reading disability alone; others were composed of children with histories of emotional maladjustment in addition to reading disability. The groups of disabled readers were compared with groups of normal, superior, and maladjusted superior readers. The variety of procedures followed tends to make close comparison of results rather difficult, but the studies do give evidence of the relationship of reading retardation and personality.

Probably the most extensive study of this group was reported by Gann in 1945. Gann administered the Rorschach test to 102 children in grades three through six. The children were grouped according to reading ability as retarded, average, and superior readers, 34 children in each group. Gann found that retarded readers showed fewer favorable and

more unfavorable signs of personality adjustment than did the average and superior readers. From their responses, retarded readers were compared with average and superior readers as follows: "1. Emotionally less well adjusted and less stable. . . . 2. Insecure and fearful in relation to emotionally challenging situations. 3. Socially less adaptable in relation to the group."[1] Redmount found that two-thirds of his subjects showed signs of severe maladjustment on the Rorschach test with personality characteristics of rigidity, lack of spontaneity, hostility, sensitivity, insecurity, anxiety, and family conflict.[2]

Vorhaus reported somewhat similar results. Vorhaus considered reading as a symbol of "being good," and surmised that non-reading arises in children submissive to their expected roles as a symptom of unconscious resistance. Comparison of the Rorschach test patterns of two groups of twenty-five children, one group composed of submissive non-readers and the other of aggressive, hostile behavior problems, showed significant differences in the Rorschach signs of submissive adjustment, shading disturbances, color disturbances, and lack of basically secure relationships. The non-readers showed more frequent signs of need to regress. Both readers

---

[1]Gann, pp. 131-32.

[2]Robert C. Redmount, "Description and Evaluation of a Corrective Program for Reading Disability," Journal of Educational Psychology, XXXIX (1948), pp. 347-358.

and non-readers lacked ability to put personal substance into effort.[1] Vorhaus later reported additional evidence in support of these findings.[2]

Siegel used the Rorschach test to compare the personality structures of forty-two reading disability cases with forty-two boys who read adequately but were maladjusted. He found that the Rorschach records of both groups indicated feelings of anxiety, insecurity, inadequacy, and conflict.[3]

Gordon compared the personality patterns of poor readers and those of other problem children. Two groups of subjects from education clinics were equated. Subjects ranged in age from seven and one-half to twelve years and in I. Q. from 85 to 140. Case Work and Personality Interviews, the Rorschach test, the Thematic Apperception Test, and Human Figure drawings were used to study the groups. Gordon found these instruments differentiated the retarded reading group from the maladjusted group only in a limited measure.[4]

---

[1]Pauline G. Vorhaus, "Non-Reading as an Expression of Resistance," Rorschach Research Exchange, X (1946), pp. 60-69.

[2]Pauline G. Vorhaus, "Rorschach Configurations Associated with Reading Disability," Journal of Projective Techniques, XVI (1952), pp. 3-19.

[3]Siegel, op. cit.

[4]M. H. Gordon, "A Clinical Study of Personality Patterns in Children with Reading Disability" (unpublished Ph.D. dissertation, New York University, 1952).

Barber attempted to determine a personality pattern common to retarded readers. She administered a battery of tests including the Rorschach, Bender, and Goodenough (Mach-over scoring) to twenty-three retarded readers from six elementary schools. She found evidence of immaturity, anxiety, and poor family relations. She concluded that retarded readers perceived themselves as insecure in relation to other people.[1]

The studies using the Rorschach test showed differences between retarded readers and children making normal progress; they also showed that poor readers can be differentiated only to a limited extent from children displaying other types of maladjustment. Even though some differences could be identified, Rorschach results have not as yet been used successfully in predicting reading retardation. Solomon used the Rorschach test to investigate personality and adjustment as related to success or failure in reading. The subjects were children of superior intelligence enrolled in a laboratory school. She found that potentially unsuccessful readers tended to be preoccupied with minute detail and to be inattentive to the practical and concrete. However, Solomon concluded that prediction of reading disability could not be

---

[1]Lucille K. Barber, "Immature Ego Development as a Factor in Retarded Ability to Read" (unpublished Ph.D. dissertation, University of Michigan, 1952).

made from the Rorschach test.[1]

A somewhat different approach to the study of poor readers was used by Bailey. He obtained Human Figure and House-Tree-Person test drawings from both good and poor readers in the second, fourth, and sixth grades. He found that teachers selected drawings of retarded readers at these grade levels with high accuracy.[2] This study demonstrated that there were marked differences in the drawings of good and poor readers. Drawings are widely believed to reflect how the individual feels about himself and others.

Further studies which reveal evidence of maladjustment in poor readers are those by Graham and by Spache. Graham reported that the Wechsler and WISC scattergrams of unsuccessful readers of at least normal intelligence were very similar to the scattergram described by Wechsler for the adolescent psychopath.[3] Spache collected data from the Rosenzweig Picture-Frustration Study administered to children brought to a reading clinic. Conclusions were based on the responses of fifty retarded readers, ages six to fourteen

---

[1]Ruth H. Solomon, "Personality Adjustment to Reading Success and Failure," Supplementary Educational Monographs, LXXVII (1953), pp. 64-82.

[2]Robert B. Bailey, "A Study of Predicting Academic Success in Elementary School Reading from Projective Tests" (unpublished Ed.D. dissertation, University of Oklahoma, 1956).

[3]E. Ellis Graham, "Wechsler-Bellevue and WISC Scattergrams of Unsuccessful Readers," Journal of Consulting Psychology, XVI (1952), pp. 268-271.

years, of average intelligence. When the data were compared with those of Rosenzweig's group of apparently normal children, retarded readers were found to be less well adjusted.[1]

A survey of the literature concerning reading retardation and personality indicates that reading difficulty is related to personality organization. The investigators of personality and reading retardation emphasized the inadequacies of the family relationships of retarded readers. Various projective techniques used in the studies differentiated retarded readers from normal children. The differences were most apparent in the poor reader's adaptation to the environment and in his feelings about himself and the world in which he lives. Projective techniques differentiated poor readers from maladjusted children only to a limited extent. The results of the studies of the personalities of poor readers emphasized the basic maladjustment of children who were retarded in reading.

Temporal Orientation

Temporal orientation is an aspect of personality development which only recently has been investigated. Temporal orientation is part of the process by which the

---

[1]George D. Spache, "Personality Characteristics of Retarded Readers as Measured by the Picture-Frustration Study," Educational and Psychological Measurement, XIV (1954), pp. 186-192.

individual organizes his experiences.[1] In discussing temporal orientation, Allison stated:

> The concept of temporal orientation is an important characteristic in the lives of individuals . . . for it reflects their past parental influences as they have affected one aspect of their character structure, the degree of their moralistic awareness; to a certain extent, it reflects one's present adjustment, one's ego integration; and it reflects the individual's awareness of the future, his goals and aspirations.[2]

Allison's discussion clearly differentiates three factors which are reflected in the temporal orientation of the individual: moralistic awareness, present adjustment or ego integration, and awareness of the future.

The aspect of moralistic awareness is characterized by Murray as "the aggregate of all the internalized or imaginatively constructed figures of moral authority functioning as conscious or unconscious images to inhibit or otherwise modify behavior."[3] He continued the discussion by stating: "This instituted composite of parental and cultural influences corresponds roughly to the system of rewards and punishments administered during childhood."[4]

---

[1]Erik H. Erikson, "Childhood and Tradition in Two American Indian Tribes," in Personality in Nature, Society, and Culture, ed. Clyde Kluckhohn and Henry A. Murray (New York: Alfred A. Knopf, 1948), p. 193.

[2]Harry William Allison, Jr., "The Temporal Orientation of the Juvenile Delinquent" (unpublished Ph.D. dissertation, University of Oklahoma, 1955), p. 10.

[3]Henry A. Murray et al., Explorations in Personality (New York: Oxford University Press, 1938), p. 76.

[4]Ibid.

Present adjustment or ego integration is an essential in the individual's time orientation; a sense of continuity of the present with the past is necessary for ego integrity. Dooley explained as follows:

> In order to bring about organization of the ego, integration of sensations and of experience is essential, otherwise activity cannot be directed toward any given end. Any disturbance of the sense of time may bring a sense of loss of integrity.[1]

Awareness of the future or goals in the future for which the individual will strive in the face of delay and frustration are a necessary aspect of personality development. In discussing the ability to strive for deferred goals, Jersild stated that "one characteristic of the mental life of the older child is that it is lived with considerable reference to the future."[2] He placed further emphasis on ability to look to the future in the following discussion:

> To have expectations based on what is to happen in the future a person must be able to imagine. Unless a child can imagine he cannot know what it is to hope. As children grow older and approach adolescence their ability to hope for a future which they can imagine adds, so to speak, a new and different world to the world in which they live. Through such imagining an older child may be able to endure more easily the hurt and unpleasantness he finds in the real world in which he resides.[3]

Lewin also described hope as implying a psychological future

---

[1]Lucille Dooley, "The Concept of Time in Defense of Ego Integrity," Psychiatry, IV (1941), p. 19.

[2]Arthur T. Jersild, Child Psychology (4th ed. rev.; New York: Prentice Hall, Inc., 1954), p. 484.

[3]Ibid., pp. 484-485.

and discussed the necessity for a psychological future with obstacles and high goals. He described a psychological future as part of time perspective. The actions, emotions, tenacity, and persistence in the face of obstacles were thought by Lewin to depend upon the time perspective of the individual.[1] Jersild expressed a similar idea when he said:

> Instead of seeking to escape into the past or feeling a need to defend himself against evil the child should, if his development is to go well, be free to use his energy in moving into the future and in learning to live with his failures.[2]

Dooley suggested that a consistent temporal orientation is developed in adolescence. She stated:

> Since the principal defensive function of the concept of time is that of saving the ego from being overwhelmed by instinctual drives and from losing its integrity, the chronological place of this type of defense must be in adolescence. It is in adolescence that the great fear of the instincts as such arises, and here that intellectual activities become the natural means of defense.[3]

Ames found that the basic concepts of past, present, and future are developed before preadolescence. In a study of development of the sense of time in children up to eight years of age, Ames found that time concepts appear in fairly uniform sequence. In this study it was reported that children

---

[1]K. Lewin, "Time Perspective and Morale," in Civilian Morale, ed. G. Watson (Boston: Houghton-Mifflin Co., 1942), pp. 48-70.

[2]Arthur T. Jersild, In Search of Self (New York: Bureau of Publications, Teachers College, Columbia University, 1952), p. 95.

[3]Dooley, op. cit., p. 41.

first develop the concepts indicating the present, then those for the future, and finally those for the past.[1]

Many studies have shown differences in child rearing practices at the various socio-economic class levels.[2] It might be expected that differences relating largely to the systems of rewards and punishments and the development of standards and values would lead to differences in temporal orientation at the various class levels. According to Leshan, the temporal orientation of the upper class individual is backward to the past as he tends to see himself as a part of a sequence of generations. The middle class individual plans for the future and acts on these plans. His temporal orientation is toward the future, and his tension-relief sequences are longer than for a member of the lower class. In contrast, quick succession of tension and relief are characteristic of the lower class orientation. The lower class individual does not plan toward goals far in the future nor frustrate himself for long periods. The future is generally so vague that its goals, rewards, and punishments are too uncertain to have any real motivating value.[3]

---

[1]L. B. Ames, "The Development of the Sense of Time in the Young Child," Journal of Genetic Psychology, LXVIII (1946), pp. 97-125.

[2]A. Davis, B. B. Gardner, and M. R. Gardner, Deep South (Chicago: University of Chicago Press, 1941); A. B. Holingshead, Elmtown's Youth (New York: John Wiley and Sons, 1949).

[3]L. L. Leshan, "Time Orientation and Social Class," Journal of Abnormal Psychology, XLVII (1952), pp. 589-593.

Leshan tested and confirmed the hypothesis that there are different temporal goal orientations in the various levels of social class. Leshan collected and examined the stories of seventy-four lower class and forty-three middle class children ranging in age from eight to ten years. The stimulus used was "tell me a story." The period of time covered by the action of each story was assessed, and lower and middle social class children were found to be significantly different in the time span required for the actions of their stories. The time span of action was found to be longer in stories told by middle class children than in stories told by lower class children. This finding was interpreted as indicating that middle class children would plan for longer periods and persist more in the effort to attain delayed goals than would lower class children. Leshan believed that the results of his study had implications for the re-evaluation of the goals and methods of the public schools and for the study and eventual prevention of delinquency.[1]

Following Leshan's lead, Allison tested hypotheses relating to the expectation that factors other than social class membership might reflect differences in temporal orientation. He attempted to determine if there are differentials in temporal orientation in relation to types of persons as well as to types of social class. The subjects for

---

[1]Ibid.

his study were delinquent and non-delinquent boys, twelve to seventeen years of age. Approximately half of each group was from the lower social class and half from the middle social class. Allison ascertained the subjects' temporal orientation from their responses to selected Thematic Apperception Test cards and the request to "tell me a story." Three aspects of temporal orientation were defined and measured--temporal direction, temporal span, and temporal fluency. Judgments of the direction (past, present, or future), and span of action (duration in time) of the stories were made by the subjects. Fluency was assessed on the basis of the number of words given by the subjects in response to questions concerning the present, past, and future. On the variable of temporal direction, Allison found that delinquents related less about the past and the future than did non-delinquents. Delinquents also related less about the past and future than about the present. Non-delinquents related about the past, present, and future in approximately equal proportion. Their stories frequently concerned their vocational and educational aspirations for the future. On the variable of temporal span, Allison found that the span of action, as judged by the subjects themselves, was longer in stories told by non-delinquents than in stories told by delinquents. The span of action in the stories of delinquents was frequently less than one hour while the span of action in stories told by non-delinquents was often over fourteen days.

On the variable of temporal fluency, Allison found that delinquents differed significantly from non-delinquents in the number of words used in response to questions concerning the past and the future. In addition, delinquents used a significantly larger number of words in relating about the present than in relating about the past and the future. Non-delinquents related about the present, past, and in approximately equal ratio. Allison's findings in relation to socio-economic status were consistent with those reported by Leshan.[1]

Allison concluded that there were important differences in temporal orientation between delinquents and non-delinquents and that these differences could not be accounted for on the basis of social class membership alone. Allison discussed the importance of temporal orientation and the implications of his findings as follows:

> The importance of this characteristic [temporal orientation] is evident by the probability that it may well be related to the development of ethical standards of conduct and moralistic awareness, for each individual must have a certain degree of such awareness in order to defer immediate gratification of impulses for future gains. The individual reacts in situations in a manner similar to the way he has perceived his parents react in the past and as he has learned from them to react. When parental actions and reactions have been unpredictable, inconsistent, and inappropriate, it is inconceivable that a strong and stable ego-ideal could be developed.[2]

---

[1] Allison, op. cit.

[2] Ibid., p. 41.

The discussion above suggests that the individual's home background and his relations with his parents are very important in the development of temporal orientation. However, Allison continued the discussion by pointing out that the school may play an important role in the development of temporal orientation. He stated:

> The possible remedial role of the school is obvious for it is in the early school years that the impulsive, potential delinquent may encounter a stable ego-ideal with whom to identify. This strongly suggests that perhaps a more stringent observance of qualifications and a recognition of the necessity for different types of qualifications be utilized in the selection of teaching personnel. In addition, an attempt to inculcate into the educational process an orientation toward future consequences and long-term goals seems equally possible and necessary.[1]

From Allison's discussion, it is apparent that school experience may play a definite role in the individual's development of goals in time. On the basis of the implications for education, it seems worthwhile to investigate additional factors which may be related to the development of temporal orientation. Allison suggested two possibilities: first, the school may play a remedial role when the potential delinquent comes in contact with a stable "ego-ideal" with whom he identifies; and, second, the educational process itself may be organized in such a way that children are directed toward long-term goals and future consequences of their actions. There is in addition a third related possibility

---

[1] Ibid.

for the role of the school in the development of temporal orientation. This third possibility relates to the individual's adequacy in the school situation--that is, to his experiences of success or failure in meeting the demands of the educational process regardless of his socio-economic background or potential for delinquency. One of the important factors for success in school is the progressive development of skill in reading. The individual's adequacy in school might well be stated in terms of his continuing experiences of success or failure in meeting the standards and in making the expected progress in learning to read. It is possible that development of a temporal orientation with long term goals is related to the child's experiences of adequacy in school, especially during his elementary years.

Allison demonstrated that the temporal orientation of the juvenile delinquent was different from that of the non-delinquent. A delinquent is a misfit in the social world, and the poor reader is a misfit in the academic world. A person can escape unpleasantness by living in the past, by translating his living into the future, or by narrowing the past or future, or by living in an abnormally delimited present. The normal person has woven into his living the past, the present, and the future. Allison found that juvenile delinquents met the demands placed on them by tending to delimit their living to the present. Retarded readers also, as a result of their inadequacy in the face of academic

demands, may have a temporal orientation different from that of normals.

Leshan's study showed different temporal goal orientations for the various socio-economic class levels. Allison found differences in temporal orientation between delinquent and non-delinquent groups for which he could not account on the basis of social class membership alone. An hypothesis that might be advanced is that differences exist in the temporal orientation of good and poor readers regardless of social class membership.

Investigations of the personality of the retarded reader found evidence of maladjustment. While poor readers are neither so severely nor so obviously deviate as are delinquents, in many studies they have been found to differ from normal children in personality. It seems particularly important to identify aspects of personality and to investigate these aspects in relation to factors or experiences which may produce them. Temporal orientation is one such aspect which has been identified. It is possible that fruitful results might be obtained by investigating temporal orientation in relation to reading retardation.

CHAPTER II

STATEMENT OF THE PROBLEM

The purpose of this investigation was to determine whether the temporal orientation of the retarded reader differs from that of the good reader and to determine whether temporal orientation is related more closely to reading ability or to social class membership. The three variables involved in temporal orientation in this study were temporal direction, span, and fluency. Temporal direction is defined as the placing of the actions of a story in the past, present, or future. Temporal span is defined as the length of time involved in the action of the story. Temporal fluency is defined as the number of words given in response to questions concerning the past, present, and future.

In order to determine the temporal orientation of the retarded reader, the following hypotheses were tested:

1. There is no difference in temporal orientation--as revealed by the responses of the subjects on the variables of direction, span, and fluency--between good and poor readers.

2. There is no difference in temporal orientation,

as revealed by the three temporal variables, between lower and middle class subjects.

3. There is no difference in temporal orientation, as revealed by the three temporal variables, between good and poor readers of the middle class.

4. There is no difference in temporal orientation, as revealed by the three temporal variables, between good and poor readers of the lower class.

5. There is no difference in temporal orientation, as revealed by the three temporal variables, between lower and middle class, good readers.

6. There is no difference in temporal orientation, as revealed by the three temporal variables, between lower and middle class, poor readers.

CHAPTER III

PROCEDURE OF THE STUDY

The Subjects

The subjects used in this study were seventy-two boys enrolled in the fourth, fifth, and sixth grades in the Cincinnati Public Schools. Half the subjects were classed as poor readers and half as good readers. A subject was defined as a poor reader if (1) he had reading test scores showing at least a year and a half of retardation; (2) according to his cumulative record, he showed poor achievement in reading (grades of "D" or "F"); (3) in the opinion of his teacher, he was a poor reader. Many but not all of the poor readers had repeated one or more grades in school. A subject was defined as a good reader if (1) he had reading test scores at grade level or above; (2) according to his cumulative record, he showed average to superior achievement in reading (grades of "B" or "A"); (3) in the opinion of his teacher, he was making satisfactory progress in reading. A few of the good readers had repeated first grade but had made satisfactory progress in the following years. The reading test scores were obtained from the California Test of Reading Achievement.

The subjects of this study were all of at least normal intelligence as indicated from their scores on routinely administered group tests of intelligence (Kuhlman-Anderson Test of Intelligence, California Test of Mental Maturity) or on individual intelligence tests (the Revised Stanford-Binet Scale and the Wechsler Intelligence Scale for Children). The subjects ranged in I.Q. from 86 to 116 (good readers 86-116, poor readers 87-115) with the mean for each group approximating 100.

The subjects were also selected on the basis of socio-economic class membership. Social class membership was determined by the neighborhood in which the family resided, by occupation of the employed parent or parents, and by judgment of the school principal. Subjects were placed in the middle socio-economic group if the employed parent was a skilled laborer, white-collar worker, or better, and if the family resided in a neighborhood known to be occupied by middle class families. Subjects were placed in the lower socio-economic group if the employed parent was an unskilled or semi-skilled laborer, or unemployed, and if the family resided in a neighborhood known to be occupied by families of the lower socio-economic level. In each instance the socio-economic placement was confirmed by the judgment of the school principals, each of whom was thoroughly acquainted with his district.

Judgments of the principal and/or teacher were

obtained in order to eliminate inclusion of known juvenile delinquents, severe problem behavior cases, and children with unusually poor attendance records.

The subjects ranged in age from nine years, three months to thirteen years, eleven months. The mean age for good readers was eleven years; for poor readers was eleven years, four months; for middle class subjects was eleven years; and for lower class subjects was eleven years, four months.

The subjects of this study were enrolled in the fourth, fifth, and sixth grades. They had reached the stage where they were expected to make considerable use of their reading skill. In addition, they were old enough to have developed the concepts of past, present, and future, and to have acquired adequate vocabularies for the basic units of time measurement with which to estimate the spans of actions of their stories.

The classification of subjects as good or poor readers, and as lower or middle in socio-economic class, made it possible to test the hypotheses essential to this study. It was necessary to control for socio-economic status since previous studies had revealed differences in relation to this variable.

Instrument of Measure

Selected cards from the Thematic Apperception Test

were used as stimulus material for eliciting stories from the subjects. Cards 5, 12 M, 14 and 17 BM, selected for this study, were the ones used by Allison. These cards were chosen because of their effectiveness in differentiating between groups of subjects and because they did not suggest a definite time orientation. With the exception of card 12 M, these cards were described by Murray as appropriate stimuli for boys of the age groups used in this study.[1] Card 12 M, although designated for administration to males fourteen years of age and over, was included in the selection because in practice it proved satisfactory as a stimulus for boys of the younger age group as well.

The four cards are described by Murray as follows:

Card 5.	A middle-aged woman is standing on the threshold of a half-opened door looking into a room.
Card 12 M.	A young man is lying on a couch with his eyes closed. Leaning over him is the gaunt form of an elderly man, his hand stretched out above the face of the reclining figure.
Card 14.	The silhouette of a man (or woman) against a bright window. The rest of the picture is totally black.
Card 17 BM.	A naked man is clinging to a rope., He is in the act of climbing up or down.[2]

The use of this story-telling technique as a means of obtaining evidence for the assessment of temporal orientation is explained by Allison:

---

[1]Henry A. Murray, Thematic Apperception Test Manual (Cambridge: Harvard University Press, 1943), p. 18.

[2]Ibid., pp. 19-20.

> Since the Thematic Apperception cards are a projective device customarily used in such a way that stories are told by the subject concerning the content of the pictures, this type of stimulus material is well suited for the purpose of revealing temporal orientation. The assumption is made in the use of this stimulus material that, in a relatively unstructured situation where subjects are simply asked to tell a story about the picture presented to them, individuals tend to project the world as they see it onto the stimulus.[1]

It was assumed in the use of this technique that temporal orientation of the subject is revealed in the stories that he tells freely and in response to pictorial stimuli. It was assumed that he will project his own temporal structure in structuring the actions reported in his stories.

The Experimental Tasks

The procedure developed by Allison was followed in this study. The procedure seemed appropriate for obtaining the desired evidence.

Each of the seventy-two subjects was interviewed individually by the examiner. The interviews were conducted during school hours in an unoccupied classroom or office. Each subject performed the following three tasks which are described by Allison as follows:

> The E . . . stated:
>
> This has nothing to do with the . . . school. I am making a survey on the development of imagination and I would like you to tell me some stories so that I can get a measure of your imagination. Although I will write down your stories as you tell them to me, no one else

---

[1]Allison, op. cit., p. 18.

will see what I have written. Now I want you to simply tell me a story. It makes no difference if the story is true or whether it concerns you or someone else. Just tell me a story. Go ahead when you are ready.

The S's story was recorded by the E. Then Task 2 was administered.

Task 2. For this task two Thematic Apperception Test cards, number 14 and number 17 BM, were shown to each S. The instructions for this task were as follows:

Now, I am going to show you several pictures. Take a good look at each one and then make up a story about the picture. Here is the first one. [E presents the first card.] Tell me a story about this one.

The same procedure was followed for the second selected card or picture. The E recorded verbatum the response or the story which the S gave to each card. Then Task 3 was administered.

Task 3. For this task two different cards, number 12 M and number 5, were shown to each S. The verbal instructions for this task are as follows:

Now, I am going to show you several more pictures as before, and again I want you to tell me a story about the picture. Then I will ask you a few questions about each picture. Take a look at this one and tell me a story about it. [E presents the first card, allows the S sufficient time to inspect it, and then records the S's story.]

After the S had given his story in response to the card and it had been recorded by the E, the S was then questioned about the story which he had given with the following three questions: (1) "What is happening right now in this picture?" (2) "What happened before or what led up to this situation?" (3) "What will happen or what will the outcome be?" These questions, of course, are oriented toward the present, past, and future, respectively. The S's initial story and his responses to each of the three questions were recorded by the E. The same procedure was followed for the second selected TAT card used in Task 3.

The five stories which the S had given were then reviewed and the S was asked to classify each one according to whether he believed the action of the story occurred

in the past, present, or future. He was also asked to estimate the time span of the action in the stories. That is, he was asked to estimate how much time elapsed between the beginning and the end of each story. In all instances, the judgments and estimates were made by the S and not the E.[1]

Two questions were used in obtaining from the subjects the judgments as to whether the actions of the stories occurred in the past, present, or future. Each subject was asked, "When would the things you tell about in this story take place?" If it was necessary to question further, the subject was asked, "Would the actions take place in the future or the past or the present?" The alternatives were stated in random order.

The order of the presentation of the three tasks, from the unstructured to the structured, was designed to avoid suggesting to the subjects that stories in the past, present, and future were desired.[2]

Treatment of the Data

The three aspects of temporal orientation, criteria for which are given below, are temporal span, temporal direction, and temporal fluency. These are defined by Allison as follows:

1. The report by the subjects of the time span of the action in each of their stories.

2. The report by the subjects of the temporal direction of each of their stories--that is, each subject's judgment of whether the action in the story occurred

---

[1] Ibid., pp. 19-20. [2] Ibid., pp. 20-21.

primarily in the past, present, or future.

3. The number of words given in response to the three questions which were designed to elicit elaboration concerning the past, the present, and the future on both of the TAT cards in Task 3.[1]

Temporal direction. Each subject stated whether the actions of each of his five stories occurred in the past, present, or future. The temporal direction of each subject was then assessed as the category in which the majority of his responses was placed. In event the responses were evenly distributed among the categories, present and future responses were combined and placed in the category in which two of the three responses occurred. The Chi square technique was applied to determine the significance of the differences obtained. The Chi square technique was also applied to the subjects' temporal direction judgments of each story.

Temporal span. Each subject estimated the time required for the actions of each story he told. These estimates were arranged in four categories as follows: less than one hour, one to twelve hours, twelve hours to fourteen days, and over fourteen days. The temporal span of each subject was then assessed as the category in which more of his estimates occurred. In the event the five responses fell in any 2-2-1 distribution in which a judgment between two equal choices must be made, the subject's temporal span tally was placed in that category nearest the direction of his single choice.

---

[1] Ibid., p. 21.

The Chi square technique was applied to this data to determine the significance of the obtained differences between groups. In addition, the Chi square technique was applied to the subject's time span estimates of each story.

Temporal fluency. Temporal fluency was assessed on the basis of the total number of words used in response to the questions concerning the past, present, and future in Task 3. The Chi square technique was applied to the subjects' temporal fluency responses. Each subject was judged to be most fluent in the category in which he used the most words in responding to the three questions.

The seventy-two subjects used in this study were selected on the basis of reading ability and social class membership, and they were equated for intelligence and age.

Comparisons were made in terms of the three temporal variables between good and poor reading groups and between lower and middle socio-economic groups. Comparisons were made between good readers of different social classes. Comparisons were made also between good and poor readers of the same social class, both middle and lower.

CHAPTER IV

THE RESULTS

Testing the six null hypotheses on each of the variables of direction, span, and fluency, as stated in Chapter II, resulted in a total of eighteen comparisons between groups. In this study the required level of statistical significance was set at .05.

The results obtained in testing the first hypothesis, which compared groups of thirty-six good readers and thirty-six poor readers, are given for temporal direction in Table 1, for temporal span in Table 2, and for temporal fluency in Table 3.

TABLE 1

COMPARISON OF 36 GOOD READERS AND 36 POOR READERS ON THE VARIABLE OF TEMPORAL DIRECTION

		Temporal Direction Responses				
Group	N	Past	Present	Future	df	Chi^2
Good Readers	36	22	9	5	2	2.9
Poor Readers	36	18	7	11		

TABLE 2

COMPARISON OF 36 GOOD READERS AND 36 POOR READERS ON THE VARIABLE OF TEMPORAL SPAN

		Temporal Span Responses					
Group	N	1 hr. or less	1-12 hrs.	12 hrs.- 14 days	over 14 days	df	Chi^2
Good Readers	36	12	6	7	11	3	2.4
Poor Readers	36	11	8	11	6		

TABLE 3

COMPARISON OF 36 GOOD READERS AND 36 POOR READERS ON THE VARIABLE OF TEMPORAL FLUENCY

		Temporal Fluency Responses				
Group	N	Past	Present	Future	df	Chi^2
Good Readers	36	11	9	16	2	1.6
Poor Readers	36	15	10	11		

In the three tests of the first hypothesis, where the number of subjects in each group was thirty-six and social class status was disregarded, statistically significant differences were not found between good and poor readers on any of the three temporal variables. The first hypothesis was

consistently sustained.

The results obtained in testing the second hypothesis, which compared groups of thirty-six lower class subjects and thirty-six middle class subjects, are given for temporal direction in Table 4, for temporal span in Table 5, and for temporal fluency in Table 6.

TABLE 4

COMPARISON OF 36 LOWER CLASS SUBJECTS AND 36 MIDDLE CLASS SUBJECTS ON THE VARIABLE OF TEMPORAL DIRECTION

		Temporal Direction Responses				
Group	N	Past	Present	Future	df	Chi^2
Lower Class	36	24	4	8	2	5.6
Middle Class	36	16	12	8		

TABLE 5

COMPARISON OF 36 LOWER CLASS SUBJECTS AND 36 MIDDLE CLASS SUBJECTS ON THE VARIABLE OF TEMPORAL SPAN

		Temporal Span Responses					
Group	N	1 hr. or less	1-12 hrs.	12 hrs.- 14 days	over 14 days	df	Chi^2
Lower Class	36	18	4	8	6	3	11.61[a]
Middle Class	36	5	10	10	11		

[a]Significant at or beyond the .05 level.

TABLE 6

COMPARISON OF 36 LOWER CLASS SUBJECTS AND 36 MIDDLE CLASS SUBJECTS ON THE VARIABLE OF TEMPORAL FLUENCY

Group	N	Temporal Fluency Responses			df	Chi^2
		Past	Present	Future		
Lower Class	36	15	9	12	2	1.07
Middle Class	36	11	10	15		

In the three tests of the second hypothesis, where the number of subjects in each group was thirty-six and reading ability was disregarded, a statistically significant difference was obtained between lower and middle class subjects on the variable of temporal span. More lower class subjects told stories with very short spans of actions while more middle class subjects told stories with longer action spans. Statistically significant differences between lower and middle class subjects were not obtained on the variables of temporal direction and temporal fluency.

The results obtained in testing the third hypothesis, which compared groups of eighteen good readers and eighteen poor readers of the middle class, are given for temporal direction in Table 7, for temporal span in Table 8, and for temporal fluency in Table 9.

TABLE 7

COMPARISON OF 18 GOOD READERS AND 18 POOR READERS OF THE MIDDLE CLASS ON THE VARIABLE OF TEMPORAL DIRECTION

Group	N	Temporal Direction Responses			df	Chi^2
		Past	Present	Future		
Middle class, good readers	18	10	6	2	1[a]	1.8
Middle class, poor readers	18	6	6	6		

[a]Present and future categories combined for purpose of calculating Chi square with the resulting loss of one degree of freedom.

TABLE 8

COMPARISON OF 18 GOOD READERS AND 18 POOR READERS OF THE MIDDLE CLASS ON THE VARIABLE OF TEMPORAL SPAN

Group	N	Temporal Span Responses				df	Chi^2
		1 hr. or less (1)	1-12 hrs. (2)	12 hrs.-14 days (3)	over 14 days (4)		
Middle class, good readers	18	3	4	4	7	2[a]	1.52
Middle class, poor readers	18	2	6	6	4		

[a]Columns (1) and (2) combined for purpose of calculating Chi square with the resulting loss of one degree of freedom.

TABLE 9

COMPARISON OF 18 GOOD READERS AND 18 POOR READERS OF THE MIDDLE CLASS ON THE VARIABLE OF TEMPORAL FLUENCY

Group	N	Temporal Fluency Responses			df	Chi^2
		Past	Present	Future		
Middle class, good readers	18	5	4	9	2	1.09
Middle class, poor readers	18	6	6	6		

In the three tests of the third hypothesis, where the number of subjects in each group was eighteen and social class membership was held constant, statistically significant differences were not found between good and poor readers of the middle social class on any of the three temporal variables. The hypothesis was consistently sustained.

The results obtained in testing the fourth hypothesis, which compared groups of eighteen good readers and eighteen poor readers of the lower socio-economic class, are given for temporal direction in Table 10, for temporal span in Table 11, and for temporal fluency in Table 12.

In the three tests of the fourth hypothesis, where the number of subjects in each group was eighteen and social class membership was held constant, statistically significant differences were not obtained between good readers and poor

readers of the lower social class on any of the variables of direction, span, and fluency.

TABLE 10

COMPARISON OF 18 GOOD READERS AND 18 POOR READERS OF THE LOWER CLASS ON THE VARIABLE OF TEMPORAL DIRECTION

Group	N	Temporal Direction Responses			df	Chi^2
		Past	Present	Future		
Lower class, good readers	18	12	3	3	1[a]	0.0
Lower class, poor readers	18	12	1	5		

[a]Present and future categories were combined for purpose of calculating Chi square with the resulting loss of 1 degree of freedom.

TABLE 11

COMPARISON OF 18 GOOD READERS AND 18 POOR READERS OF THE LOWER CLASS ON THE VARIABLE OF TEMPORAL SPAN

Group	N	Temporal Span Responses				df	Chi^2
		1 hr. or less (1)	1-12 hrs. (2)	12 hrs.- 14 days (3)	over 14 days (4)		
Lower class, good readers	18	9	2	3	4	1[a]	0.0
Lower class, Poor readers	18	9	2	5	2		

Columns (1) and (2) and columns (3) and (4) were combined for purpose of calculating Chi square with the resulting loss of 2 degrees of freedom.

TABLE 12

COMPARISON OF 18 GOOD READERS AND 18 POOR READERS OF THE LOWER CLASS ON THE VARIABLE OF TEMPORAL FLUENCY

Group	N	Temporal Fluency Responses			df	Chi^2
		Past	Present	Future		
Lower class, good readers	18	6	5	7	2	1.06
Lower class, poor readers	18	9	4	5		

The results obtained in testing the fifth hypothesis, which compared groups of eighteen middle class, good readers and eighteen lower class, good readers, are given for temporal direction in Table 13, for temporal span in Table 14, and for temporal fluency in Table 15.

TABLE 13

COMPARISON OF 18 LOWER CLASS, GOOD READERS AND 18 MIDDLE CLASS, GOOD READERS ON THE VARIABLE OF TEMPORAL DIRECTION

Group	N	Temporal Direction Responses			df	Chi^2
		Past	Present	Future		
Lower class, good readers	18	12	3	3	1[a]	.47
Middle class, good readers	18	10	6	2		

[a]Present and future categories were combined for purpose of calculating Chi square with the resulting loss of 1 degree of freedom.

TABLE 14

COMPARISON OF 18 LOWER CLASS, GOOD READERS AND 18 MIDDLE CLASS, GOOD READERS ON THE VARIABLE OF TEMPORAL SPAN

Group	N	Temporal Span Responses				df	Chi^2
		1 hr. or less (1)	1-12 hrs. (2)	12 hrs.- 14 days (3)	over 14 days (4)		
Lower class, good readers	18	9	2	3	4	1[a]	1.76
Middle class, good readers	18	3	4	4	7		

[a]Columns (1) and (2) and columns (3) and (4) were combined for purpose of calculating Chi square with the resulting loss of 2 degrees of freedom

TABLE 15

COMPARISON OF 18 LOWER CLASS, GOOD READERS AND 18 MIDDLE CLASS, GOOD READERS ON THE VARIABLE OF TEMPORAL FLUENCY

Group	N	Temporal Fluency Responses			df	Chi^2
		Past	Present	Future		
Lower class, good readers	18	6	5	7	2	.45
Middle class, good readers	18	5	4	9		

In the three tests of the fifth hypothesis, where the number of subjects in each group was eighteen and reading

ability was held constant, no statistically significant differences were obtained between lower class, good readers and middle class, good readers on any of the three temporal variables. The fifth hypothesis was thus consistently sustained.

The results obtained in testing the sixth hypothesis, which compared groups of eighteen lower class, poor readers and eighteen middle class, poor readers, are given for temporal direction in Table 16, for temporal span in Table 17, and for temporal fluency in Table 18.

TABLE 16

COMPARISON OF 18 LOWER CLASS, POOR READERS AND 18 MIDDLE CLASS, POOR READERS ON THE VARIABLE OF TEMPORAL DIRECTION

Group	N	Temporal Direction Responses			df	Chi^2
		Past	Present	Future		
Lower class, poor readers	18	12	1	5	1[a]	4.0[b]
Middle class, poor readers	18	6	6	6		

[a]Present and future categories were combined for purposes of calculating Chi square with the resulting loss of 1 degree of freedom.

[b]Significant at or beyond the .05 level.

In the three tests of the sixth hypothesis, where the number of subjects in each group was eighteen and reading

TABLE 17

COMPARISON OF 18 LOWER CLASS, POOR READERS AND 18 MIDDLE CLASS, POOR READERS ON THE VARIABLE OF TEMPORAL SPAN

Group	N	Temporal Span Responses				df	Chi^2
		1 hr. or less (1)	1-12 hrs. (2)	12 hrs.-14 days (3)	over 14 days (4)		
Lower class, poor readers	18	9	2	5	2	1[a]	1.02
Middle class, poor readers	18	2	6	6	4		

[a]Columns (1) and (2) and columns (3) and (4) were combined for purpose of calculating Chi square with the resulting loss of 2 degrees of freedom.

TABLE 18

COMPARISON OF 18 LOWER CLASS, POOR READERS AND 18 MIDDLE CLASS, POOR READERS ON THE VARIABLE OF TEMPORAL FLUENCY

Group	N	Temporal Fluency Responses			df	Chi^2
		Past	Present	Future		
Lower class, poor readers	18	9	4	5	2	1.09
Middle class, poor readers	18	6	6	6		

ability was held constant, a statistically significant difference was obtained between lower class, poor readers and middle class, poor readers on the variable of temporal

direction. Examination of the results given in Table 16 shows that lower class, poor readers placed stories primarily in the past while the temporal direction responses of middle class, poor readers were evenly distributed in the three categories. Statistically significant differences were not obtained between lower class, poor readers and middle class, poor readers on the variables of temporal span and temporal fluency.

In summary, lower and middle class subjects were found to differ significantly in temporal span. Lower and middle class, poor readers were found to differ significantly in temporal direction. None of the other comparisons of subjects resulted in differences significant at the required level on any of the three temporal variables.

Temporal Direction Responses to Each Stimulus

In order to determine if the request to "tell me a story" and the four TAT cards were equally effective in differentiating groups, the subjects' temporal direction responses to each of the five stimuli were treated independently. When the expected entry in a cell was less than five, the present and future responses were combined into a "not past" category for the purpose of calculating Chi square with the resulting loss of one degree of freedom. The results for each of the five stimuli are presented separately for the major reading ability and social class groups. The results

are given for good and poor readers in Table 19 and for lower and middle class groups in Table 20 in the Appendix.

Good and poor readers did not differ significantly in their temporal direction responses to any of the five stimuli. Two of the five stimuli differentiated lower and middle class groups at the .05 level of significance. These two stimuli were Cards 17 BM and 12 M. Lower class subjects placed their stories primarily in the past while middle class subjects placed more stories in the present and future than in the past.

Temporal Span Responses to Each Stimulus

In order to determine the effectiveness of the individual stimuli in differentiating groups, the subjects' temporal span responses to each of the five stimuli were treated independently. When necessary for the calculation of Chi square, adjacent temporal span categories were combined. The results are given for good and poor readers in Table 21 and for lower and middle class groups in Table 22 in the Appendix.

Statistically significant differences were not found between good and poor readers or between lower and middle social class groups in their temporal span responses to any of the five stimuli. The request to "tell me a story" seemed to elicit more stories with longer action spans than did the four TAT cards. In general, each TAT card stimulus resulted in a pattern of responses similar to the total pattern for all the data.

Reliability of Children's Estimates of Temporal Span

The temporal span estimates made by children in this study were checked for reliability by comparison with adult estimates. Stories selected at random--twenty-one given in response to "tell me a story" and twenty-five given in response to Card 14--were read to two adults. The adult judges estimated the span of action in the stories given in response to "tell me a story" to be in the same category as the subject did in over half the trials and in the same or adjacent categories in 19 and 20 out of 21 chances, respectively. The judges' estimates of the spans of actions of stories told in response to Card 14 were 18 and 20 correct out of 25 trials. These judges' classification of the length of the action span coincided with the subject's estimate at better than chance expectation. The subjects' judgments of the length of the action of the stories they told were assumed to be sufficiently reliable for determination of temporal span.

CHAPTER V

DISCUSSION OF RESULTS

The general purpose of this study was to determine the temporal orientation of the retarded reader. Specifically, it was necessary to determine if good and poor readers differed in their responses on the defined variables of temporal orientation--direction, span, and fluency. It was also necessary to determine if differences in temporal orientation were related to the social class memberships of the subjects. Six hypotheses were formulated and were tested in relation to each of the temporal variables.

When the thirty-six good readers were compared with the thirty-six poor readers on the three temporal variables, statistically significant differences were not obtained. It should be noted, however, that these groups were contaminated by the inclusion of subjects of middle and lower socio-economic status. When socio-economic status was controlled by using eighteen subjects of the same social class in each group, statistically significant differences between good and poor readers were not obtained. Chi square was used to test the comparison (1) of good and poor readers of the middle

class group, and (2) of good and poor readers of the lower class group.

From the above findings it may be concluded that there were no differences between good and poor readers on the temporal variables as they were treated in this study.

When the thirty-six lower and middle class subjects were compared on the three temporal variables, statistically significant differences were not obtained on direction or fluency. A statistically significant difference was obtained between the two groups on the variable of temporal span. However, it should be noted that these groups were contaminated by the inclusion of subjects from both good and poor reading groups. When reading was held constant by using eighteen subjects of the same reading ability in each group, one statistically significant difference was obtained. This difference was between lower and middle class, poor readers on the variable of temporal direction. Since reading was held constant in this comparison, the obtained difference was traceable to the difference in socio-economic status. The preceding is especially true since a significant difference was found between poor readers of lower and middle socio-economic status of subjects of the age range of this study.

Lower and middle social class groups were found to differ significantly in their estimates of the spans of actions in the stories they told. Lower class subjects more frequently told stories with shorter spans of actions than

did middle class subjects. This finding is important not only because it is consistent with that reported by Leshan, but also because it shows differences in spans of actions even when the judgments were made by the subjects themselves. The reliability of the time estimates of the subjects was shown by their close agreement with those made by adults. Differences in temporal span appear to be closely related to social class status.

Since the null hypotheses relating to reading were sustained on all counts, it is evident that differences do not exist between good and poor readers in temporal orientation as it was tested in this study. Apparently, good and poor readers do not differ in temporal orientation either because they actually are alike or because the instrument was not sufficiently sensitive to differences. The sensitivity of the instrument was previously demonstrated in relation to another type of deviation--delinquency; in the present study, the sensitivity was evident because subjects were differentiated in relation to social class on two of the variables. Apparently within the age groups tested in this study, good and poor readers do not differ in temporal orientation.

Several explanations are possible. First, while on the basis of the evidence of maladjustment found in poor readers, good and poor readers were expected to differ in temporal orientation in this study, the poor reader may not be sufficiently deviate or maladjusted that his temporal

orientation in his preadolescent years is measurably different from that of good readers.

Second, the temporal organization of the poor reader may be as yet so undeveloped that differences do not occur consistently. While reading may be a severe problem, the effects of having been retarded in reading may not become apparent until later when temporal orientation has become more definite. While poor reading may be profoundly disturbing to children as young as those in this sample, it may be that temporal orientation as reflected by direction, span, and fluency is not sufficiently well organized to be used as a means of escape from present circumstances.

Third, the use of temporal orientation in adjusting may not follow a consistent pattern. Jersild pointed to long-term goals in the future as means of dealing with or escaping from present difficulties. Development of such goals is believed, as shown in the literature, to be desirable. A previous study demonstrated that adolescent delinquents differed from non-delinquents in temporal orientation by living in a delimited present.[1] The past, though assumed to be uncomfortable, may be safer and more pleasant than the present or than prospects for the future. The retarded readers may well be using temporal orientation in many ways as a means of adjustment without revealing a consistent pattern.

---

[1] <u>Supra</u>, p. 19.

Further investigation would be necessary to determine more specifically the temporal orientation of children of various ages. It may be that the apparent tendency of the subjects of this study to place stories primarily in the past was related to telling stories about themselves or about "a boy." It may be that interpretation of experience, real or imaginary, was taking place in the telling of the story. Some poor readers, for example, told stories in which a character struggled for intellectual achievement, such as reading lots of books or studying hard to learn about something, or generally persisting in the face of an intellectual challenge. In the nature of the fantasy or in the content of the stories, differences between good and poor readers may be evident rather than in the aspects of temporal orientation as measured in this study.

Further investigation should be made of temporal orientation as an important aspect of personality organization and of the factors which contribute to its development. Although the results of this study showed no statistically significant differences between good and poor readers on the three temporal variables investigated, it cannot be assumed that experiences related to a child's adequacy in reading are of little or no importance in his temporal orientation. Since it may be possible that temporal orientation is not sufficiently organized in subjects of the age group of this study for differences between good and poor readers to be apparent,

different results might be obtained by using older subjects.

Further investigation of the temporal orientation of poor readers employing different stimulus pictures would probably not be helpful. The cards used in this study, either together or separately, indicated no statistically significant differences between good and poor readers. In further investigation, it would be well to define other temporal variables which could be measured or to devise an instrument which might be more sensitive to differences.

The results of this study have implications for the planning of educational experiences. This study shows that the temporal orientation of the lower socio-economic class is different from that of the middle class around whose values, interests, and attitudes the public school curricula tend to be built. A curriculum based on long term goals and planning for the distant future may have little meaning for children of the lower socio-economic class, particularly the poor readers, and may fail to accomplish its goals.

CHAPTER VI

SUMMARY

The upward extension and increasingly effective enforcement of compulsory education have focused attention on children who are retarded in reading. Investigations of apparent causes of reading disability have indicated that the personality of the poor reader is extensively involved in his disability. Recent investigations employing projective techniques have revealed evidences of maladjustment among poor readers. Poor readers are found to differ in their adaptation to environment from children who are adequate in reading. Similarity in personality is found between poor readers and other maladjusted groups. Poor home and family relationships are frequently found to be associated with poor reading.

Learning to read is one important aspect of the child's experience. The effect of having been inadequate in reading can be assumed to give the poor reader ample opportunity to develop undesirable attitudes toward himself and others. Temporal orientation is a part of the process by which the individual organizes his experiences and is considered an important aspect of personality development.

Differences in temporal orientation have been demonstrated in relation to a more obvious and severe type of social deviation--juvenile delinquency. Differences in temporal orientation also have been demonstrated in relation to social class membership. The purpose of this study was to investigate the temporal orientation of the retarded reader. It was necessary to determine if good and poor readers differ in temporal orientation and if differences were associated with the social class status of the subjects.

The subjects of this study were seventy-two boys, all of normal intelligence, enrolled in the fourth, fifth, and sixth grades of the Cincinnati Public Schools. The subjects were selected as good or poor readers and as lower or middle class in socio-economic status. The subjects were equally divided in each of the classifications.

Each subject, in an individual interview, performed three tasks designed to reveal his temporal orientation on the variables of direction, span, and fluency. Each subject told five stories. First, the subject was asked to "tell me a story." Then he was shown four selected Thematic Apperception Test cards and was asked to tell a story about each. After the fifth story, each story was reviewed. The subject classified the action as happening in the past, present, or future (temporal direction) and estimated the length of time elapsing in the story (temporal span). On the third task, the subject was questioned concerning the past, present, and future, and

his temporal fluency was assessed from the number of words he gave in response to the questions.

Six null hypotheses were tested. The hypotheses of no difference in temporal orientation between good and poor readers were sustained on all three temporal variables. The hypothesis relating to social class differences was sustained on the variable of temporal span and was rejected on temporal direction and fluency. Middle and lower social class groups differed significantly in temporal span; more lower class subjects told stories with shorter action spans than did middle class subjects.

The results of this study support those reported previously by Leshan that lower and middle class children differ in the length of the action spans of their stories.

The most significant conclusion was that good and poor readers of the age group of this study do not differ in temporal orientation as measured on the variables of span, fluency, and direction. Maladjustment associated with reading difficulty may not be severe enough to determine temporal orientation. Preadolescent poor readers may not be sufficiently deviate that their temporal orientation is measurably different from that of good readers. While poor reading may be profoundly disturbing to children as young as those of this sample, temporal orientation is perhaps not sufficiently well organized to be used as a means of escape from present

circumstances or to appear as a consistent pattern for poor readers.

BIBLIOGRAPHY

BIBLIOGRAPHY

Allison, Harry W., Jr. "The Temporal Orientation of the Juvenile Delinquent." Unpublished Ph.D. dissertation, University of Oklahoma, 1955.

Ames, L. B. "The Development of the Sense of Time in the Young Child," Journal of Genetic Psychology, LXVIII (1946), pp. 97-125.

Bailey, Robert B. "A Study of Predicting Academic Success in Elementary School Reading from Projective Tests." Unpublished Ph.D. dissertation, University of Oklahoma, 1956.

Barber, Lucille K. "Immature Ego Development as a Factor in Retarded Ability to Read." Unpublished Ph.D. dissertation, University of Michigan, 1952.

Beck, Harriett B. K. "Relationship of Emotional Factors in Early Childhood to Subsequent Growth and to Achievement in Reading." Unpublished Ph.D. dissertation, University of Michigan, 1951.

Blanchard, Phyllis. "Reading Disabilities in Relation to Personality and Emotional Development," Mental Hygiene, XX (1936), pp. 384-413.

Boyd, Robert D. "Reading Retardation as Related to Personality Factors of Children and Their Parents." Unpublished Ph.D. dissertation, University of Michigan, 1953.

Davis, A., Gardner, B. B., and Gardner, M. R. Deep South. Chicago: University of Chicago Press, 1941.

Dooley, Lucille. "The Concept of Time in Defense of Ego Integrity," Psychiatry, IV (1941), pp. 13-23.

Erikson, Erik H. "Childhood and Tradition in Two American Indian Tribes," in Personality in Nature, Society, and Culture, edited by Clyde Kluckhohn and Henry A. Murray. New York: Alfred A. Knopf, 1948, pp. 176-201.

Gann, Edith. Reading Difficulty and Personality Organization. New York: King's Crown Press, 1945.

Gates, A. I. "The Role of Personality Maladjustment in Reading Disability," Journal of Genetic Psychology, LIX (1941), pp. 77-83.

Gordon, M. H. "A Clinical Study of Personality Patterns in Children with Reading Disability." Unpublished Ph.D. dissertation, New York University, 1952.

Graham, E. Ellis. "Wechsler-Bellevue and WISC Scattergrams of Unsuccessful Readers," Journal of Consulting Psychology, XVI (1952), pp. 268-71.

Harris, Albert J., and Roswell, Florence G. "Clinical Diagnosis of Reading Disability," Journal of Psychology, XXXVI (1953), pp. 323-39.

Hollingshead, A. B. Elmtown's Youth. New York: John Wiley and Sons, 1949.

Jackson, Joseph. "A Survey of Psychological, Social, and Environmental Differences between Advanced and Retarded Readers," Journal of Genetic Psychology, LXV (1944), pp. 113-31.

Jameson, Robert U., and Ketchum, E. Gillet. "Common Sense about Children's Reading," Saturday Evening Post, April 7, 1956, pp. 228-234.

Jersild, Arthur T. Child Psychology. 4th ed. revised. New York: Prentice Hall, Inc., 1954.

_____. In Search of Self. New York: Bureau of Publications, Teachers College, Columbia University, 1952.

Leshan, L. L. "Time Orientation and Social Class," Journal of Abnormal Psychology, XLVII (1952), pp. 589-93.

Lewin, K. "Time Perspective and Morale," in Civilian Morale, edited by G. Watson. Boston: Houghton-Mifflin Co., 1942, pp. 83-94.

Missildine, W. H. "The Emotional Background of Thirty Children with Reading Disabilities with Emphasis on its Coercive Elements," Nervous Child, V (1946), pp. 263-72.

Murray, Henry A. Thematic Apperception Test Manual. Cambridge: Harvard University Press, 1943.

_____, et al. Explorations in Personality. New York: Oxford University Press, 1938.

Redmount, Robert S. "Description and Evaluation of a Corrective Program for Reading Disability," Journal of Educational Psychology, XXXIX (1948), pp. 347-58.

Robinson, Helen M. "Personality and Reading," in Modern Educational Problems, edited by A. E. Traxler. Report of the Educational Records Bureau and the American Council on Education, 1952, pp. 87-99.

_____. Why Pupils Fail in Reading. Chicago: University of Chicago Press, 1946.

Siegel, Max. "The Personality Structure of Children with Reading Disabilities as Compared with Children Presenting other Clinical Problems." Unpublished Ph.D. dissertation, New York University, 1951.

Solomon, Ruth H. "Personality Adjustment to Reading Success and Failure," Supplementary Educational Monographs, LXXVII (1953), pp. 64-82.

Smith, Nila B. "Research on Reading and the Emotions," School and Society, LXXXI (January 8, 1955), pp. 8-10.

Spache, George D. "Personality Characteristics of Retarded Readers as Measured by the Picture-Frustration Study," Educational and Psychological Measurement, XIV (1954), pp. 186-92.

Stendler, Celia Burns. Children of Brasstown. Urbana: University of Illinois Press, 1949.

Stewart, Robert S. "Personality Maladjustment and Reading Achievement," American Journal of Orthopsychiatry, XX (1950), pp. 410-17.

Strang, Ruth. "Reading and Personality Formation," Personality, I (1951), pp. 131-40.

Vorhaus, Pauline G. "Non-Reading as an Expression of Resistance," Rorschach Research Exchange, X (1946), pp. 60-69.

_____. "Rorschach Configurations Associated with Reading Disability," Journal of Projective Techniques, XVI (1952), pp. 3-19.

APPENDIX

TABLE 19

TEMPORAL DIRECTION RESPONSES OF 36 GOOD READERS AND 36 POOR READERS TO EACH OF THE FIVE STIMULI

Subjects	N	Temporal Direction Responses			df	Chi^2
		Past	Present	Future		
"Tell me a story"						
Good Readers	36	25	3	8	1	.06
Poor Readers	36	24	2	10		
Card 14						
Good Readers	36	16	12	8	2	3.56
Poor Readers	36	10	11	15		
Card 17 BM						
Good Readers	36	21	9	6	2	.39
Poor Readers	36	19	9	8		
Card 12 M						
Good Readers	36	17	13	6	2	.14
Poor Readers	36	18	11	7		
Card 5						
Good Readers	36	22	11	3	2	3.8
Poor Readers	36	19	9	9		

TABLE 20

TEMPORAL DIRECTION RESPONSES OF 36 LOWER CLASS SUBJECTS AND 36 MIDDLE CLASS SUBJECTS TO EACH OF THE FIVE STIMULI

Subjects	N	Temporal Direction Responses			df	Chi^2
		Past	Present	Future		
"Tell me a story"						
Lower Class	36	28	3	5	1	3.12
Middle Class	36	21	2	13		
Card 14						
Lower Class	36	16	8	12	2	3.56
Middle Class	36	10	15	11		
Card 17 BM						
Lower Class	36	24	4	8	2	7.44[a]
Middle Class	36	16	14	6		
Card 12 M						
Lower Class	36	23	9	4	2	6.77[a]
Middle Class	36	12	15	9		
Card 5						
Lower Class	36	23	9	4	2	2.43
Middle Class	36	17	11	8		

[a]Significant at or beyond the .05 level.

TABLE 21

TEMPORAL SPAN RESPONSES OF 36 GOOD READERS AND 36 POOR READERS TO EACH OF THE FIVE STIMULI

Subjects	N	Temporal Span Responses				df	Chi^2
		1 hr. or less	1-12 hrs.	12 hrs.- 14 days	Over 14 days		
"Tell me a story"							
Good Readers	36	4	9	10	13	2	1.76
Poor Readers	36	5	7	15	9		
Card 14							
Good Readers	36	14	8	2	14	3	7.53
Poor Readers	36	15	5	9	7		
Card 17 BM							
Good Readers	36	11	5	12	8	3	1.56
Poor Readers	36	11	8	8	9		
Card 12 M							
Good Readers	36	9	5	13	9	3	3.64
Poor Readers	36	7	11	13	5		
Card 5							
Good Readers	36	14	6	9	7	3	2.19
Poor Readers	36	16	5	5	9		

TABLE 22

TEMPORAL SPAN RESPONSES OF 36 LOWER CLASS SUBJECTS AND 36 MIDDLE CLASS SUBJECTS TO EACH OF THE FIVE STIMULI

Subjects	N	Temporal Span Responses				df	Chi^2
		1 hr. or less	1-12 hrs.	12 hrs.- 14 days	Over 14 days		
"Tell me a story"							
Lower Class	36	7	7	12	10	2	.43
Middle Class	36	2	9	13	12		
Card 14							
Lower Class	36	19	5	5	7	3	4.7
Middle Class	36	10	8	8	10		
Card 17 BM							
Lower Class	36	15	7	6	8	3	6.25
Middle Class	36	7	6	14	9		
Card 12 M							
Lower Class	36	10	7	12	7	3	1.4
Middle Class	36	6	9	14	7		
Card 5							
Lower Class	36	12	8	5	11	3	7.15
Middle Class	36	18	3	10	5		