A STUDY TO DETERMINE IF THERE ARE SIGNIFICANT INTERACTING PHYSICAL, MENTAL, AND EMOTIONAL FACTORS DEVELOPED BY PARENTS OF SHERMAN, TEXAS, WHICH INFLUENCE READINESS FOR BEGINNING READING

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By

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CHAPTER I

INTRODUCTION

Statement of the Problem

The problem of the study is to determine if there are significant interacting physical, mental, and emotional factors developed by parents which influence readiness for beginning reading.

First-grade teachers have encountered the frequent inquiries of parents of pre-school children asking which experiences prior to first-grade reading will best foster success in beginning reading. It is a recognized fact that many parents of pre-school children are intensely interested in providing their children with those experiences considered of value by first-grade teachers. The sincerity of the inquiries and the need for a reliable and authoritatively correct answer have been motivating factors in the selection of the study.

Purpose of the Study

The purpose of the study is to approach the problem from a practical and workable angle in determining which definite and significant influences have been of benefit to the first-grade pupils of Sherman, Texas, in preparing them
for reading readiness. The problem in this investigation was undertaken with three purposes in mind.

The first purpose was to determine the mental, physical, and emotional factors in reading readiness as established by eminent authorities on reading which are pertinent to this study.

The second purpose was to ascertain the degree of readiness attained by each pupil upon entrance into the first grade of the Washington School.

The third purpose was to find out the factors of readiness developed by parents prior to school life.

Source of Data

Data were secured from the following: (1) first-hand and vicarious experiences of three first-grade teachers in observing a group of eighty-seven pupils in the Washington School, Sherman, Texas, (2) information obtained from the parents the first day of school through permanent record cards and a supplementary questionnaire, (3) planned conferences with parents at school, (4) observations made in get-acquainted home visits, Parent-Teacher Association meeting, and various other contacts, and (5) the results of the Metropolitan Readiness Tests, the Kuhlman-Anderson Intelligence Tests, and the Metropolitan Achievement Tests.

The secondary data were secured from the following:
(1) educational and professional books dealing with the subject of reading readiness, (2) magazines, and (3) educational journals.

Limitations of the Study

More books have been written on the subject of reading than any other subject in the curriculum. The modern concept of reading readiness is that of a continuous process. It begins the first time a child finds meaning in a picture, and it continues as long as there is improvement in the reading process. In this study the expression "reading readiness" is limited to reading development preceding the actual reading from a book.¹

This study was limited to the first-grade pupils in the Washington Elementary School. Only those physical, mental, and emotional characteristics that were present at enrollment were included.

This study was limited to those children observed during the school year 1949-1950.

Related Studies

Almy made a study of experience as a factor in reading readiness.² Her findings may be briefed as follows: (1) A

¹Lillian A. Lamoreaux and Doris May Lee, Learning to Read Through Experience, p. 1.

²Millie Corinne Almy, Children's Experiences Prior to First Grade and Success in Beginning Reading, p. 111.
significant, positive relationship exists between success in beginning reading and the child's responses to opportunities for reading prior to first grade. (2) Experiences which contribute to the positive relationship between reading success and responses to opportunities for reading include being read to, looking at books and magazines, and interest in words, letters, and numbers, wherever they may be found. (3) A child who likes to "read" a variety of materials is likely also to have been interested in the details of reading and to have made many responses to opportunities for reading. (4) Most children before they enter first grade have had some variety of reading instruction at home. (5) Some parents give their children a more deliberate instruction than that which grows out of the things the child notices in his every-day living. (6) A significant relationship was not found between beginning reading success and either mental age or occupational status. (7) The descriptive material which has been presented indicates that the effect of the child's early reading experiences on his skills in and attitudes toward beginning reading depends considerably on how these experiences fit into his whole life pattern.

No other study closely related to the subject was found.

Treatment of the Data

A study was made of the factors which influence reading readiness before school began in September so that they might
be kept clearly in mind during the organization and analysis of the data used.

At the beginning of school the children were assigned to one of the three first-grade rooms in such a way as to make the number as equal as possible. No characteristics of the individual children were considered.

An effort was made to measure reading readiness with the greatest possible accuracy through use of standardized tests and by teacher opinion. After the results of the tests were noted and the teacher observations recorded, the data compiled were organized into chapters. The first chapter of the thesis consists of an introduction to the investigation. It includes a statement of the problem, the purpose of the study, related studies, and the treatment of the data. The second chapter briefs those factors which reading authorities have agreed upon for the development of the whole child, which leads to readiness for reading. The third chapter is an analysis of what parents have done at the Washington School, Sherman, Texas, in compliance with recognized reading preparation. The fourth chapter gives the conclusions and recommendations regarding those things which the parents and the school can do in preparing children for the reading program.
CHAPTER II

RECOGNIZED FACTORS IN
READING READINESS

Introduction

The purpose of this chapter is to determine those mental, physical, and emotional factors which authorities on reading have deemed significant in developing reading readiness. Even as "there is no one best way" for all teachers for all pupils, so there is no one perfect method for all parents for all children. However, there are certain basic principles applicable to all.¹

The factors which influence reading readiness are many, and are complex in nature. They are often so involved and interwoven that it is very difficult to determine which factor or group of factors are most significant in reading readiness.²

The complexity and interrelationship of the factors involved are described by M. Madilene Veverka, and quoted by Betts, as follows:

"This readiness is not yet definitely established. There are too many factors involved. It is not a

¹Donald D. Durrell, Improvement of Basic Reading Abilities, p. 1.
²M. Lucile Harrison, Reading Readiness, p. 5."
matter of age nor yet of I.Q. It is not mental maturity alone. Biological factors enter. Personality traits are important. Background of a home with understanding parents helps. An interested attitude toward books and reading is also important. A good oral vocabulary is needed. Experiences with things, people, and situations aid understanding and comprehension.

A certain vitality and dynamics of the whole organism enter into the picture. It is not any special group of these items nor any specific amount of them. It is rather a combination and balance of these which result in or indicate a stage of growth at which this new experience is appropriate.

We like to think of this point in growth as a place at which the child's total living in a society of his peers would be dwarfed and inadequate with reading left out. It seems to be a point below which the lack of reading deprives him of nothing, but above which inadequacy, infantilism, inferiority feelings, being different from his little friends, the cutting off of a rich field of experience, might begin to set in.3

Physical Factors

Health status and food habits.—Good physical care on the part of parents is necessary to prevent physically ill, poorly nourished, fatigued children who are unable to reach their potential development. Essential factors include "good food, fresh air, protection from disease, the correction of physical defects, plenty of exercise and outdoor play, balanced by relaxation and rest."4

McKee describes the detrimental influence of poor health status as follows:

3Emmett A. Betts, Foundations of Reading Instruction, p. 106.

4Gladys Jenkins, Helen Shaacter, and William W. Bauer, These Are Your Children, p. 15.
Poor general health often promoted by malnutrition, lack of sufficient sleep, persistent over-stimulation or chronic infection of the teeth, tonsils, and other parts of the body tends to rob the child of the energy with which he can attend actively and enthusiastically to the tasks included in getting ready to learn to read.

Eating is a learned behavior pattern which is established early in life and tends to be continuous. Firmly fixed habits are especially helpful during the first days of school when there is a natural tendency to be more interested in the surroundings than in the food.

Eating should be a happy experience, free from reflective adult idiosyncrasies. The atmosphere should be pleasant, with a minimum of violent emotions, over-stressed table manners, display of parental authority, and poor eating habits as a bid for attention.

Rhythm and rest habits.--The amount of sleep that a child needs depends partly upon the individual. The average for six-year olds is eleven hours. Pre-school children should awaken spontaneously, cheerful and rested. During the first month of school the child needs about one-half hour more sleep because a stimulating school is fatiguing. More sleep is required in winter than in summer.

An opportunity should be given for expressing rhythm

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5 Paul McKee, *The Teaching of Reading*, p. 171.
6 John J. B. Morgan, *Child Psychology*, p. 75.
individually in many ways during the first five years. Too much restraint and supervision may cause nervous, jittery, constrained ability, stuttering speech and awkwardness. Over-discipline and nagging cause inability to relax.\(^8\)

Tenseness in writing, reading, speaking and the like may often be traced to early training -- "training which stressed control rather than freedom of movement."\(^9\) Children have a high rate of metabolism, their energy is expended readily, and their bodies require alternating activity and rest.\(^10\)

**Muscular coordination.** -- During the school life of any child the use of many muscles, both large and small, is necessary. This may cause tension and impairment if essential coordination and maturity have not been reached. Preschool children need an opportunity to run and climb and to carry on group construction projects with large boxes, kegs, boards and the like for the development of large muscles. At the same time, experiment with paint, clay, or crayon will begin small muscle coordination.\(^11\)

**Visual discrimination.** -- Vision is integrated with the total action system -- the posture, manual skills, intelligence, and personality.\(^12\) Children learn before they start

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\(^8\) Morgan, op. cit., p. 155.  
\(^9\) Ibid., p. 166.  
\(^10\) Bernice Baxter, Teacher-Pupil Relationships, p. 79.  
\(^12\) Arnold Gesell, "Vision in Childhood," *Newsweek*, XXXIII (May 16, 1949), 49-50.
to school to distinguish between many different objects by their form or appearance. "This discrimination between different objects by their form is called visual discrimination." To do well in beginning reading, the child needs sufficient power of visual discrimination to distinguish between the forms of the printed words which he will attempt to learn. 13

Outward signs of poor vision include blinking, rubbing eyes, frowning, squinting, holding book too near to or too far from eyes, and twisting the head. 14

Auditory discrimination.—Children learn early in life to distinguish readily between different sounds. "This distinguishing between different sounds is called auditory discrimination." To do well in beginning reading, the child needs sufficient power of auditory discrimination to distinguish between the sounds of the words used in the beginning reading materials. 15

"If a child's hearing is defective, he may receive wrong impressions, or nearly hear confusing sounds." 16 Children with a hearing deficiency are not necessarily inferior in intelligence. However, early detection of hearing weaknesses may prevent the development of language defects.

14 Lamoreaux and Lee, op. cit., p. 91.
15 McKee, op. cit., p. 151.
16 Paul Witty, Reading in Modern Education, p. 57.
Increased efficiency of one sensory capacity may be substituted for another if the deficiency is great.17

It is well for parents to notice evidence of poor hearing, as inattention while others are talking, failure to respond to oral directions, or inaccurate reproduction of things heard.18 Ear training may be begun early, with large doses of Mother Goose rhymes.19

"Other things being equal, visual and auditory discrimination can be developed." Children should be given systematic guidance in these skills if a deficiency is detected.20

**Mental Factors**

**Mental age.**—Mental maturity apparently is a primary factor in readiness for reading activities. It is generally conceded that children with mental ages between 6.5 and 7.5 years receive the greatest benefit from the initial reading instruction. It appears that mental maturity is necessary in dealing with reading, but that mental maturity alone does not insure success.21

**Language patterns developed.**—"The development of reading ability is primarily a problem in language." Although readiness for reading is usually discussed in terms of

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17Morgan, op. cit., p. 262.
18Lamoreaux and Lee, op. cit., p. 91.
19D. D. Durrell and Helen Sullivan, Building Word Power.
20Betts, op. cit., p. 332.  
21Ibid., pp. 120-124.
physical, mental, and emotional factors, parents must be alert to the crux of the problem, which is language development.\textsuperscript{22}

A child's background of experience and information is reliably revealed by his language development. Developmental reading is synonymous with concept development, and concepts are products of experience and language. In considering reading readiness, parents and teachers are concerned with the child’s speech habits, speaking vocabulary, and his control over language structure.\textsuperscript{23}

Close contact with adults or older children whose training is good tends to be an advantage in enabling the child to talk freely, articulate clearly, and repeat simple events or stories in the proper sequence. It is often possible to help or correct such faulty speech habits as lisping, baby talk, nervous rapid speech, or indistinct speech.\textsuperscript{24} If a child says "jist" for "just", "fur" for "for", and the like, he may have difficulty in recognizing and pronouncing the printed word. If a child runs words together, as "doncha-wantanapple," he may have trouble in distinguishing between words. "Speech and reading are closely related phases of language development."\textsuperscript{25}

\textsuperscript{22}Ibid., p. 114.
\textsuperscript{23}Are Your Children Ready to Read?, 1948, p. 4.
\textsuperscript{24}Witty, op. cit., p. 60.
\textsuperscript{25}Are Your Children Ready to Read?, 1948, p. 20.
Creating a desire to read.--The child's use of language grows as adults read and tell stories and listen to his stories and adventures. Looking at pictures suggests conversation. The radio, records, rhymes, and films can be instructive fun. If given the opportunity the child has many uses for books. He learns to identify pictures and to follow the story. He may learn to page through a book, to hold it right side up, and perhaps, to follow the contents from left to right across the page. Many children without systematic training in reading learn to identify a number of letters and words, and a few children really learn to read. Children's interest in pre-reading activities may be encouraged, although most authorities agree that the teaching of reading as a systematic project is not timely for most children of pre-school age.

Children ask questions. The handling of questions by parents is an important feature in the development of small children. The attitude of the answer is perhaps as important as the answer itself. If the parent becomes weary or annoyed, the child may feel rebuked rather than encouraged in a quest for knowledge. If the parent evades the question or is not honest in his answer, he may further weaken his child's interest in learning.

\(^{26}\)Betts, op. cit., p. 494.

\(^{27}\)Arthur T. Jersild, Child Development and The Curriculum, p. 73.

\(^{28}\)Ibid., p. 62.
Ability to do problematic thinking.--In pre-school endeavors in drawing, modeling, block construction, and the like, there will be occasions for teaching the child to attack and solve problems. An opportunity should be provided for the child to try his hand at experimenting and practicing in his own way, and in gaining the satisfaction which can be derived from even the crudest performance.29

Before entering school a child should be able to give a satisfactory response if asked concerning his full name, his parents' name, the family address, and his own age and birthday. He should be familiar with the location of the school in relation to his home. He may answer the telephone and assume such responsibilities as buying his bus and lunch tickets.

It is well for the child to have a knowledge of his personal history, including the inoculations and diseases he has had. There are innumerable ways in which a child can learn to help himself. He will feel more secure if he understands that many agencies are designed to serve the public and that he should have no hesitation in calling upon them.30

The power to concentrate, to attend and persevere, are habits easily encouraged by parents, and are important prerequisites for success in reading.31

29Ibid., p. 89.


31Leaflet No. 8 -- Portfolio for Kindergarten Teachers.
Social and Emotional Factors

Home relationships. -- The most important thing parents can do to get children ready for school is to give them a happy home. Hildreth says, "A child with a contented home life feels secure and confident enough to take the first step away from home. He is ready for the experience of going to school." 32

The parents are usually the child's first teacher. The example they set and the instruction and care they provide are likely to have a far greater influence than other educational agencies. 33 It is with the family that the child has his first experience in group living. Fortunately, this is a small and devoted group which will at first do most of the necessary adapting. It is here that the child learns what people are like, what he can expect from them, and what restrictions they impose. If the family is understanding, loving, and consistent, the child lives in a safe, comfortable world. The family has cut the world down to his size. He learns to handle himself independently and adequately within it.

When parents exact instant blind obedience, children tend to become timid and lack self-confidence. On the other hand, too much freedom and too many choices to make lead to


33 Jersild, op. cit., p. 5.
nervousness and irritability. "Some things should be settled by adults so that they form a reassuring, stable background for life. Without that, a child has no serenity and relaxation."34

The emotional attitudes of those who are responsible for a child color his response to laws, rules, and authority. A friendly, "open" home helps him to make friends. If the home is happy, other group situations will be judged by it.

**Ability for social adjustment.**—As a child grows older his social relationships with those his own age become more and more important to him. This broadening of the child's world should be gradual and always with the support of the home.35

One of a child's greatest needs is that of play, in which he learns to take responsibilities, such as helping to clean up after the play period is over. Desirable traits cultivated by constructive play include independence, initiative, and a feeling of responsibility for himself and others in the group. It is through play that children are inducted into group membership through which citizenship is born. Through the experiences of living and working and playing with others, the child learns what groups can do that individuals cannot accomplish. He learns to identify himself, his wishes and needs, with those of his contemporaries. When

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the child is able to postpone personal satisfaction for the common good of the group, he is well on the road to social adjustment. 36

Rich background of experience.--A wealth of experience is important for the normal growth of pre-school children and is a profitable prerequisite for successful reading. A child must know, for instance, as much about cats as the author expects him to know if he is to read about cats with understanding. 37

Without a rich background of experience, the child can only parrot words. He cannot really read. Reading is a reconstruction of the facts, experiences, and ideas behind words. If a child has not had many experiences or ideas, the words he pronounces, as he supposedly reads, have no meaning for him. 38

There should be all kinds of experiences: playing with other children; making excursions to the country and to the city; caring for pets, toys, or babies; enjoying older people; constructing things in response to a felt need; taking part in games, dramatizations, music, puzzles, stories; noticing characteristic sounds in nature, in industry, in speech, and taking pleasure in imitating them. Participating in these and other delightful adventures will prepare the

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37 Leaflet No. 8, Portfolio for Kindergarten Teachers.

child for pleasurable and successful activities in the reading program.\(^3\)

**Home-school relationships.**—A good public relation between the home and the school aids in understandings which promote good reading.\(^4\) Teachers and parents should exchange information about the interests, characteristics, and development of each child. The child's readiness for reading depends to a great degree on the smoothness of his transition from home life to school life.\(^5\) Through conferences, meetings, and home visiting, the home and school are endeavoring to understand and help one another. Parents and teachers are learning that by sharing their common problems are more easily solved. Only in the measure that it meets the human needs of the parents and children can the school hope to succeed in the field of home-school relationships.\(^6\)

Parents can teach children that school is a wonderful place to live and "find out", that it is a place where boys and girls will work together in finding many new interests. Parents need to feel that school is not just the place to

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\(^3\)Charles J. Anderson and Isobel Davidson, *Reading Objectives*, pp. 27-29.

\(^4\)Telda M. Johnson, "Reading Ideas That Work," *Grade Teacher*, LXV (June, 1948), 30, 69.

\(^5\)Paul Witty, *Reading in Modern Education*, p. 56.

\(^6\)Leaflet No. 11, *Portfolio for Kindergarten Teachers*. 
learn to read, but that school is one factor in developing "well-rounded" personalities who can live satisfyingly.\(^3\)

**Amalgamation of Views**

Thus we see that readiness for profitable reading includes the maturation and well-being of every physical, mental, and emotional factor which enters into the reading process. This development of the whole child is in part a process of growth fostered by understanding adults, and it is in part developed or taught by parents and teachers.\(^4\)

Good health and vitality contribute in making it possible for the child to participate fully in this stimulating adventure of school with less fatigue. Rhythmic coordination of muscles and motor activities in well-nurtured growth interact with all aspects of total development necessary for adjustment and for learning. Physical defects in seeing and hearing, poor habits of eating and sleeping, and the lack of freedom for relaxation may rob the child of the energy he needs to participate to his greatest benefit in learning.

The adjustment to the new situation necessitates language usage which has been developed at home. The association with older children or adults, the use of many books, rich and varied experiences, and nature of response to his

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curiosity, will help form a foundation to his success in first grade.

If the child is a part of a warm, friendly home in which he knows he is loved, he can meet this new situation with a secure feeling and be able to cope with the many problems of the enlarged world.
CHAPTER III

FACTORS IN READING READINESS
DEVELOPED BY PARENTS

Introduction

When a school in a progressive town like Sherman has been working with parents for years to promote cooperation, it seems feasible that most of the children will have had a number of experiences which foster readiness for reading. This study will attempt to find out what these experiences have been and how they relate to success in beginning reading.

**Background.**—Washington School is located in South Sherman, bordered by manufacturing concerns. There are three sections of the first grade in the Washington School, with an average of thirty children in each section. Almost one-third of the first-grade children live in the country and come in by bus. The parents are all of the working class of people, with none financially independent. There is a marked similarity in the home background of the children. The boys wear blue jeans and bright cowboy shirts. The girls wear print dresses. Some are slightly more faded than others, or less well-kept, but there is little difference. So great is the similarity in the financial status
of the children that the influence of material possessions is considered negligible in this study.

Accuracy of data used.—Every effort was made to check the accuracy of the data obtained from the parents. The information used was verified by observation during home visits, in day-by-day study of the children, by asking questions, and through conferences and casual conversation with the parents.

It is recognized that much of the data are not subject to statistical measurement; for instance, it is not how much time parents spend with their children, but the quality of the instruction that is important. The words in a child's vocabulary can be measured more accurately than the attitude toward learning and the habits of study established.

Personal Contacts

School census.—The acquaintance of the teachers with the 1949-1950 group of six-year olds began with the teachers taking the school census. Each teacher used her own judgment in determining the most pertinent things to say to the parents and children. One child greeted the census taker politely and quickly told her name, age, birthday, and address. She showed her vaccination scar, and then she asked what else she must do before she started to school. Some mothers asked questions readily. Others, like their children, stood back timidly and appeared almost afraid, yet eager.
As a whole, the mothers seemed grateful when the teachers volunteered information concerning pre-school day and expressed friendly interest in the child's happy adjustment to school. These small gestures of friendliness possibly helped overcome tension or over-anxiety and in some cases awakened a realization of the importance of pre-school day and readiness for school life.

Pre-school day.---Pre-school day was a cooperative affair sponsored by the Parent-Teacher Association and directed by the public school nurse. Every parent received an invitation from the superintendent, and another from the principal, to attend on a designated day. Information blanks were included, with the necessary explanations given. Health leaflets were included in the second letter which was sent as a reminder and to lend emphasis.

On pre-school day, the children and mothers were greeted individually by the three first-grade teachers. At first, the children were seated with their mothers and were entertained by the first-grade pupils. The principal gave the essential facts concerning the policies of the school as to time, method of dividing the children, vaccinations, and the like. The teachers talked briefly to the mothers on the physical, mental, and emotional habits which might help in the adjustment to school life. The children were taken on a tour of the primary division of the building and took part in directed play. The mothers heard a more detailed talk
with emphasis upon the importance of correcting any physical defects discovered. While the nurse examined each child and talked with the mother, the other mothers and children visited with the teachers. Pre-school day was frightening to only one child who was one of the largest boys in the group. A number of children cried when it was time to go home.

The school realized that pre-school day was only the beginning in solving adjustment problems, but it was believed important in giving necessary information and allowing the parents a small part in planning the curriculum. It was also purposed to give the child an interest in school and to create the proper home-school relationship.

First day of school.—The children were divided into three groups by the simple process of drawing colors from a basket. When the children were divided, the teachers drew colors also.

The mothers and children were then shown to the assigned room. The enrollment was completed as quickly and simply as possible, and the morning was devoted to making the first day of school impressive and happy. Information for the school's permanent records and for this study was secured. The children had practice in such routine activities of orientation as finding the way to his own room, the rest room, and the cafeteria.

The part of the parent in preparing the child for
successful participation in the school program was emphasized by use of attractive posters with the following captions: (1) Let Him Sleep One-Half Hour Longer, (2) A Good Breakfast, (3) Let Him Think for Himself, (4) Don't Push Him beyond His Maturity, (5) He Belongs to the Group at Home and at School, and (6) Peace and Understanding at Home and at School.

Home visits.—The first-grade pupils were dismissed at noon the first four weeks of school. This afforded an opportunity for the teachers to make home visits in the afternoon. It is customary for the pupils to ride to their homes with the teacher, ostensibly to direct the way. On these occasions the children usually talked excitedly about themselves, their families, and the family activities. The home visits were made by appointment and proved to be a very enjoyable source of enlightenment. The purpose, understood by parents and teachers alike, was to become better acquainted.

Conferences.—In preparation for the parent and teacher conferences, the teachers followed the suggestions of the school supervisor in regard to the references studied, the outlines formulated, and the plans of suggested procedure. The conferences were held by appointment, at the school building, with only the parent and the teacher present. The teacher came to the conference with the child's progress in each phase of school work clearly in mind. The parent was encouraged to talk freely of her problems, many of which were
solved through cooperation. The theme of each conference was "What can we work on together to help the child?"

Method of Grouping

The Metropolitan Readiness Tests were given about two weeks after the children entered school. The scores were used by teachers in a tentative, flexible grouping within the room. For convenience, those considered ready for rapid introduction of reading materials will be called Group I. Those who had specific readiness needs, requiring a few weeks of preparation, will be called Group II; and those for which actual reading should be postponed indefinitely will be designated as Group III. The Kuhlman-Anderson Tests were given to strengthen the accuracy of the initial grouping.

At no time were children segregated or made to feel separate and apart.

Table I gives the homogeneous grouping of pupils within the room for instructional purposes only. The Chronological Age is recorded at the time that the Kuhlman-Anderson Tests were given. Therefore, the Chronological Age and the Mental Age are of the same date. The Educational Age was obtained by giving the Metropolitan Achievement Tests the eighth month of the first year. A few children moved during the last weeks of school, but they were present long enough that it was considered justifiable to include them in the study. Other children were omitted from the study because they moved too frequently to make a consistent study possible.
TABLE 1

INITIAL GROUPING BASED UPON TEACHER JUDGMENT, PERCENTILE READINESS, AND MENTAL AGE, SUBSTANTIATED BY ACHIEVEMENT AGE

<table>
<thead>
<tr>
<th>Pupil</th>
<th>Percentile Readiness Score</th>
<th>C.A.</th>
<th>M.A.</th>
<th>E.A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1A</td>
<td>99</td>
<td>6-8</td>
<td>7-3</td>
<td>8-3</td>
</tr>
<tr>
<td>2A</td>
<td>99</td>
<td>6-11</td>
<td>7-1</td>
<td>8-6</td>
</tr>
<tr>
<td>3A</td>
<td>99</td>
<td>6-9</td>
<td>7-1</td>
<td>8-1</td>
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<tr>
<td>4A</td>
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<td>7-2</td>
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<td>5A</td>
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<td>30A</td>
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TABLE 1—Continued

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### TABLE 1—Continued

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<th>E.A.</th>
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<td>6.10</td>
<td>6.3</td>
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<td>6.6</td>
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<td>6.3</td>
<td>6.6</td>
</tr>
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<td>6.3</td>
<td>7.2</td>
</tr>
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<td>7.0</td>
<td>6.5</td>
<td>7.0</td>
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<td>15G</td>
<td>14</td>
<td>6.3</td>
<td>6.6</td>
<td>6.11</td>
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<tr>
<td>*17G</td>
<td>13</td>
<td>6.10</td>
<td>6.3</td>
<td>6.3</td>
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<td>18G</td>
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<td>6.3</td>
<td>6.4</td>
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<td>5.10</td>
<td>6.4</td>
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<td>6.5</td>
<td>6.11</td>
<td>6.9</td>
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<td>6.1</td>
</tr>
<tr>
<td>**22G</td>
<td>6.7</td>
<td>6.7</td>
<td>6.7</td>
<td></td>
</tr>
<tr>
<td>**23G</td>
<td>6.10</td>
<td>6.3</td>
<td>6.5</td>
<td></td>
</tr>
<tr>
<td>**24G</td>
<td>7.7</td>
<td>6.3</td>
<td>6.5</td>
<td></td>
</tr>
</tbody>
</table>

*Not enrolled at time of tests.

**Unable to score on group tests.

In Group I the first twenty-four pupils had a percentile rank in reading readiness of 79 or above. Six were below 79. Twenty-nine A and 30A were placed in Group I, although they had a percentile rank of 53 and 41, respectively, which would indicate that they belonged in a lower group. Twenty-nine A was a quiet child for whom the adjustment to
school proved very difficult. The richness of her background, which included books and travel, caused the teacher to feel that she was lacking only in preparation for the initial transition to school life. The teacher's judgment was verified by the Kuhlman-Anderson Tests, in which 29A, with a chronological age of 6 years, 5 months, made a score of 7 years, 1 month. In the case of 30A, who suffered from attacks of asthma, the teacher's judgment was again verified by the Kuhlman-Anderson Tests. Thirty A, with a chronological age of 6 years, 11 months, made a score of 7 years, 1 month.

In Group II the high percentile rank of 95 for 1B and 81 for 2B would indicate that they should be placed in Group I. However, both were carry-overs from the year before. Both lived in the country, had limited experiences, and were partially clothed and fed by the school. In each case the mental age was lower than the chronological age.

Two pupils with a readiness score of 12 were included in Group II. This classification, based upon teacher judgment, was later justified by the Metropolitan Achievement Tests.

In Group III the percentile readiness scores varied from 0 to 53. Two pupils were unable to score on group tests. One of these, 24C, was limited by both environment and general intelligence. The other, 23C, had a very bad speech defect and attended a special school for handicapped children.
part of each day. His teacher recommended that he spend
two more years at the special school before attempting first-
grade work. No effort was made to administer the Metropolitan Achievement Tests.

Twenty-two C was the only child whose home was so
completely undesirable that a teacher would hesitate to
enter. His percentile readiness score was 3, and his mental
age was 6 years, 1 month. However, he was regular in attend-
dance and was provided with adequate food and clothing through
the help of local clubs and the government cafeteria program.
At the end of the year 22C was able to make an achievement
score of 6 years, 9 months.

Eighteen C had a readiness score of 12, a chronological
age of 6 years, 2 months, and a mental age of 6 years, 3
months. He went home at noon for several weeks because his
mother thought he was too small to carry a lunch tray to
the table.

Twelve C came from the country and seemed awed by the
size of the school building. He was limited by both vocabu-
larly and experience. His response to the activities pro-
vided by the school was good, and at the end of the year his
educational age was 7 years, 1 month.

Physical Factors

A good physical condition gives the necessary energy
for learning. Fatigue, eye and ear defects, and chronic
deficiencies hinder good judgment. Parents at Sherman are
urged to bring children for a preliminary examination by
the school nurse and to take their children for regular
periodic check-ups. Parents are helped if financial assis-
tance is required for corrective treatment. Every effort is
made to see that children are in the best possible physical
condition before school starts.

During Parent-Teacher meetings, pre-school activities,
and conferences, parents and children are taught that opti-
mum health functions are interrelated aspects of living with
other age mates. Emphasis is placed upon good health for
all as a part of our democratic way of living through use
of picture posters, plays, films, and discussions by the
nurse, teachers, and visiting doctors. Information concern-
ing the health habits established at home and the health
status of the child was tabulated from the information se-
cured from the mothers. The presence of these health fac-
tors is indicated in Table 2.

Data in Table 2 indicate an impressive difference in
the three groups in the number of pupils having regular check-
ups. Since a good free clinic is available, the difference
may be accounted for by interest rather than by finance.
The high percentage of check-ups reported in each group was
attributed by a local pediatrician to the fact that parents
in the Sherman are "health minded." Emphasis placed upon
cleanliness by the school may account for the perfect record
in the care of the teeth. The teachers were in agreement
A PERCENTILE COMPARISON OF HEALTH STATUS AND HEALTH HABITS ESTABLISHED PRIOR TO SCHOOL ENTRANCE BY THE THREE GROUPS

<table>
<thead>
<tr>
<th>Health Factors</th>
<th>Group I</th>
<th>Group II</th>
<th>Group III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular check-up......................</td>
<td>80</td>
<td>69.6</td>
<td>54.1</td>
</tr>
<tr>
<td>Good physical condition...............</td>
<td>90</td>
<td>96.9</td>
<td>66.6</td>
</tr>
<tr>
<td>Infrequent colds......................</td>
<td>90</td>
<td>73</td>
<td>50</td>
</tr>
<tr>
<td>Minimum of ten hours' sleep...........</td>
<td>70</td>
<td>54.5</td>
<td>41.6</td>
</tr>
<tr>
<td>Habit of brushing teeth..............</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Habit of eating a variety of food.....</td>
<td>86.6</td>
<td>96.9</td>
<td>83.3</td>
</tr>
<tr>
<td>Habit of trying new foods............</td>
<td>80</td>
<td>75.7</td>
<td>82.9</td>
</tr>
</tbody>
</table>

that mothers were more accurate in reporting such activities as attendance at the picture show than in reporting those habits, such as cleanliness, that might cast a reflection upon the child and his training.

When parents were asked, "Do you consider your child healthy?" most of the mothers indicated a definite affirmative or negative answer. Others said "yes" and added a qualifying exception, as asthma, allergies, or stomach upsets. Good attendance, lack of fatigue, and general health bore out the accuracy of their statements.

Data in Table 2 show an impressive difference of percentage in the number of pupils in the three groups who reported having frequent colds. Susceptibility to colds seems to have a definite correlation to readiness for learning, inasmuch as colds are one evidence of poor health status.

Vision.—The teachers and the nurse tried to detect any
visual deficiency present by use of the Snellen Chart and through daily observation. Eye-perception games were played. Permanent record cards were checked to see if parents had observed any difficulties. If any trouble was detected, a home visit was made and the necessary correction proposed.

Table 3 gives the percentage of trouble indicated in the three groups and the corrections made.

### TABLE 3

**A PERCENTILE COMPARISON OF VISUAL FACTORS OF THE THREE GROUPS**

<table>
<thead>
<tr>
<th>Observations</th>
<th>Group I</th>
<th>Group II</th>
<th>Group III</th>
</tr>
</thead>
<tbody>
<tr>
<td>No trouble indicated</td>
<td>90</td>
<td>93</td>
<td>89.3</td>
</tr>
<tr>
<td>Trouble corrected</td>
<td>10</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Possible trouble neglected</td>
<td></td>
<td></td>
<td>10.7</td>
</tr>
</tbody>
</table>

Data in Table 3 indicate that in no instance did the parents of the children in Groups I and II fail to correct a deficiency noted. In Group III, 10.7 per cent of the parents neglected to correct possible trouble detected.

Hearing.—Table 4 shows the percentage of pupils in each group indicating trouble with hearing.

### TABLE 4

**A PERCENTILE COMPARISON OF AUDITORY DIFFICULTIES OF THE THREE GROUPS**

<table>
<thead>
<tr>
<th>Group</th>
<th>Auditory Difficulty</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>3.3</td>
</tr>
<tr>
<td>II</td>
<td>10.0</td>
</tr>
<tr>
<td>III</td>
<td>21.0</td>
</tr>
</tbody>
</table>
Data in Table 4 show that there were more auditory problems in Group III than in any other group, and fewer in Group I. The nurse attributed the prevalence of ear trouble in Group III to neglected tonsils. In no case was a hearing difficulty considered sufficiently great to cause emotional disturbance, but the contribution of auditory acuity to reading efficiency was recognized.

**Speech.**—Twelve of the eighty-seven children of this study had some speech disorder. In Group I there was one example each of lisping, slight clattering and substitution for certain consonant sounds. All three children made a high readiness score and a high achievement score. It seems plausible to infer that, since their speech defects were so slight, there was no delay in readiness for reading.

One child in Group II and five children in Group III were referred to a speech teacher who came to the building for this special work. Their handicaps were more physical than functional, and progress was slow. The achievement of three of the six children was below the grade norm. One child of Group III was taken to the school for handicapped children and showed very little progress. Two children of Group II used baby talk. Their readiness scores were very low, but progress was rapid.

**Rhythm.**—Rhythm plays a part in healthful living.

To feel rhythm is to possess a sense of balance. A rhythmic pattern is a guiding influence in directing the life span for an individual. His daily schedule is built around a rhythm of activity and rest. He engages
in vigorous activities; he relaxes in quieter periods. His day is a succession of adaptive behavior working out a pace, a rhythm to meet his needs. This "pacing" must be guided by adults acquainted with basic developmental demands for serenity, safety, security as important in his total growth pattern.1

Signs of basic rhythmic stability, as evidenced by facial expressions and general bodily movement, seemed to indicate a definite weakness in all groups, and especially in the children of Group 1. The social life of the parents, working mothers, and a certain laxity of discipline may account for the irregularity observed.

In Figure 1 the regular check-up is considered as an examination by a doctor, either child specialist or family doctor, for the specified purpose of determining physical fitness. No check was made on the degree of corrective measures used, and no statements were requested from busy doctors. The physical condition was ascertained by reports of mothers based upon doctors' reports, examinations by the school nurse, and observation of the teachers.

Figure 1 shows by graphic comparison the physical readiness factors. Data are taken from Tables 2, 3, and 4. This graph shows the profile chart based on the percentile rank for each of the three groups of children. The per cent varies with the different items considered. Marked differences may be noted in five components. These are regular check-up,

1Bess L. Stinson, "What Do We Mean By Healthful Living?," Healthful Living For Children, Bulletin of the Association for Childhood Education, p. 5.
Regular check-up

Good physical condition

Infrequent colds

Minimum of ten hours' sleep

Habit of brushing teeth

Good eating habits

Adequate vision

Adequate hearing

Percentile

1 10 20 30 40 50 60 70 80 90 99

Group I

Group II

Group III

Fig. 1.—A percentile comparison of physical readiness factors of the three groups of children

general physical condition, infrequent colds, amount of sleep, and adequate hearing. It will be seen from the graph that children in Group 3 are significantly lower in every
item measuring health, but they are almost identical in good eating habits and habit of brushing teeth.

Mental Factors

Mental age.—What a child can do, or what parents can do for a child, is limited by inherent patterns of mental development. The optimum mental age for beginning reading in the Washington School, of Sherman, Texas, is considered from 6 years and 6 months to 7 years and 6 months. To obtain the mental ages, the Kuhlman-Anderson Tests were given. The results were used only as one element of the composite which determines readiness for learning. The mental ages varied from one who could not profit by group tests to a maximum of 7 years and 3 months. Eleven children rated lower than 6 years and 6 months. In only one case were results considered so low that the environment could not promote readiness for reading.

Language patterns developed.—Reading is begun with experience charts. The sentences are worded by the children and read by language type reading. Free expression, clear articulation, and the ability to tell simple events in the proper sequence are indispensable. The ability to do this is affected by previous training. Since children learn largely through imitation, a good model is important. Hence, the training of the adults with whom the child has had close contact partially determines this readiness.
Table 5 presents the educational status of the parents as given by the parents themselves for the permanent school records.

### TABLE 5

**A COMPARISON OF EDUCATIONAL LEVELS ATTAINED BY THE PARENTS OF THE THREE GROUPS**

<table>
<thead>
<tr>
<th>Levels</th>
<th>Group I</th>
<th>Group II</th>
<th>Group III</th>
</tr>
</thead>
<tbody>
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<td>Graduate work</td>
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<td>0</td>
<td>1*</td>
</tr>
<tr>
<td>Finished college</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Some college work</td>
<td>7</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Finished high school</td>
<td>29</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>Some high school work</td>
<td>6</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>Finished elementary school</td>
<td>3</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Some elementary school work</td>
<td>0</td>
<td>6</td>
<td>10</td>
</tr>
</tbody>
</table>

*Mother has handicapped child.

The evidence of Table 5 indicates that there is a definite correlation between the educational status of the parent and the degree of readiness for learning attained by the child. The only one in Group III whose attainment was outstanding is the parent of a child so seriously handicapped that the influence of environment could not be accurately measured. In Group III, three parents finished high school; in Group I, only nine failed to do so.

For the simple sentences used in beginning reading, no language pattern difficulties were noted in Group I, and very few were noted in Group II. In Group III, however, such expressions as "him are it" were not infrequent.
It is generally conceded that a complexity of factors influences the language patterns developed by the child. Data on the following items are indicated in Table 6: telling stories, listening to stories, previous training in reading, interest in the radio, and attendance at the picture show.

**TABLE 6**

A PERCENTILE COMPARISON OF EXPERIENCES WHICH DEVELOPED LANGUAGE PATTERNS OF THE THREE GROUPS

<table>
<thead>
<tr>
<th>Experiences</th>
<th>Group I</th>
<th>Group II</th>
<th>Group III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Told stories............</td>
<td>90</td>
<td>75.7</td>
<td>66.6</td>
</tr>
<tr>
<td>Listened to many stories</td>
<td>100</td>
<td>87.8</td>
<td>87.5</td>
</tr>
<tr>
<td>Received instructional</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>reading..................</td>
<td>16.6</td>
<td>24.2</td>
<td>29.1</td>
</tr>
<tr>
<td>Enjoyed radio............</td>
<td>70</td>
<td>69.6</td>
<td>70.8</td>
</tr>
<tr>
<td>Attended shows frequently.</td>
<td>70</td>
<td>90.9</td>
<td>83.3</td>
</tr>
</tbody>
</table>

Data in Table 6 show that the number of children who enjoyed listening to stories exceeded those who enjoyed telling stories. Interest in telling stories is considered of more significance than enjoyment of stories read because more factors related to language development are involved. Telling a story entails the ability to remember the proper sequence, vocabulary selection, articulation and speech development. Poor language usage may result in timidity or a lack of self-confidence which causes a hesitancy to tell stories before an audience. A variance of 23.6 per cent
between Group I and Group III seems to indicate that Group I had fewer difficulties in language development than the other two groups and that Group III had more language difficulties than Group II.

The percentile scores of the three groups were very low in previous training in reading from a book. A comparison of the three groups reveals a percentage of 16.6 for Group I, 24.2 for Group II, and 29.1 for Group III. The low percentage of parents reporting formal instruction given may be the result of suggestions from magazines for parents and from preschool meetings designed to teach that there were more important things for four- and five-year-old children to be doing to develop the whole personality.

In several cases older children and other relatives gave training in letters, numbers, and the like, rather than the parents. In a few instances the mother attempted to teach the child in an effort to prepare him for school because older children in the family had experienced repeated failures.

In enjoyment of the radio, there was only 1.2 per cent difference in the three groups. In attendance at the picture show, Group II ranked highest, with 90.9 per cent; Group III was second, with 83.3 per cent; and Group I was lowest, with 70 per cent.

Creating a Desire to Read

"No one doubts that a strong desire to learn to read
facilitates the child's task in doing that learning." Parents who enjoy reading are most likely to engender in their children a desire to read. Readiness for reading is often manifested by the child's interest in the printed forms he sees about him. Data on the parental enjoyment of reading, and the child's curiosity about books, signs, labels, and newspapers have been compiled and appear in Table 7.

**TABLE 7**

A PERCENTILE COMPARISON OF INFLUENCES FOSTERING A DESIRE TO READ OF THE THREE GROUPS

<table>
<thead>
<tr>
<th>Influencing Factors</th>
<th>Group I</th>
<th>Group II</th>
<th>Group III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observed parents' interest in reading</td>
<td>90</td>
<td>84.8</td>
<td>79.1</td>
</tr>
<tr>
<td>Enjoyed color books</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Enjoyed picture books</td>
<td>100</td>
<td>90.9</td>
<td>91.6</td>
</tr>
<tr>
<td>Interested in signs</td>
<td>83.3</td>
<td>69.6</td>
<td>66.6</td>
</tr>
<tr>
<td>Interested in labels</td>
<td>86.6</td>
<td>69.6</td>
<td>66.6</td>
</tr>
<tr>
<td>Interested in newspapers</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Data in Table 7 show that in all three groups 100 percent of the children reported enjoyment of color books. This high percentage may be attributed to the abundance and the variety of color books available. The almost unanimous interest in picture books may be ascribed, in part, to the economy of price and the variety of choices. The availability of a public library with a good representation of new

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²McKee, op. cit., p. 161.
and old story-book favorites may also be an influencing factor. The teachers found no reason to doubt the genuine interest of the children in both picture books and color books, since even the ones who were poorest financially brought books to school, evidencing pride and a desire to share their possessions with others.

A greater difference was shown among the three groups in the curiosity about signs, labels, and newspapers, with Group I consistently showing the greatest interest.

Problematic Thinking

Pre-school children meet with many situations involving problematic thinking. An encouraging attitude on the part of the parent tends to increase the child's ability and desire to attack and solve problems. The feeling of satisfaction in problems solved independently and the habit of perseverance are invaluable to the child in learning to read, as in all other aspects of life.

Table 8 presents data relating to experiences involving problematic thinking. When parents were asked, "Is your child allowed to spend money?" 100 per cent of Group I said "yes." Some qualified the statement by saying, "to a limited extent" or "My child has an allowance." In Group II, 87.8 per cent gave an affirmative answer; in Group III, 75 per cent. Daily contact with the children substantiated the accuracy of the mothers' statements. It is to be recognized
A PERCENTILE COMPARISON OF SITUATIONS INVOLVING PROBLEMATIC THINKING OF THE THREE GROUPS

<table>
<thead>
<tr>
<th>Situations</th>
<th>Group I</th>
<th>Group II</th>
<th>Group III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spend money</td>
<td>100</td>
<td>87.8</td>
<td>75</td>
</tr>
<tr>
<td>Bathe and dress</td>
<td>86.6</td>
<td>87.8</td>
<td>75</td>
</tr>
<tr>
<td>Go to store alone</td>
<td>70</td>
<td>84.8</td>
<td>66.6</td>
</tr>
<tr>
<td>Ride bus alone</td>
<td>40</td>
<td>21.2</td>
<td>16.6</td>
</tr>
<tr>
<td>Use telephone</td>
<td>83.3</td>
<td>60.6</td>
<td>12.5</td>
</tr>
<tr>
<td>Work puzzles</td>
<td>80</td>
<td>75.7</td>
<td>50</td>
</tr>
</tbody>
</table>

that there was no way to check the wisdom of the children's expenditures.

Letting the children bathe and dress themselves is always mentioned in pre-school discussions. There was no significant difference in the affirmative answers in Groups I and II. Both groups exceeded Group III, who had a percentage of 75, as contrasted with 86.6 in Group I and 87.8 in Group II. Some of the mothers qualified their answers by saying, "If I get the hard spots," or "If I make a check-up."

On pre-school day the mothers were told quite frankly that the first-grade children who entertained them were wearing their school clothing, even though it was a special occasion, to demonstrate the type of apparel customarily worn in the Washington School.

Data in Table 8 show that Group I is first; Group II is second; and Group III is third in each of the following
problematic situations: working puzzles, using the telephone, and riding the bus alone. Since these problematic situations involve reasoning, initiative, and noting likenesses and differences, it may be concluded that there is a significant correlation between readiness for reading and success in independent thinking and action.

Some of the children in each of the three groups live in the country and therefore had no opportunity to go to the store alone. Others live in residential sections where stores are too far from the children's homes to make walking practical. In view of the conditions affecting the reliability of the data used, a further study of other groups with a wider range would seem desirable before ascribing significance to the percentages of children going to the store alone, as given in Table 8. However, it is believed that a child who has learned to go to the store alone could also go to school alone without emotional upset.

Figure 2 is a graphic comparison of the mental factors observed in the three groups, as given in Tables 6, 7, and 8. A greater difference may be noted in participation in story telling than in listening to stories. Children of Group I surpass both of the other groups in manifested interest in printed form. Marked difference may be noted in two problematic situations, using the telephone and working puzzles.

The readiness developed by pleasure in color books and
Told stories
Listened to many stories
Received instructional reading

Enjoyed radio
Attended shows frequently
Observed parents' interest in reading

Enjoyed color books
Enjoyed picture books
Interested in signs
Interested in labels
Interested in newspapers

Spent money
Bathed and dressed self
Went to store alone
Rode bus alone
Used telephone
Worked puzzles

Percentile

Fig. 2.—A comparison of the use of mental factors of the three groups in their relation to readiness for reading.

picture books is not portrayed by Figure 2, because all three groups are almost equal in total participation.
Social and Emotional

One of the questions most frequently asked of the first-grade teachers of the Washington School is, "How does my child get along with other children?" or "Does my child play all right with the other boys and girls?" Another expression often heard is, "We live in the country and my child has had little chance to play with other children."

These comments are examples of the many indications of the general knowledge of the value of group interaction and the importance of early training for this social process. Emotional readiness for reading is more than the right attitude toward reading; it is a part of this larger instructional job of social adjustment.

**Transition adjustment.**—Several children were at first rather quiet and timid, and some appeared nervous and excited; but, with the exception of one little girl who was desperately unhappy, all worked or watched with eager anticipation. Each willingly stayed at school without his mother, and many wanted to stay longer than the half-day. The happy transition may be attributed, to a large extent, to pre-school achievement of parents in training their children.

**Parental interest in school.**—What the parent considers important is reflected in the child's thinking and colors his emotional response to school life. Table 9 gives some indications of interest in school manifested by parents. Many working mothers took "time off" for the various activities.
TABLE 9
A PERCENTILE COMPARISON OF INDICATIONS OF INTEREST MANIFESTED BY PARENTS

<table>
<thead>
<tr>
<th>Indications</th>
<th>Group I</th>
<th>Group II</th>
<th>Group III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attended pre-school day.....</td>
<td>66.6</td>
<td>48.4</td>
<td>41.6</td>
</tr>
<tr>
<td>Came with child first day...</td>
<td>93.3</td>
<td>81.8</td>
<td>83.3</td>
</tr>
<tr>
<td>Attended previous activities............</td>
<td>33.3</td>
<td>24.2</td>
<td>12.5</td>
</tr>
<tr>
<td>Active participation during year.........</td>
<td>80</td>
<td>48.4</td>
<td>41.6</td>
</tr>
<tr>
<td>Child attended Bible School: Regular attendance in Sunday School............</td>
<td>76.6</td>
<td>42.4</td>
<td>58.3</td>
</tr>
<tr>
<td></td>
<td>93.3</td>
<td>69.6</td>
<td>69.6</td>
</tr>
</tbody>
</table>

It is interesting to note that no one separate interest is typical of any group; but Group I exceeds significantly in every phase of active participation in school activities. Bible School and Sunday School were included as being similar interests which were available to all. This study seems to indicate that Sunday School and Bible School attendance does have a positive value in promoting readiness for reading.

Home relationships.--It is generally conceded that a stable, happy home is conducive to learning. It seems reasonable to assume that the home should preferably include both parents, with a mother free for the care of the home. In this study, however, more children were found to have broken homes, working mothers, and extended families in Group I than in either of the other two groups. The percentages are given in Table 10.

It is the opinion of the three teachers that data in
Table 10 do not indicate that broken homes, working mothers, and extended families produce conditions augmenting readiness for reading, but rather that these children by reason of their mental abilities were able to make outstanding records. It is possible that they could have made greater achievement under different circumstances. Wheeler says, "There is probably greater reading retardation among the mentally superior than among the mentally dull students." He reasons that this retardation is harder to detect and is usually not known.

Occupation of parents.—The social and emotional background as influenced by the financial or occupational status of the parents is quite similar for all groups. Table 11 gives the actual number employed in various occupations. Others employed who were not listed in the table include one each of the following: oil worker, abstracter, fireman,

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bus driver, postal employee, beauty operator, insurance agent, sign painter, deputy sheriff, and city employee. None are from the better socio-economic status, and the number with extremely meager facilities is too few to be significant. Almy reports similar findings.

Parental concept of readiness.--Parents were asked, "what have you done to get your child ready for school?" Many and varied were the answers. One mother whose child's sociometric rating and general readiness score were outstanding said, "Everything we have done since he was born was to prepare him for living with others. Is that what is meant by preparation for school?" Many gave a fairly accurate resume of the things discussed in pre-school talks the previous

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4Almy, op. cit., pp. 3-11.
spring. These answers included social adjustment, emotional control, safety, and health habits established. A few mothers merely stated, "I taught my child to count to ten," or "I taught my child to print his name and to say his ABC's." These answers were few and were common to no one group.

Social experiences.—Public kindergartens are not available, and the economic status of the families in this area discourages extensive attendance at the two private kindergartens. Five children had attended kindergarten in Group I, and one had attended in each of the other two groups. The findings of many studies have indicated the desirability of a free kindergarten with each elementary school. A popular dancing school is located in the Washington School area. Much training in social adjustment, rhythm, listening, creative expression, and following directions would foster readiness for reading. Again, the finance is prohibitive to many.

A comparison of the three groups as to social experiences is given in Table 12. Data in this table indicate a slight

| Table 12 |
|-----------------|-----------------|-----------------|
| **Experiences** | **Group I**     | **Group II**    | **Group III**  |
| Kindergarten    | 16.6            | 3               | 4.16           |
| Dancing school   | 6.6             | 9               | ...            |
| Circus          | 73.3            | 60.6            | 75             |
| Zoo             | 70              | 66.6            | 58.3           |
| Carnival        | 80              | 84.8            | 87.5           |
| Spend night away from home | 63.3 | 54.5 | 58.3 |
| Play at park    | 86.6            | 89.6            | 87.5           |
advantage of Group I in attendance in kindergarten and
dancing school, but the numbers are too small to be of sig-
nificance. Trips to the carnival, zoo, and the like, give
added meaning to stories read in the first grade. Visits
to the zoo necessitate a trip to a larger town and there-
fore manifest more parental interest and offer opportuni-
ties for parent-child conversation. Spending the night away
from home was largely limited to those who lived near rela-
tives. The amount of time spent in supervised play at parks
was influenced by the location of the children in relation
to their nearness to the parks. The difference in the num-
ber participating in all items of Table 12 is considered in-
significant.

Figure 3 is a graphic picture showing relative differ-
ences in various social-emotional activities in their sig-
nificance in fostering the desired reading readiness. The
percentage of children with broken homes, working mothers,
and extended families is greater in Group I. Of positive
significance are participation of parents in school activi-
ties and regular attendance of children in religious services.
The number of mothers attending the pre-school day was limited
to those who had established residence in the community be-
fore the designated program. From Figure 3 it may be seen
that the number of mothers who came with the children the
first day was relatively high for all groups. The percentage
of those who attended previous school affairs was relatively
Fig. 3.—A comparison of the social-emotional factors of the three groups in their relation to readiness for reading.
low for all three groups. On all other items the variance was not pronounced.

Evidence presented in Chapter III indicates that parents of all three groups were conscious of the need for readiness for beginning reading and that the degree of development was promoted by their efforts. The three percentage graphs show the variance in physical, mental, and social achievements. No one single factor, but the integration of many factors, made the adjustment from home to school and beginning reading easier.
CHAPTER IV

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

This study undertook to determine which factors developed by parents were influential in preparing the child for reading readiness. The results of the tests and the teacher observations were shown in Chapter III, and comparisons were made of the three groups of children.

Notwithstanding the limitations of the study, an examination of the findings leads to the following conclusions:

1. Reading readiness is a composite ability which includes growth, achievement, and orientation.

2. No one factor, and no one group of factors, insures readiness for learning. The total development of the whole child involves the maturation and well-being of all the mental, emotional, and physical factors which enter into reading readiness.

3. The children of parents who were interested in cooperating with the school program of activities made more gain than children whose parents ignored school functions.

4. The evidence of this study seems to warrant the conclusion that the occupation of the parent is not significant.
in reading readiness if there is a relative financial equality among the families presented.

5. A positive, significant relationship was found between the training of the parents, as indicated by the educational level attained, and the degree of reading readiness achieved by their children.

6. From this study it is apparent that while some children who come from homes where formal instruction is given make creditable records, more children receiving instruction at home failed to make progress and were not ready to read.

7. Greater retardation in reading readiness was noted among the children with a poor general health status, as evidenced by frequent colds and other health problems, than among those children who had a good general health condition, including regular consultations with the dentist and the doctor.

8. It is apparent from this study that regular attendance at Sunday School and Bible School is advantageous in preparing the child for school adjustment.

9. A positive, significant relationship was not found between reading readiness and certain broadening experiences, as attendance at the circus, zoo, carnival, picture show, and park.

10. The data collected support the hypothesis that reading readiness is fostered by those activities in which the
the child has an active participation, and which involve
practice in problematic thinking and independence of action.

Recommendations

Factors which promote readiness for beginning reading
as found in this study are listed as recommendations for
parents and teachers. The following recommendations to par-
ents are suggested:

1. Give children an opportunity to see and handle
colorful books.

2. Promote interest in signs, labels, newspapers, and
the like.

3. Read to children, on the child's level, with ear
training materials included.

4. Provide children with simple puzzles for training
in seeing likenesses and differences and accuracy of manipu-
lation.

5. Give the child ample opportunity to solve problems
for himself, without parental guidance.

6. Build up confidence in the child that he can find
his own way to school, and about the school, by experience
or play acting.

7. Take the child for a regular physical check-up, and
have him ready physically for school.

8. Establish good health habits which help him and the
group.
9. Be ready for an active interest and participation in school affairs.

10. Give the child experiences similar to school, in listening, following directions, and participation in group life, as in Bible School and Sunday School.

11. Encourage the child to tell events in the proper sequence, using good language patterns.

12. Satisfy the child's curiosity in a manner to insure future interest.

13. Give the child a wholesome affection and a feeling of being wanted and secure in his home.

Success in beginning reading depends partially upon the interaction of home and school prior to first grade. For this reason the following recommendations to schools are suggested:

1. Clarify and establish effective methods of preschool training for parents.

2. Continue home visits and all other activities which unite parents and school.

3. Include parents in making plans for the school.

4. Investigate the advantages and possibilities of kindergartens.

5. Cooperate more fully with other organizations that have child-centered interests.

6. Make available to all parents bulletins and colorful booklets of pertinent information concerning readiness for schools.
7. Make a greater effort to secure total participation in all school affairs.

8. Formulate with the parents, in their own language, the philosophies and aims of the school so as to secure uniformity of understanding and effort.
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