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DEVELOPMENT AND TESTING OF RECORDS FOR LONGITUDINAL STUDIES

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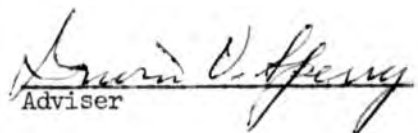
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A thesis submitted to  
the Faculty of  
The Consolidated University of North Carolina  
in partial fulfillment  
of the requirements for the degree  
Master of Science in Home Economics

Greensboro

1958

Approved by

  
Adviser

#### ACKNOWLEDGEMENT

The writer wishes to express her sincere appreciation to Dr. Irwin V. Sperry, director of the thesis, for his skillful guidance and encouragement throughout the extent of the study. Thanks are also expressed to Mrs. Rose M. Freedman whose help was invaluable and to Doctors Josephine Kremer and Julia Heinlein who served on the thesis committee.

Grateful acknowledgement is given to Dr. Leland H. Stott of the Merrill Palmer School for assisting in the development of the study: and appreciation is expressed to the parents of the eight children studied in the pretest for their wholehearted cooperation, and to all others who contributed to the development of this thesis.

J. W. H.

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## CHAPTER I

### INTRODUCTION

One of the most important approaches to the understanding and appreciation of human development is the longitudinal study. This type of study follows a particular child over a number of years, noting his changing characteristics and adjustments. In the longitudinal approach, a student can see the growth of the individual in relation to conditioning factors and becomes aware of the sequence of phases of growth and change in the child. Such relationships are difficult to distinguish in other types of study. A long term view of the child's development will reveal many factors which might otherwise be unobserved.

In order to study a child by this method, records of his development and information regarding the environment in which he has developed are necessary. Many such studies have been conducted in research centers throughout the country, Merrill-Palmer school being one of the foremost centers for this type of research.

#### I. BASIC ASSUMPTIONS FOR FORMULATING LONGITUDINAL STUDIES

This individualized longitudinal study of the development of children follows the child from infancy through adolescence with special reference to his home and family situations. Some of the basic assumptions for formulating and conducting a longitudinal study are pointed out.

(1) Development is the product of interchange between the individual and his environment, for the growth of personality and character are

not dependent on heredity alone but upon an interchange between heredity and environment. The effect of environment on an individual begins with life itself. From the moment of conception, certain factors are established and cannot be changed, such as color of the eyes, the color and structure of the hair, body build, and other potentialities. According to Ilg and Ames, from the time the first cell of the fertilized ovum divides, environment is a powerful factor in growth and development. If the environment is favorable, each individual has the possibility of developing to the fullest his most positive assets for living; if unfavorable, his natural potentialities may be inhibited or suppressed. However, his environment can not change his potentialities.<sup>1</sup> Heredity and environment are mutually dependent variables. The individual's growth is conditioned by environment.

(2) Since the home situation is the most prominent part of the child's early environment, it has an extremely important effect on his development. Breckenridge and Vincent state that, "Of all the agencies of society which affect children, the home exerts the first and most insistent influence."<sup>2</sup> During early childhood the greatest amount of time is spent in the home and with the parents. Therefore, according to Breckenridge and Vincent, it is the child's parents who should provide affection, a sense of belonging, discipline, and good habits and attitudes. They are "his background and his tradition, his protectors and providers, his earliest guides and educators, and his closest companions."<sup>3</sup> The authors continue this

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<sup>1</sup> Frances L. Ilg and Louise B. Ames, Child Behavior (New York: Hayes and Brathus, 1954), p. 64.

<sup>2</sup> Marian E. Breckenridge and E. Lee Vincent, Child Development (Philadelphia: W. B. Saunders Company, 1955), p. 152.

<sup>3</sup> Ibid., 1943, p. 152.

trend of thought by stating that parents "set the atmosphere for his moral and ethical standards, his physical well-being, his aesthetic appreciations, his concepts of family living and his philosophy of life in general."<sup>4</sup> The physical aspects of the home--space, arrangement, and facilities--have considerable effect upon the development of the child. They determine the amount of rest, quiet, play, exercise, and tension that the child may experience. Also, the number of people in the home and their relation to the child influence his development.

(3) Even though children follow the same general course of development, each is individual and different from the other in the way he develops and ~~patterns~~ his temperamental nature. Development follows an orderly process. A child must sit before he can stand, stand before he walks, and so forth. We are made more aware of the process through such normative studies as those made by Arnold Gesell at Yale University.<sup>5</sup> Gesell has determined the ages at which most of the children he observed were able to perform a given function. However, as previously noted, each infant is an individual from the moment of conception; no two people, not even identical twins, are exactly alike in their development. Thus each child has his own method of growing and grows and develops at his own rate, although the same general growth pattern will be followed.

(4) The most fruitful approach to the understanding of human development and the individual processes is through long term studies of an

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<sup>4</sup> Ibid., 1955, p. 153.

<sup>5</sup> Arnold Gesell, et al., The First Five Years of Life. A Guide to the Study of the Preschool Child. (New York: Harper and Brothers, 1940), pp. 3-377.



individual's development in relation to specific environmental situations. The effect of environment on development has already been seen; therefore, it is most important to see the child develop in his environment. As expressed by Gesell and Ilg,

It is not possible to diagnose constitutional traits simply by observing occasional behavior patterns. But by watching over a period of weeks, months, and years, the manner in which a child solves the endless succession of growth problems, it is possible to become acquainted with very significant aspects of the psychic constitution.<sup>6</sup>

Longitudinal studies give just such a picture of the development of a child--one which includes home, school, family, friends, and all other factors which affect his development. These studies give a comparatively complete over-all view of an individual's development.

The home environment and the child's relationship with his parents, their relationship with each other, their personal traits, attitudes, and training techniques are most important in the child's development and adjustment. These may have a different effect on each individual child depending upon his original nature and temperament. The child's original temperament, plus the effect of his environment, form his individuality. Although individuals retain their uniqueness, the patterns of behavior tend to be somewhat similar. The young child can be classified according to degrees of similarity. Therefore, the bases on which longitudinal studies are built are the early behavior patterns of the child, his environment, the developmental changes and persistence of patterns that occur as the child continues to grow.

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<sup>6</sup> Arnold Gesell and Frances L. Ilg, Infant and Child in The Culture of Today (New York: Harper and Brothers, 1943), p. 45.

## II. OBJECTIVES OF THE STUDY

The Woman's College of the University of North Carolina is planning to undertake a major study in which the objectives will be: (1) to trace development in young children with different behavioral patterns in relation to their home and school environment for a period of 15 years; (2) to collect "real life" teaching material and provide facilities for student experiences in the field of child development and family relations; (3) to set up a continuing program in which graduate students can gain research experience, develop theses, and thus contribute to the graduate program and research aspect of this program.

The first step in this study is to establish records from which information can be collected and compiled. It is most important to have records which give a comparatively complete and accurate account of the development of a child, and which can be used throughout the extent of the study. The records should be easy to use and interpret. Information from the records will be translated into more complete reports and studies of each individual. Therefore, the objectives of the present study are: (1) to establish developmental records that can be used by nursery and public schools; (2) to test these records for their accuracy and effectiveness; and (3) to revise the records on the basis of the test.

In order to test the records, eight children from the Woman's College Nursery School and Toddler Group were chosen for study. The Toddler Group is composed of children ranging in age from eighteen months to three years. The nursery children are from three to five years of age.

The following chapter is a review of literature on longitudinal studies, their use and value. Chapter III will be an explanation of the procedures

used in setting up the program. Chapter IV will report the results of the test and the changes made in the record forms. The final chapter contains a summary of the study and recommendations for its use.

## CHAPTER II

### REVIEW OF LITERATURE

The literature reviewed in this chapter is concerned with the importance of the longitudinal method of studying child growth and development. There is included a discussion of: (1) development of the longitudinal method, (2) advantages and disadvantages of the longitudinal and cross sectional methods, (3) factors concerning the use of the longitudinal method, and finally (4) examples of some outstanding longitudinal studies.

#### II. DEVELOPMENT OF THE LONGITUDINAL METHOD

Child study has emerged as a combination of many disciplines. Philosophy, natural history, and education were the early origins of child study. However, psychology, psychiatry, medicine, physiology, sociology, anthropology, and linguistics have recently proven fertile sources for new information and have contributed to further understanding and interpretation in this field.<sup>1</sup> Stone and Church point out three areas of emphasis for activities in the area of child study. The first emphasis is on research or application. Research refers to finding out how children function and grow. Application means doing things to, for, or with the children. The second emphasis is placed on normality or abnormality, on the usual path of development or upon the divergent path, i.e., what can go wrong in the normal course of growth. Lastly, emphasis is laid on the child himself

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<sup>1</sup> L. Joseph Stone and Joseph Church, Childhood and Adolescence (New York: Random House, 1957), p. 386.

or on his environment and how it shapes his development. No matter which of the emphases is chosen, the main object is always "finding out."<sup>2</sup> Various methods and practices have been employed in acquiring information and data concerning child development.

One of the most successful methods used is the longitudinal approach. As defined by Breckenridge and Vincent, the longitudinal study is the "method involving the measuring or testing of the same children through a number of years, and, therefore, through each successive stage of growth."<sup>3</sup> In this type of study, an over-all view of child development is assured.

In tracing the development of longitudinal studies, one should see it in relation to the development of child study. Stone and Church have divided the history of child study into four eras: (1) "the era of early experimentation," which began in the eighteenth century and lasted until the middle of the nineteenth century; (2) "the era of early experimental psychology," which reached its peak in the last quarter of the nineteenth century; (3) "the era of individual differences," which was of most importance at the beginning of the twentieth century; and (4) "the era of personality study," which covers the last twenty years. Some over-lapping occurs in all four of the eras.<sup>4</sup>

The study in each era was conducted in various ways. Observation was the basic method used by the early nineteenth century naturalists; "another aspect of the naturalist method is that it was longitudinal--

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<sup>2</sup> Ibid., pp. 386-387.

<sup>3</sup> Breckenridge and Vincent, op. cit., p. 34.

<sup>4</sup> Stone and Church, op. cit., p. 388.

that is, it consisted of repeated observations of the same individual."<sup>5</sup> This is one of the first references to study of this type. However, the method was not used as we know it today, because little or no attempt was made to analyze or manipulate variables in the child's surroundings, or to study either special kinds or responses, or development. Also, the studies lacked comparison of children, situations, conditions of development, or observations; therefore, they were completely uncontrolled.<sup>6</sup> Although these studies were of little help in understanding child development as such, they were of interest in describing the total functioning of the child; and the information was collected by the longitudinal method.

During the experimental psychology era, the child was studied in a laboratory situation in the hope of discovering the pure forms of each different phase of development.<sup>7</sup> However, the laboratory method did not provide the desired results. Sperry and Baggs stated the drawback to this method:

The controlled, single variable type of research has not been effective in this study. Real control could not be achieved since the research worker is not allowed to submit children to the same rigorous manipulation as other subjects; the single variable type of experimentation is difficult because research workers have not yet been able to isolate all the factors which make for personal interactions nor to reduce factors which have been isolated to their most elemental state.<sup>8</sup>

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<sup>5</sup> Ibid., p. 389.

<sup>6</sup> Ibid., p. 389.

<sup>7</sup> Ibid., p. 390.

<sup>8</sup> Irwin V. Sperry and Betty Cox Baggs, "New Techniques for Studying Children," Journal of Home Economics, Vol. 42 (November, 1950), p. 723.

Following this era, the methods of studying child development varied. However, in the early twentieth century, during the era pertaining to individual differences, interest was renewed in the longitudinal study, and a number of longitudinal studies were initiated. Previously, the cross-sectional method of study, in which ". . . development is studied by comparing different children at different ages,"<sup>9</sup> had been utilized. The question was raised as to whether data collected from different individuals could be considered accurate in describing growth. Stone and Church explain,

The longitudinal studies set out to answer this question by mapping the growth of the same individuals from birth onward. They demonstrate, indeed, that the growth curves of individuals differed significantly from the smooth curves based on group averages. We are indebted to the longitudinal studies for our knowledge of latencies and asynchronies in growth and of the typical growth paths followed by different individuals, patterns that had been totally obscured by the earlier methods of study.<sup>10</sup>

Although these studies were important, they were usually concentrated on psychometric techniques and testing or measuring physical traits, and little thought was given to other processes of development.

Around 1930, during the era of personality study, psychologists became aware that the person was not merely a group of individual parts, and as a result, interest was aroused in the study of personality and individuality.<sup>11</sup> Lawrence Frank states,

The organization of longitudinal studies of children may be cited as indicating an interest in observing how the

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<sup>9</sup> Stone and Church, op. cit., p. 389.

<sup>10</sup> Ibid., p. 395.

<sup>11</sup> Ibid., p. 395.

changing structures, functions, and activities of the individual organism are transformed through periods of time.<sup>12</sup>

Simultaneously interest in the study of child development flourished and increased. Not only scientists but lay people as well were interested in this movement and large sums of money were made available to establish child guidance clinics, research centers, and research programs to gain the necessary information concerning child development.<sup>13</sup> Research in this field came to be of great importance; one of the effects was to make possible the large scale longitudinal studies of development which could not have been undertaken without the support of the foundations and their continuous supply of funds.

Outstanding longitudinal studies mentioned by Stone and Church were conducted by Terman at Stanford on gifted children; by the Joneses, Bayley, and Macfarlane at the University of California; by Shirley and Boyd at the University of Minnesota; by the Bush Foundation at Western Reserve; and by the Fels Institute, the University of Colorado, and Harvard University.<sup>14</sup>

## II. ADVANTAGES AND DISADVANTAGES OF THE LONGITUDINAL AND CROSS-SECTIONAL METHODS

Until recently it was thought that one could study growth of an organism or any phase of growth by studying large groups of children of different ages, combining the information, and constructing smooth graphs

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<sup>12</sup> Roger G. Barker, Jacob S. Kounin, Herbert F. Wright, (eds.), Child Behavior and Development, (New York: McGraw-Hill Book Company, Inc., 1943), p. 10.

<sup>13</sup> Stone and Church, op. cit., p. 407.

<sup>14</sup> Ibid., p. 408.



showing growth that had taken place. These were called cross-sectional studies. However, in the past years the information from this type of study has been questioned by such organizations as the American Association for the Advancement of Science. At its meeting in New Orleans in 1931, a symposium was held on the subject of development. The discussion can be summarized as follows:

In the realm of physical anthropology, emphasis centered very largely around the question of growth. Papers and discussions . . . were focused to an unprecedented degree on the individual, as contrasted with the group. Indeed, the sessions devoted to this subject left a rather definite impression that we may be at the beginning of a new era, in which individual, rather than mass studies, will be foremost. The importance of observing the same individual over the largest possible period was emphasized by nearly every speaker who dealt with any aspect of development.<sup>15</sup>

As can be seen from the above statement, the trend of interest was shifting to a study of the total individual which would almost necessitate the use of the longitudinal method.

Both the longitudinal and the cross-sectional studies have advantages and disadvantages, and both serve a particular purpose. In regard to the cross-sectional method, Breckenridge and Vincent say,

The same child is not represented at different levels. Many of the norms now used were collected in this way. Such norms as the mental ability at various age levels, vocabulary norms, interests of 6 year olds, and the Children's Bureau Standards of height and weight are examples. By the use of such norms, general trends can be determined. It thus becomes possible to determine what is generally expected and how great will be the difference among individuals. However, individuality is lost sight of in such studies.<sup>16</sup>

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<sup>15</sup> Barker, Kounin, and Wright, *op. cit.*, p. 10.

<sup>16</sup> Breckenridge and Vincent, *op. cit.*, p. 34.

This clearly indicates that in order to study individual differences some other means is desirable. These two authors also explain that to collect norms through longitudinal studies may take longer but are more reliable for determining growth trends.<sup>17</sup> Longitudinal studies

can be used also to study individual patterns of growth as the cross-sectional method can not. When a battery of tests and observations are repeated regularly, much can be learned about the dynamics of growth.<sup>18</sup>

Therefore, it seems that longitudinal records, even though they may require longer to keep, will ultimately provide a more complete set of data than do the cross-sectional. Furthermore, longitudinal studies enable one to know the past history and nurture of the child studied, and, therefore, one can see what has occurred in most aspects of the individual's life.

The norms established by cross-sectional studies are important in understanding the stages of development; they can be used in comparing one child's rate of growth with others. But it is also essential to know what happens to the child before the study was begun if a really complete view of development is to be obtained. One advantage of the cross-sectional study is that uniform sampling criteria can be set up and used from start to finish of the series.<sup>19</sup>

Since children grow at different rates, the cross-sectional study does not show the pattern of growth of an individual child. Anderson says,

While means and standard deviations can be obtained at each age level, as in the cross-section study, the

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<sup>17</sup> Ibid., p. 34.

<sup>18</sup> Ibid., p. 34.

<sup>19</sup> Leonard Carmichael, (ed), Manual of Child Psychology (New York: John Wiley and Sons, Incorporated, 1946), p. 7.

longitudinal study, in addition, permits, (1) an analysis of the development and growth of each individual child; (2) a study of the growth increments, both for the individual and the group; and (3) an analysis in detail of the interrelations between growth processes, both maturational and experiential, because all data have been obtained on the same children.<sup>20</sup>

Stott says, "In such a study the student is able to 'see' growth in perspective in relation to some of its contributing factors."<sup>21</sup> Both of these statements explain the importance and the advantages of using the longitudinal method as compared with the cross-sectional method. As Stott further explains:

It is the belief of many authorities in the child development field that the longitudinal research approach is the most fruitful one in its contribution to our understanding of the basic processes of human growth and development.<sup>22</sup>

He also states that:

Careful studies of single individuals can be extremely valuable from a research point of view, in that sequential relationships between earlier developmental trends and environmental circumstances, and later development and adjustment may be brought to light.<sup>23</sup>

It has been found at the Merrill-Palmer School that beyond the research value of the longitudinal studies, the educational value of these studies is of primary importance. Information collected at the Merrill-Palmer School has been used in connection with the teaching of child development and family relations.<sup>24</sup>

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<sup>20</sup> Ibid., p. 7.

<sup>21</sup> Leland H. Stott, The Longitudinal Study of Individual Development (Detroit: The Merrill-Palmer School, 1955), p. 1.

<sup>22</sup> Ibid., p. 4.

<sup>23</sup> Ibid., p. 4.

<sup>24</sup> Ibid., p. 4.

Nevertheless, some disadvantages also occur in the use of this method. As Lawrence E. Frank explains:

It is well recognized that the longitudinal study involves many difficulties, both scientific and administrative, arising from the shifting about of families and the consequent loss of subjects during the prolonged period of such a study; moreover, the very rapid development of new methods and procedures tends to render obsolescent the original repertory of methods selected at the beginning of the study. These difficulties, however, are more than compensated for by the character of the data that are obtained through longitudinal studies of the same children.<sup>25</sup>

Many children from the original sample move away, or in some way contact is lost with the family, which means that the final group of cases may not be exactly the same as the ones at the beginning of the study. Even though these disadvantages of the longitudinal method are present and recognized, they appear to be out-weighed by the obvious advantages. Without the collection of data by this means, it would be extremely hard, if not impossible, to get a full and accurate view of the total development of an individual.

#### Factors Concerning the Use of the Longitudinal Method

In using the longitudinal method, the hypotheses at the beginning of the study are more general. "The longitudinal researchers sometimes must begin with broad goals in mind, collecting data which may be analyzed when specific problems are formulated at a later date."<sup>26</sup>

Anderson explains the procedures of the longitudinal study in this way. A large number of cases should be selected at the beginning of the

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<sup>25</sup> Baker, Kounin, Wright, op. cit., p. 11.

<sup>26</sup> Lester W. Sontag, Charles T. Baker, and Virginia Nelson, Mental Growth and Personality Development (Lafayette, Indiana: Society for Research in Child Development, Child Development Publications, Monograph, Vol. XXIII, Serial No. 68, No. 2, 1958), p. 13.

study to insure a representative number at the termination because of the number of drop-outs. After the cases are selected, the methods of measurement and observation must be chosen and arranged in the proper sequence. Care must be taken in anticipating the data needed at the end of the study in order to collect the desired information.<sup>27</sup>

Breckenridge and Vincent tell us that many research centers using the longitudinal approach study the growth of an individual by:

- (1) comparing his growth with appropriate norms, and
- (2) by following his progress through the stages of growth. The first way gives the status of the child at one point in his life; the second way reveals from whence he has come, in what direction and at what speed he is going.<sup>28</sup>

### III. EXAMPLES OF LONGITUDINAL STUDIES

Some longitudinal studies in addition to those mentioned by Stone and Church have been conducted at The Merrill-Palmer School, The University of Illinois, The University of Michigan, and The University of Iowa.

The Harvard Growth Studies are among the most outstanding longitudinal studies. These were begun in 1922 when 3,500 children were given mental and scholastic tests and physical measurements were taken. Continued for a period of twenty years, they were among the earliest longitudinal studies to be conducted. Dearborn explains,

The measurements here presented have several advantages over the materials available from previous longitudinal studies of growth, among which are: (1) the increased reliability of the physical measurements due to the averaging out of personal errors of measurement; (2) the

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<sup>27</sup> Carmichael, *op. cit.*, p. 8.

<sup>28</sup> Breckenridge and Vincent, *op. cit.*, p. 34.

presentation of the raw figures for the convenience of workers who wish to set up and investigate their own indices and to use preferred methods for determining statistical constants; (3) the opportunity to select groups from a large representative population for particular types of study; (4) the possibility of investigating idiosyncracies of individual development over a period of years; and (5) the study of particular problems which the selected material make possible.<sup>29</sup>

Some other materials which have been developed in the above mentioned longitudinal study were: a scale for measuring dental age, measurements of the growth of children, measurements of mental development, information regarding the influence of reading ability on mental development, and facts concerning the relation of physical growth to school achievement.

Longitudinal studies were also conducted at The Fels Institute at Antioch College. This Institute was established in 1929 under the direction of Lester W. Sontag, and since that time studies of human growth and development from the prenatal period to maturity have been conducted using the longitudinal method. More than 300 children have been studied in this program. One of the institute's outstanding contributions was the Mental Growth and Personality Development Study. Sontag, Baker, and Nelson maintain,

Some problems in child development research can be approached only by the longitudinal method. One such problem is the study of individual differences in mental growth rate, or individual patterns of change in measured intelligence in children.<sup>30</sup>

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<sup>29</sup> Walter F. Dearborn, John Rothney, and Frank Schuttleworth, (eds.), Data on the Growth of Public School Children From Materials of the Harvard Growth Study (Washington, D. C.: Society for Research in Child Development, Inc., National Research Council, Monograph, Vol. III, Serial No. 14, No. 1, 1938), p. 1.

<sup>30</sup> Sontag, Baker, and Nelson, op. cit., p. 13.

The mental development study was based on 140 Fels children. Information on the mental development of these children was taken from the Fels longitudinal files and comparisons were made; the study was published in 1958.

In 1955 the manual called "The Merrill-Palmer Longitudinal Study of Individual Development" was published by Leland H. Stott. One of its purposes was to provide many students with a guide to better understanding of human development.<sup>31</sup> It included an explanation of factors which influence individual growth and also traced the developmental processes. In addition, the use and value of longitudinal studies was explained.

Thus, as can be seen from the studies mentioned above, the longitudinal method has been used successfully in tracing the total growth of an individual for a given number of years. The information gained from these studies has been most helpful in seeing the rate and patterns of growth followed by an individual.

As explained by Kodlin and Thompson,

A fundamental idea underlying all of these programs has been the collection of data to describe systematically the changes in certain characteristics in individuals observed over a period of time. In this, the investigators who use the longitudinal approach are following the classical naturalistic approach to the study of biological phenomena, a necessary first step in the development of hypotheses and theories. Another fundamental concept is that the results of growth as seen at a given stage is influenced by various conditions that have operated in the past; therefore, the more one knows of a person's past the greater will be the insight into the causes which determine the person's characteristics. The soundness of these concepts cannot be questioned and they serve as a justification for the need for the longitudinal approach.<sup>32</sup>

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<sup>31</sup> Stott, *op. cit.*, p. 111.

<sup>32</sup> Dankward Kodlin and Donovan J. Thompson, An Appraisal of the Longitudinal Approach to Studies of Growth and Development (Lafayette, Indiana: Society for Research in Child Development, Inc., Child Development Publications, Monograph, Vol. XXIII, Serial No. 67, No. 1, 1958), p. 21.

## CHAPTER III

### METHODS AND PROCEDURES FOR SETTING UP RECORDS FOR LONGITUDINAL STUDIES

Records were needed for the longitudinal study to be conducted by the Woman's College of the University of North Carolina which would provide a relatively complete picture of the development of a child, and which could be kept without an undue amount of effort. This chapter is concerned with the procedures employed in formulating, testing, and revising the records.

#### I. DEVELOPMENT OF THE RECORDS

In order to formulate records for the longitudinal study, extensive reading was done in the area of child development. From the readings, basic principles of the development and growth of human beings were reviewed. Other research studies which had been conducted in this field were evaluated; and from these sources came suggestions for the types of information necessary for this study.

In addition, letters were written to other nursery schools and research centers throughout the country asking for samples of record forms which had proven useful in their situations. A list of the contributing centers is included in Appendix A. The records received from these sources, plus records from the Woman's College Nursery School, were examined and analyzed.



### Aspects of Growth Considered in the Formulation of Records

On the basis of the readings, records from other research institutions, previous studies, and the objectives of this study, certain aspects of growth were considered in the formulation of records to be used in the collection of longitudinal data. The four aspects considered here show the physical, mental, social, and emotional development, including the factors which contributed to the development of each of these areas of growth in the child.

#### Physical Development

Breckenridge and Vincent explain that "growth includes two aspects of change. They are not interchangeable, but, nevertheless, are inseparable. A child 'grows' and he 'grows up.' He 'grows' in size and 'grows up' or matures in structure and function."<sup>1</sup> As he grows, there are many changes which indicate the degree of his maturity. Few people are aware that the two aspects are closely interwoven. Environment and heredity together determine how the child will develop. Heredity establishes such factors as color of hair and eyes, body build, and certain potentialities. Environment allows the potentialities either to develop or to remain dormant. Almy tells us that "the child does not merely increase in size, general stature, and complexity of skeletal structure. All of the body systems grow, and there is also development in the ability to function."<sup>2</sup> In this particular study, it was essential to see how the child develops physically

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<sup>1</sup> Breckenridge and Vincent, op. cit., p. 4.

<sup>2</sup> Millie Almy, Child Development (New York: Henry Holt and Company, 1956), p. 27.

and how factors in his environment and heredity may influence this development.

There are several basic beliefs concerning growth. (a) Growth is a continuous and orderly process. (b) The tempo of growth is uneven. (c) Different aspects of growth develop at different rates. (d) Growth is unique in each child. (e) All aspects of growth are inter-related.<sup>3</sup> For the program of data-collection, it was proposed to obtain essential information concerning physical growth. Whether or not an actual account of individual development will verify the beliefs concerning growth will be shown in this study.

#### Mental Development

Children differ in their inherent mental capacity. Any measure of mental growth will reflect the experiences and opportunities which a child has had as well as his capabilities. Therefore, intelligence is not an entity. "It is a general quality or characteristic of personal activity."<sup>4</sup> Many people have different ideas about intelligence. Binet, as quoted by Stott, has said that intelligence is the ability to give a great deal of attention and to sustain it sufficiently to achieve certain ends. Thorndike described it as the ability to make good responses from the standpoint of truth or fact. Others have maintained it is the ability to learn; some consider it the ability to adjust to new situations. Terman, according to Stott, said a person "is intelligent in proportion to his ability to carry on abstract thinking."<sup>5</sup> It would seem that probably

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<sup>3</sup> Breckenridge and Vincent, op. cit., pp. 5-8.

<sup>4</sup> Stott, op. cit., p. 28.

<sup>5</sup> Ibid., p. 28.

all of these ideas combined would perhaps begin to explain intelligence.

Stott further concludes,

Intelligence is most accurately conceived, not as a thing, or an entity, or even as an innate capacity or ability, but rather as a general quality of personal functioning--that is, adequacy and effectiveness in meeting life situations. The more effectively one characteristically meets life situations at any stage in his overall development, the "brighter," the "smarter," the more "intelligent" he is judged to be.<sup>6</sup>

Measurement of mental capacity is difficult and requires the services of a trained person. Even then results are not always indicative of the individual's abilities. However, in this project an attempt was made to study the mental development of an individual as objectively as possible.

#### Social Development

Social development is another aspect which should be considered in the total development of an individual. It is not a specific function such as talking, but a form of behavior which determines the acceptance or harmonious interaction of one individual with others. The process of maturation determines to some extent a person's sociability. How the young child reacts and relates himself to others depends on his stage of maturity. As with the other phases of development, there is a pattern which social development follows. The behavior and reaction of a child is simple when he is very young, but as he grows it takes on more complex forms of behavior. A child's family must necessarily play an important part in his social development, for very often he will respond in a manner similar to that of his parents. Therefore, it is most important to have

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<sup>6</sup> Ibid., p. 29.

records which not only indicate the social development of the child but also provide information concerning his home and family.

#### Emotional Development

The final aspect concerns the child's emotional development. Stott explains that "emotionality is one of the most important factors involved in social adjustment and development."<sup>7</sup> Each person experiences daily numerous emotions in himself. In dealing with others he is confronted with their emotional reactions as well. One must understand this emotionality in order to work better with his fellow man. There are many varying opinions about emotional development, one reason for the divergence being that the emotions are difficult to study. Stott believes that first hand observations recorded of the child at home, at school, and as he comes in contact with his associates and adults are primary sources of data for understanding and evaluating the emotional development of a child.<sup>8</sup> Breckenridge and Vincent explain that "emotionality is a primary factor in his mental and personality development."<sup>9</sup> Since this emotionality does affect other aspects of development, it must be observed and recorded to insure a complete description of total development.

All four areas of development--physical, mental, social, and emotional--are so closely interwoven that in the study of an individual they can not be effectively separated. A person acts as a total being, not in individual phases isolated from each other. "A child's intellect

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<sup>7</sup> Ibid., p. 24.

<sup>8</sup> Ibid., pp. 24-25.

<sup>9</sup> Breckenridge and Vincent, op. cit., p. 84.

is related to his physical well-being; his physical health is sharply affected by his emotions; his emotions are affected by school success or failure, by his physical health, and by his intellectual adequacy."<sup>10</sup> Each of the four phases has been affected by the child's heredity and environment. Similarly, each part of the child's development must be understood if he is to be seen as a total being; however, the parts should not be thought of as unrelated, but as inter-acting each with the other.

#### Specifications For the Development of the Records

In order to obtain a complete picture of an individual's development, it was considered necessary to accumulate a maximum amount of information in each of the four categories. An important part of the study was to observe the contribution of each of the four aspects to the total development of the person. In order to see the inter-relatedness of all four, and in order not to exclude some bit of essential information, it was deemed necessary that the records should contain an extensive enumeration of facts about the child and his environment. The findings could later be analyzed and conclusions drawn which would provide a relatively complete, over-all description of the individual.

Since the information secured in this study will be used by students in child development classes and as a basis for further research, the data compiled must be thorough. After the records have been kept for the desired number of years, development can be traced from birth through the adolescence of the child. It is believed that this will give students first hand information concerning the developmental processes followed by human beings. The

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<sup>10</sup> Ibid., p. 13.

individual studies could then be compared so as to enable students to see that development is an individual process, even though a similar pattern is followed throughout. In order to extend the program, further research in this area could be undertaken by other graduate students and if this is done, the records must give full and detailed information if they are to be useful in future studies.

Though the description is to be thorough and complete, it must also be concise. Unnecessary statements and overly detailed reports should be excluded from the records. Notations and explanations in these records should answer directly and clearly questions posed. Too many details would not only require an excess amount of time to record, but would also add difficulty in interpretation of the information.

There is the possibility that these records may be used where there is a limited staff for collecting data; therefore, it is most important that the records require only a reasonable amount of time to keep. Since many nursery schools do not have the necessary staff for keeping detailed records on children, the time element is an important consideration.

In summary, it was deemed necessary to formulate records which would: (1) supply a maximum amount of information for each aspect of growth, and insure a comparatively complete picture of the child's development for the duration of the project; (2) assure the collection of complete information; (3) provide concise information; and (4) require only a reasonable amount of time to collect the desired information. These were the specifications established for setting up the records for this study. With these objectives in mind, record forms received from other research centers were analyzed and evaluated. After due consideration, records

were formulated which seemed to meet the above specifications and fulfill the purposes of the study.

## II. THE RECORD FORMS

These records along with the included instructions provide the basis for the revised record forms which will be used in the Woman's College program of longitudinal studies. There are three main phases to the data-collecting program: (1) data characterizing each child at the beginning of the study; (2) data describing the child's development; and (3) data concerning his environment.

### Data Characterizing the Child at the Beginning of the Study

The information gathered about each child at the beginning of contact in terms of his basic nature and activity tendencies is collected by means of the following records:

(1) The family information questionnaire is to be completed by the child's mother. Included in this record are the name, sex, and birth date of the child under observation and information regarding the age, height, weight, health condition, previous education, and occupation of the parents. Social and civic activities and organizations in which the parents participate are likewise recorded on this form; there is additional space for the name, age, and relation to the family of other adults living in the home; and there is extra room to list the names, ages, and sexes of other siblings in the family.

(2) The parent interview form records the mother's recollection of her child's infancy. Information obtained from this record concerns disposition, ease of handling, health, vigor, food intake, digestive problems,

sleep, toilet training, activities, and emotional development of the child, plus some account of family relations. This information is recorded by a staff member during an interview with the mother, either in her home or during an office conference.

(3) The height-weight chart is an account of the physical aspects of the child's growth. The measurements and recordings are to be made by the nursery school teacher at six month intervals. No complex instruments are necessary for the measurement; nevertheless, the chart gives a good picture of the pattern of growth each child follows.

(4) The physical appearance record contains information regarding hair, eyes, skin, shape of head, body build, posture, motor coordination, and the energy of the child, plus notation of any distinguishing characteristics. A photograph of the child taken annually should also be included. This information is to be recorded by the nursery school teacher.

(5) The behavior profile is to be kept by a staff member who has observed the child for an extensive period. In this record three degrees of each behavior tendency are indicated. The most desirable position on the scale would be somewhere near the middle. The ends represent less favorable extremes. Dots are made on the scale to indicate the position of the child in each situation; then the dots are joined to make a profile and to give an overall view of the child's behavior.

(6) Mental tests are to be given to each child at designated intervals by a person trained in testing procedures. The tests are analyzed and added to the child's file. In this study, the Stanford Binet Form I test is used. Inferences regarding the nature of the child's potentialities can be drawn from the way he performs on this test.



### Data Describing the Child's Development

The second group of records can be classified as developmental data. This concerns the way in which the child grows and matures. According to Leland Stott, "life is synonymous with change. From the moment of conception to the end of individual existence processes of change of various sorts are constantly underway."<sup>11</sup> We are interested in knowing about the nature, progress, and results of these changes in the young child. In order to collect data concerning such changes, other record forms were developed. (1) The height-weight records, which have been explained in the previous section, describes the development as well as appearance of the child.

(2) Diary records of the child's behavior form an important part of this program. These diary records are made at various intervals for a period of thirty minutes. The setting is described, then the recorder notes every action, facial expression, attitude of body, quality of movement, and tone of voice used by the child. Also indicated is the actual locomotion of the child, where he is, where he goes, what he does, what he says, and to whom he says it. In addition, there is space available for comments and interpretations of the child's actions which the observer deems necessary. This type of record gives deep insight into the behavior of the child as well as being a word picture of his exact reactions in certain situations. When kept over a period of time, it will show the developmental patterns.

(3) Ratings on social interactions and relations with peers and adults are the basis for three more record forms. Information for these is obtained through the use of prepared check lists which are completed

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<sup>11</sup> Stott, op. cit., p. 1.

periodically by a staff member. The check lists show the reactions of the child in many situations in which he is dealing with adults or his associates. These records are used with the permission of the Merrill-Palmer School.

(4) The food intake record is composed of a chart listing the food eaten by the child in one week. This is given to the child's mother who keeps an accurate account of the kinds and amount of food eaten during that particular period. The week chosen should be a typical one, not during an illness or under any other set of circumstances which would change the normal food intake. The kind of food eaten at each meal, any pertinent remarks as to how the child ate, whether he had to be urged or ate willingly, whether meal time was pleasant or not, and how the food affected him should be recorded. This record will, therefore, give a good representation of the kind of eater the child is in home surroundings. It also will show how his intake changes over a period of years and will indicate his preferences and aversions to various kinds of foods.

(5) The food attitude record specifies these food likes and dislikes in more detail. When kept over an extended length of time, it will show how the child's tastes change. There are columns in the chart to be checked for foods eaten daily, and those eaten three or more times weekly. Columns are also provided to show food skills; i.e., how he handles his eating utensils, etc. There is also space to indicate food allergies information which will be helpful to the teacher should the child be fed at school. This record is kept by the child's mother.

(6) The sleep pattern record, also compiled by the mother, gives a daily account of the amount of sleep the child has at nap time and at night.

It is expected that the parent will comment about how the child sleeps, including any difficulties in getting the child to bed, wakefulness during the night, bed-wetting, fretfulness, and any other information about the soundness of sleep that would be meaningful. This chart is to be kept for a period of one week, at the beginning of the study, and possibly later on.

(7) The speech record provides information regarding the age at which certain phases of speech development are noticed. The child's mother records the date at which each phase mentioned on the record is first noticed. She will need to pay particular attention to the child's vocalization, speech sounds, words, and expressions. Of course, children vary as to the age at which the indications used in the record first appear. This record was suggested for the study by Leland Stott of the Merrill-Palmer School in Detroit, Michigan.

(8) The emotional behavior record gives an account of the emotional reactions of the child for a period of twenty-four hours. Children usually experience many situations during the day which arouse different emotions, such as affection, fear, anger, jealousy, joy, mirth, excitement. The mother should note each outburst or expression carefully, then record the child's exact reaction immediately. Stott tells us,

There has come a growing realization of the importance of understanding and respecting the child's point of view, his "private meanings," his individual strivings, and frustrations, his own "self-image," and his attitudes toward himself in relation to others and the total situation if we are to foster his emotional development.<sup>12</sup>

#### Data Concerning the Child's Environment

The third phase of the data-collecting process concerns the child's environmental surroundings. At any point in his development, his personality

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<sup>12</sup> Ibid., p. 24.

is the result of interchange between the organism itself and the environment. The quality and adequacy of the environment determine to what extent his potentialities can be developed. Information concerning the child's environment is obtained from the parent interview. In order that this information be as accurate as possible, it is suggested that the mother be visited in her home rather than have the interview occur in the office of the staff member. This arrangement gives the interviewer a more definite picture of the physical environment in which the child lives. Through the interview, information is elicited concerning the parents' attitudes, feelings, and philosophy about children. Casual conversation with them reveals many attitudes and relationships between parents and their children. This information can be invaluable to the nursery school teacher.

A progress report by the nursery school teacher made near the end of the school year adds another dimension to the child's developmental records. Here the instructor includes such information as ways in which the child responds to adults as well as to his playmates and changes that have taken place during the year in regard to attitude, maturation, and emotional behavior. Comments concerning his reaction to play materials and progress in his manipulative ability are also recorded.

### III. EVALUATION OF RECORDS

All of the records are designed to give approximately a complete view of the child as he travels the road to maturity, showing how he has developed each step of the way. During the formulation of the record forms, Dr. Leland H. Stott of the Merrill-Palmer School visited the Woman's College to help develop and evaluate the record forms to be used

in the long term study. Dr. Stott's suggestions were invaluable and added much to the accuracy and thoroughness of the charts developed.

### The Pretest

In order to determine the effectiveness of the records, a pretest was made using the above described record forms. Eight children were chosen from the College Nursery School and Toddler Groups as subjects for the pretest. Of the children chosen, there were four girls and four boys. The four youngest children in the toddler group were selected, all of whom were near the age of 18 months. Twin boys, three years of age, and two girls, both four years old were selected from the nursery school. Their records were compiled by two staff members over a period of four months. Interviews were conducted with the parents and diary records of each child were kept. During this four month testing period all other records were completed for each child and placed in the files for future reference.

During the pretest, eight student teachers in the nursery school who had been in close contact with the children, were asked to complete the records concerning: (1) relationships of the child with adults and his peers, (2) the sociability record, and (3) a behavior profile for each child selected for the study. It is interesting to note that when these records were compared, the range of results was relatively small, thus emphasizing the practicality of the forms used.

### The Panel of Specialists

While this pretest was being conducted, copies of the record forms were sent to be evaluated by a panel of specialists in the area of child

development who were members of the faculties of eight land-grant colleges in the Southeast. The list of participating colleges is given in Appendix B.

The panel was asked the following questions: (1) Would you and your staff be able to keep these records without an undue amount of effort? (2) Do you believe this series of records would give a relatively complete picture of the child? (3) Are there any items of information which might be superfluous? (4) Are there any items of information that should be added? With one exception there were answers from all who received the questionnaire, and many of the suggestions offered proved useful.

On the bases of the pretest and suggestions from the panel of specialists, revisions were made in the first record forms. It was thought that these changes would assure collection of more complete data on which to base the long term study. The revised records were then put into permanent form ready for use. A copy of the revised forms appears in Appendix C. Further explanation of the revisions will be given in the following chapter.

It is apparent that there were many processes involved in developing, testing, and revising the record forms so that they would provide maximum information with a reasonable amount of time, effort, and staff required. Another important aspect of these records is that they can be used to follow the child through the long term study with few modifications, and may be kept easily by different teachers throughout his school career. When information from these records in the long term study is compiled, it is believed that there will be a more comprehensive picture of the child's development.

## CHAPTER IV

### RESULTS AND REVISIONS OF RECORD FORMS

The previously discussed objectives of this study as stated in Chapter I are: (1) to develop a set of records to be used in a longitudinal study of child development; (2) to test the records with children in the Woman's College Nursery School and Toddler Group; and (3) on the basis of the test and suggestions from specialists in the area of child development, to revise the records. With these objectives in mind, a set of records was formulated and established which indicated four aspects of development, physical, mental, social, and emotional, from infancy through adolescence. The records were established in a manner which would insure the collection of thorough, concise, and complete information, yet require a reasonable amount of time to keep. This chapter is concerned with the results obtained from the pretest in relation to the specific requirements mentioned above, and the revisions which were deemed necessary to insure the accuracy of the records.

#### I. RESULTS

As an example of the type of information procured from these records, a personality sketch of one of the children studied in the pretest has been made. All of the information in this sketch was obtained from the records kept for a four month's observation period. This personality study describes the four areas of development, physical, mental, social, and emotional; as well as the factors influencing the maturation of the child.

Personality Study of Susan J.

Susan J., a three year, eleven month old pupil in the Woman's College Nursery School, is typical of many little girls her age. With her short, light brown hair, inquisitive brown eyes, and dark complexion, she presents an attractive appearance. Her height is forty-one inches, and her posture is excellent. Susan's abundant amount of energy and well developed motor coordination are quite evident in the way she runs, jumps, and climbs. The child usually has a solemn expression and rarely ever exchanges smiles with the teacher or with the other children in the nursery school.

There are six other members in the family, Susan's parents, her great-grandmother who is eighty-three years old, two brothers, aged ten and eight, and a sister, age six. Two nurses are in the home twelve hours each day caring for Susan's great-grandmother. There are also two maids employed by the J's as their's is a stately old home belonging to the great-grandmother. Mrs. J. manages the house and has had to give up many of her civic activities in order to have more time for her responsibilities at home. Mr. J. is an accountant in the Sears-Roebuck Mail Order Plant. Mrs. J. is a college graduate, while Mr. J. attended college for two years.

According to her mother, Susan was a very happy, smiling baby, even in the presence of strangers. Though a relatively healthy baby, she had projectile vomiting for three and one-half months after birth, and convulsions occurred when she was ten months old and again at eighteen months following a red throat and high fever. In one of these attacks Susan was paralyzed on one side for twenty-four hours and had to be rushed to the hospital. However, there has been no recurrence of this trouble since that time.



Susan sat alone at six months, crept at seven months, walked at ten and one-half months, spoke her first word at eleven months, fed herself with a spoon at one year, and drank from a cup at nine and one-half months. Susan was a bottle fed baby, and was allowed to keep her bottle until she was three years old. Toilet training was begun at eleven months but was interrupted when Mrs. J. had to be taken to the hospital; however, it was resumed at seventeen months and completed when Susan was twenty months old. The training period was quite successful with no problems occurring during the time.

Since Susan doesn't seem to need as much sleep as some children her age, the afternoon nap has been discontinued. Her usual bedtime is about 8:15 P. M. She shares a bedroom with her sister and always wants her sister to go to bed at the same time regardless of the difference in their ages. Once Susan is in bed she goes to sleep immediately, and sleeps soundly until 7:15 A. M. Previously, at the age of three, Susan would go to her mother's room during the night, but now she is quite content to take her favorite blanket to bed with her and remains in her own room. The hall light is left on during the night, and if necessary, Susan goes to the bathroom without calling for her mother's help.

Eating is no problem in the J. household. Susan likes almost all kinds of food, meat, fruit, and milk being her favorites. Oddly enough, she cares very little for sweets, although occasionally she will eat cake at a party. Susan handles her eating utensils well and requires no assistance from her parents. The only problem her mother has is to keep Susan from eating between meals. During the week the four children enjoy eating dinner together in front of the television set; however, on Saturday and

Sunday, they eat at the table with their parents.

Outdoor activities hold much interest for Susan. Playing in the sandpile, swinging, and riding her tricycle and scooter are some of Susan's favorite pastimes. The only restriction Mrs. J. has placed upon Susan's outdoor play is that she stay in her own yard, and not go near the main street which is directly in front of the house. Indoors, dolls and other forms of domestic play occupy a considerable amount of Susan's time. She loves having stories read to her, and though she has no particular favorite, she will sit for hours listening to her mother read. Putting puzzles together is another of her favorite pastimes. She works quickly, aptly, and is most skillful in reassembling puzzles. Since music is of no special interest to other members of the family, Susan's only contact with it comes from the use of her record player. As a group, the family does enjoy dining out and seeing a movie once a month. They also take vacations together.

Susan's day is busy and filled with many activities. The following schedule may be considered typical:

7:15 A. M. Susan awakens  
 7:45 A. M. Dresses, breakfasts, and watches Captain Kangaroo on TV  
 8:45 A. M. Goes to nursery school  
 12:30 P. M. Returns home and plays alone in the yard until the  
           other children come home  
 5:00 P. M. Watches television  
 5:30 P. M. Eats dinner  
 6:00 P. M. Plays  
 7:00 P. M. Undresses, takes a bath, and prepares for bed  
 8:15 P. M. Goes to bed

Independence is one of Susan's outstanding characteristics, since she does almost everything for herself, and resists help from others. She began dressing and undressing herself when she was two years and eight months old. Now she makes decisions about what she will wear, and also

picks up her clothes and puts them away. Other indications of her independence are seen in her ability to feed herself and go to the bathroom with no assistance from adults.

According to Mrs. J.'s report, Susan seems to be an emotionally stable child. Her calm, pleasant nature and the fact that she seldom gets upset are good indications of her emotional stability. Once, however, when her great-grandmother was taken to the hospital, Susan, being rather distressed, begged to remain home from nursery school that day. There is no evidence of nervous habits, and the only behavior problem of some concern to her mother is the fact that Susan has never learned to share. The other children in the family have given in to her desires, probably because she is the youngest in the family. Doubtless this selfishness will clear up as she has more contact with other children.

Susan responds readily to disciplinary measures enforced by her mother and father. The parents agree in their ideas of discipline and the usual punishment is spanking or sending Susan to her room. Both measures have proven most effective and produced results satisfactory to both parents.

In Susan's contact with other children in the nursery school, she seems to submit easily to children who take the initiative, even if they are younger than she. Susan is not a leader, but follows the ideas of others, and hesitates to make her own feelings known. At first it appeared difficult for her to know exactly how to approach or to make friends with the other children. Therefore, Susan usually plays alone and though she is pleasant, she seldom talks to the other children or quarrels with them. She watches as they play, but hesitates to join the group until the teacher gives her some encouragement. Also, Susan is somewhat shy when

meeting new adults, but if the grown person is not a stranger, she is accepting, trusting, and cooperative. She responds quickly to adult authority and comes immediately when called. In the nursery school she depends upon the teachers' support to meet difficult situations with other children; however, she is independent in play and routine matters. At home she gets along well with her brothers and her sister. The latter tries to mother Susan, and the boys are also quite eager to help care for her. The children spend much time together, especially Susan and her sister. Mrs. J. reports that she has not recognized any indications of sibling rivalry or jealousy.

Results from the Stanford Binet mental test (Form L) show that Susan is very alert and quick. The score determined that she had achieved the mental age of five years and four months. When given the test, Susan went willingly, but shyly and cautiously with the examiner. Nevertheless, she was most cooperative in answering questions, although she made no extra comments. When the test was completed, she returned eagerly to the playroom.

When Susan first came to the nursery school, she stayed for only part of the day, and her mother remained with her. She was very shy and unsure of herself in this new situation. She needed the reassurance of her mother's presence to make her feel more at ease. Finally, about two weeks later, Susan came to her mother with the news that she was going to stay for lunch and to please come for her when lunch was over. After that, she stayed at nursery school without her mother. In the beginning, Susan was more interested in solitary rather than group play. She rarely spoke to the other children and even when one of them attacked her, she remained

quiet. About three weeks before the end of nursery school, an amazing change took place. One day as she sat playing in the sandbox, she turned to the children near her and started talking rapidly about their play. From that time on Susan had less trouble expressing her feelings and ideas to the other children; also she joined readily in their play. Susan's poor language development and the fact that she lisps could have been one reason for her difficulty in communicating with other children.

The behavior profile indicates that Susan has an average amount of energy, an above average amount of vigor in activity, is moderately sensitive to stimulation, is most responsive, alert, seems somewhat serious, solemn, quiet and reserved in nature, has a comfortable contented attitude towards the world, and is moderately stable of mood and not easily frustrated.

In summary, Susan is still rather quiet and shy, but very alert and able. She loves all kinds of art work, water play, stories, and especially outdoor activities, such as running, climbing, and swinging. She adapted beautifully to the nursery school after the first break with her mother was made, and is most cooperative in all school routines and rules.

Susan seems to be stable and considerate, except for her shyness with new people. Now she is relaxed, calm, and happy at school. She is also beginning to enjoy group as well as solitary play. She seems to like nursery school, and is developing in a healthy way. She enjoys so many things and is so cooperative that she will be popular in most any group.

#### Interpretation of the Personality Study of Susan J.

From the above sketch, it can be seen that when the records are kept over a long period of years and the information from them compiled, the

pattern of development of an individual can be traced. The results of each record form can be interpreted and used to show the rate of growth and the sequence followed in the development of the individual.

The information obtained from the records concerning physical development was given in specific terms such as height, weight, muscular development and skills, amount of energy, and description of personal appearance including the color of the hair and eyes. Since there will be many changes in these characteristics during the extent of the study, a record keeping an account of them was vital.

In the parent interview, information regarding the child during infancy was obtained from the mother in a personal interview. Not only were the facts collected in this form essential for interpreting the present nature of the child's personality, but it also gave the interviewer a chance to become better acquainted with the parent. From talking with the mother the interviewer gained insight into the mother's personality, attitudes, and ideas. In this form facts concerning the home life of the child were revealed and recorded. The physical arrangement of the home, other people dealing with the child, her reactions to and relationships with other members of the household, all of which greatly influence her total being, were noted for the record. Also the activities and interests of the child were recorded in this form, and as time passes, the changes recorded will indicate the child's physical maturation.

Eating and sleeping habits carefully recorded by the mother proved most helpful in understanding how the child had changed over a period of time. The addition or subtraction of sleeping hours, the discontinuance of naps, changes in the in-take of food, changes in food likes and dislikes,

the rate of improvement in eating skills are all facts which were collected in the record forms developed for this study. This information enables one to see the individual patterns of eating and sleeping followed by each child.

The results of the mental ability test indicated a high level of functioning. However, the findings of a single test of this nature are not always reliable, so other tests should be given at designated intervals during the study to insure more accurate results.

Records dealing with the social development of the child and his relations with others showed how the child reacted to other people, both her peers and adults. A commonly accepted principle in child development is that in the early years children are "I" centered--they are primarily interested in themselves. As they mature, they become more aware of the people around them, first their parents and siblings, later other people outside the home. With his new awareness, the child begins to react and to relate himself to these other people. The sociability development records showed how the child's relationships developed and changed as she continued to grow. These forms also gave a good picture of his ability to deal with other people.

The emotional development of the child was traced through the emotional study records. Information showing how the child reacted in different situations, and emotional responses noticed were recorded. Later these records may be compared to indicate the changes that occurred in the child's emotional stability.

## II. REVISIONS IN RECORD FORMS

The record forms were sent to a panel of specialists in the field of child development who were asked to evaluate the records, and suggest changes or additions which they thought would make the records more meaningful and thorough. In addition to these, upon completion of the pretest, the records were again analyzed and other revisions made by the writer and her adviser. A list of the suggested changes was compiled and studied, and from this revisions were made in the original records to make them more thorough, complete, and concise, thus more nearly fulfilling the objectives set up for the record forms. The following is a discussion of the proposed and actual changes made in the original record forms.

### Height-Weight Record

The first suggestion was that in measuring the height and weight of the children for this study, standard equipment be used and measurements made by a trained person. According to the objectives of this study, the records are to be of such a type that they can be kept by any nursery school teacher. Accordingly, it is believed that measurements accurate enough for the purposes of this study can be made by any staff member with the usual equipment if she works carefully. If a trained person were necessary, a larger staff would be required for keeping the records. However, since the information needed can be obtained without such assistance, the staff can, therefore, be held to a minimum. It was also suggested that the height and weight be recorded at intervals of three months. If this were to be done, it would be very time consuming, especially as it appears that the desired pattern of growth can be traced just as accurately by



making these measurements every six months. Thus the latter procedure was recommended.

#### Physical Appearance Record

Measurement of the child's head, which is noted in the personal appearance record, was questioned. After the pretest, it was concluded that this figure added little meaning to the study, and it was, therefore, decided that instead of the specific measurement, a description of the appearance of the child's head, noting any unusual conformation or characteristics, would be more meaningful.

Another suggested change in the physical appearance record was that the description of motor coordination be broken down into two sections, one to include a description of the development of large muscle coordination, the other to include the development of the coordination in the small muscles. Since this would tend to make the information obtained more thorough, the change was made.

#### Food Intake Record

Recommendations for changes in the food records were (1) that in the record showing food intake for one week, a column be provided to record between meal snacks. After the pretest was begun, the need for this information became apparent. The change was incorporated to give a more complete description of the child's eating pattern. (2) Another recommendation was that some instructions for the parents be included on the food intake form. These would explain how to measure the food and how to indicate the amounts of food the child had eaten. This procedure proved wise

since it was found in the pretest that various methods of describing the amounts of food eaten by the child were used. To make the descriptions more uniform, a list of suggestions for measuring food was added. This measurement list was obtained from nursery school records used by the University of Tennessee.

One of the specialists thought a record including the child's early eating behavior in the nursery school, his likes and dislikes, his attitudes toward mealtime, and the amount of food eaten or rejected would be useful. Although this information would probably be essential in a more detailed study, sufficient insight into the child's eating habits and food intake can be obtained from the existing record forms. In addition, such information would increase the size of the staff since it would take much of a teacher's time to compile. Therefore, considering the nature of this study, such a record was omitted.

There was a thought that records concerning toilet training had been neglected in the data collecting program. At the conclusion of the pretest, it was apparent that sufficient information concerning toilet training had been related by the mothers, and recorded in the parent interview form. Therefore, it was not considered necessary to add another form to give any more specific details about this phase of a child's development.

#### Speech Record

In using the speech record during the pretest, it was discovered that the information was not applicable to children above the toddler age. Questions in this record included information concerning the child's first attempt to talk, and the sounds he made which later led to talking. Since the nursery school child has already passed this stage in his speech development, it is suggested that this speech record be used exclusively with

the small child during his early language developments.

#### Emotional Development Records

Another recommendation was that record forms similar to those now being used to indicate social relationships be added for emotional development and motor coordination. Though records of this type would give increased information, it was not thought wise to add such forms. For the purposes of this study, the necessary amount of information can be obtained from the records already decided upon. Not only would additional forms be cumbersome to keep, but also they would require an undue amount of time to record.

#### Behavior Profile

The suggestion that the behavior profile have more specific descriptive terms to help the average nursery school teacher rate the children did not prove necessary. The profile seems clearly stated, for during the pre-test students who used the record asked no questions concerning the terminology, and there was a rather high degree of consistency in their independent ratings, therefore, this form remained unchanged.

#### Parent Interview Record

It was also suggested that a section describing the child's demonstrations of affection be included in the parent interview form. By this was meant a fond look, a pat, a hug, a stroke--anything indicative of fondness for another person. Another suggested addition was that terms such as smile, chuckle, laugh, or some terminology other than mirth be used to describe emotional reaction. These changes were not considered necessary, however, as they seemed to add little to the clarity of the information already obtained in the records. One person believed it would prove helpful to indicate on the record concerning the child's relations with others, how

often a particular type of behavior which had been recorded occurred. This would take extra time for the recorder to describe, and the added information would be of little value to the study; therefore the change was not deemed necessary.

The recommendation that there be two parent interview forms instead of only one was considered essential. Although the entire form will be used for the initial interview at the beginning of the study, it will be divided into two phases; the initial parent interview, which will comprise information pertaining to the infancy and early development of the child as well as background data which would have bearing on the child's development. The second section of this form will be devoted to information obtained from the mother during the period of the child's school attendance. Here will be recorded a description of his activities and developmental changes which occur with the child's growth and maturity. Such a division should save time in that the entire form will not have to be completed in each interview. It will also avoid the duplication of information which it is necessary to collect only once.

Upon completion of the pretest it was deemed necessary to make some additional changes in the parent interview form. The first change was to add adjectives such as lively, quiet, calm, alert, over-active, irritable, tense, and happy to the question which the mother is asked concerning the characteristics of her child during infancy. Those most descriptive of her baby are to be checked, thus insuring a more accurate and meaningful picture of the baby. Still another addition was a question pertaining to the child's health during infancy, since it was discovered that without this, little information on the subject was gathered. This clue developed when some parents, although not specifically asked, mentioned serious

illnesses suffered by the child during infancy which could have a lasting effect on physical development. Therefore, it was decided that a record of the child's early health would be informative and add to the thoroughness of the data collected on this form.

In the second phase of the parent interview, a question as to the nature of the child's play at home was added. The parent is asked to characterize the play as active, sedentary, boisterous, quiet, energetic, self-initiated, dependent, or adult directed. The answers should provide knowledge of the child's behavior at home, and will enable the recorder to compare his at home activities with those at school or in a larger group.

To insure more specific answers to questions concerning the main restrictions on play, it was considered necessary to ask directly about the restrictions with reference both to outdoor and indoor play. This warrants more uniformity in the mothers' answers which will be an asset in the final interpretation of the data.

Since television has become such an important aspect in the lives of many families, it was considered necessary to add a question pertaining to the amount of time the child spends with this medium. It will be interesting to see the results of this question and to compare the amount of time different children watch television. As society changes, new influences will come into the lives of children. As changes occur, questions concerning these factors should be added to the forms so that all possible influences upon growth may be considered and recorded.

In that part of the interview pertaining to the emotional development of the child, it seemed vital to include such questions as "what situations most often lead to difficulty with the child?" And "for what is he

most often punished?" Answers here will give insight not only into the behavior of the child, but also will suggest the values the parents place on certain actions, and their ideas of what is bad or dangerous for their children. An understanding of these data will show the ways in which parents' values affect the child as he in turn develops his own ideals. In addition to this, a check list concerning the methods most often used in dealing with, and managing the child was formulated. Included here were such procedures as assisting, bribing, cajoling, demonstrating, depriving, diverting, isolating, offering choices, praising, preparing the child in advance, putting to bed, reasoning, rewarding, scolding, spanking, suggesting, or threatening. Such a detailed description of the mother's handling of her child will give insight into the parents' philosophy of rearing children, and add to the conciseness of information obtained in the study.

A question concerning the child's reactions to any of the above methods was inserted, replacing one inquiring only about his feelings toward discipline by his parents. It was believed that thus a broader concept of child rearing techniques and the child's attitudes would become discernible. Such attitudes and reactions to discipline and guidance can indicate the type of temperament a child may be developing.

Furthermore, several questions had been asked concerning the amount of time the family spent together, what special interests they had as a family unit, and what excursions were taken together. This line of inquiry was gathered into one more specific question requiring the mother to "comment on activities jointly engaged in by members of the family, such as reading, hobbies, excursions to the zoo, railroad station, airport,

market, walks, etc." Space was also provided to note whether the activities were performed by the mother and child, father and child, siblings and child, or the entire family as a group. It is believed that phrased in this way, this single query will elicit all of the information necessary for this phase of the study, and that the answers will be in more graphic terms than those obtained from the three original questions.

The final change in the original parent interview form was to add a question concerning the child's reaction to activities outside the home, such as Sunday school, Bible school, and play groups. Although the other records supplied a relatively complete account of the child's activities with his parents and siblings, there was a need for data concerning his reactions to activities with people outside his immediate family group. In understanding all aspects of the child's development, his attitudes and ideas about the larger world must also be considered, so this side of his growth was brought into the record.

All the revisions and additions mentioned above were considered necessary to insure, as far as was possible, the accuracy as well as the conciseness of each of the record forms. A copy of the revised record forms appears in Appendix C. Having incorporated these changes, the forms are now ready for use in a longitudinal study. It is expected that in their final form, they will provide a detailed, clear, and relatively complete view of the development of an individual as he progresses in all four phases of his growth--physical, mental, social, and emotional.

## CHAPTER V

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### I. SUMMARY

The study of human development and growth has become an outstanding area of interest to people today. In order to understand and appreciate human development, all areas of growth and the relationship of conditioning factors must be seen. The longitudinal method of study, in which the development of a particular child is followed over a number of years, is one of the most satisfactory approaches to the problem. In this method the rate and sequence of development can be traced in an individual.

Some of the basic assumptions for formulating such studies are (1) that development is the product of interchange between the individual and his environment; (2) that the home has an extremely important effect on the child's development, as it is a predominant part of his early environment; (3) that although children follow the same general course of development, each is an individual and differs from the other in his individual development; and (4) that the most fruitful approach to understanding human development and individual patterns of growth is through long term studies of how the individual develops in relation to specific environmental situations. The longitudinal method insures the collection of information concerning the early behavior patterns of children, their environment, and the developmental changes which occur as the child grows. Information concerning all of the above aspects is necessary if a comparatively complete picture of development is to be presented.



The Woman's College of the University of North Carolina is planning a program of longitudinal studies which will trace development of young children with different behavior patterns in relation to their home and school environment over a period of 15 years. From the study, realistic information concerning growth will be collected for teaching purposes. It will also facilitate a continuing program in which graduate students can gain research experience.

Records were needed for the long term project. The purposes of this study were: (1) to establish developmental records that can be used by nursery and public schools; (2) to test the records for their accuracy and effectiveness; and (3) to revise the records on the basis of this test.

A review of literature concerning longitudinal studies revealed that studies of this nature were conducted in the early nineteenth century. However, these studies made no attempt to analyze data collected by the longitudinal method, so were of little value. It was not until the twentieth century that longitudinal studies as we know them were used. In the 1930's interest was centered on the study of total development of the individual, rather than on the development of component parts of the personality.

The longitudinal method provides a more comprehensive picture of total growth than does the cross sectional method, in which development is studied by comparing different children at different ages. Through longitudinal studies, the changing structure, function, and activities of an individual can be traced over an extended period, thus revealing growth patterns of the individual. The main disadvantage of the longitudinal method is that there is a loss of subjects resulting from the shifting of families to new areas. However, the advantages of this method seem to

outweigh the disadvantages. Outstanding longitudinal studies have been conducted in many institutions such as The Merrill-Palmer School, The University of Illinois, The University of California, Harvard University, The University of Michigan, and others. Information collected through these studies has proven most vital in understanding individual development.

In order to develop records for a longitudinal study, certain procedures were followed. Letters were written to other nursery schools and research centers asking for sample records which had proven useful in their situations. Other research studies in the field of child development were studied and analyzed. On the basis of recommendations by authorities, the records obtained from other nursery schools, readings in child development, and previous research studies, records were formulated.

Information tracing the four aspects of development: physical, mental, social, and emotional, was to be gathered. The four areas are so closely interwoven that in the study of an individual they cannot be effectively separated, so to insure the collection of material which would provide a relatively complete view of the individual, the forms were devised with all aspects of this inter-relatedness in mind. Also, since it is likely that the records will be used where there is a limited research staff, it was believed that they should require the minimum amount of time necessary to secure adequate information.

The data-collecting program was divided into three phases. The first was to obtain information characterizing each child at the beginning of the study. Forms developed to provide this information were: (1) the family information questionnaire; (2) the parent interview, in which the mother gave her recollections of the child's infancy and some account of the family relations; (3) the height-weight record; (4) the physical

appearance record; and (5) a behavior profile. To show mental development, a standardized mental test was used.

The second phase of the data collecting program was designed to secure information regarding the child's development. In addition to the above mentioned records, which are to be repeated periodically, other forms were developed. They were: (1) diary records, (2) records describing social interaction and relations with others, (3) food-intake records, (4) food attitude records, (5) sleep pattern records, (6) speech records, and (7) emotional development records. All of these are to be repeated at designated intervals.

The final phase of the data-collecting program concerns the child's environment and consequently records were devised which would provide an understanding of the surroundings in which the child lives. Questions concerning the environment were scattered throughout the family information and parent interview records.

In order to determine the feasibility of the records, a pretest was conducted in which ~~eight~~ children from the Woman's College Nursery School and Toddler Groups were observed for a period of four months. While the pretest was in progress, the record forms were sent to a panel of specialists in child development in eight southeastern land grant colleges to be evaluated. On the basis both of the pretest and the suggestions from the specialists, revisions were made in the original record forms to insure even further the collection of complete, concise, and thorough information.

## II. CONCLUSIONS

From this study, it is concluded that for the purposes of the Woman's College projected program the longitudinal method is one of the best means of studying individual growth. It provides thorough information concerning each aspect of development. Other conclusions based on the pre-test and statements by authorities including a panel of specialists are:

1. In order to conduct a valid longitudinal study, it is necessary to use a standard set of records to assure the uniformity of research conditions and methods.
2. The parent interview record seems to provide the needed information concerning home environment. It is important that facts concerning home environment be part of the information obtained about the child in the longitudinal study. This information is essential since knowledge of the environment in which a child lives is vital for understanding how he develops and reacts in specific situations.
3. From the results of the eight cases studied in the pretest, it is evident that the desired information, indicating the parent's attitudes concerning child rearing, is obtainable through the use of the parent interview record. It is essential that information showing attitudes be obtained, since they affect the personality development of the child.
4. The family information record gives material concerning the education, occupation, and social activities of the parents. In order to understand the potential position of the child in society, this information is necessary.

5. It appears that the family interview guide provides considerable information regarding infant development. Since the early years are considered the most impressionable, it is necessary to have some understanding of events which occurred during infancy.
6. The behavior profile provides a reasonably accurate picture of the child's total personality. Such a summary of the child's behavior pattern becomes useful in reviewing his over-all personality development.
7. The height-weight record and the physical appearance record seem to give a clear description of the child's appearance, and when repeated, show changes in these aspects over the years. The physical characteristics of the child are of primary importance since they affect, to some extent, acceptance or rejection by his peers. If the child is unusually obese, or in some way different from other children, he may be shunned or ridiculed by his playmates.
8. The mental test seems to be effective in indicating the child's mental growth. It is important that the mental development of the child be traced since all four aspects of development--physical, mental, social, and emotional--are so closely interwoven in forming his personality.
9. Diary records were used to collect narrative descriptions of the child's activities. Information collected in these forms provide the desired facts. Such details concerning

the child's reactions in specific situations are useful in tracing his development.

10. The sociability development records give a useful account of the development of the child's social interaction and relations with adults and his peers. This information is important in understanding how he will fit into society. These factors may also indicate to some extent the type of citizen the child may become.
11. The three forms indicating the child's development concerning food intake, attitudes toward food, and sleeping habits, appear to provide the necessary and desired information. It is essential that development in these areas be traced, since they affect his growth and indicate to some extent his willingness to accept and cooperate with his environment.
12. The emotional development record seems to supply the needed data concerning development of the child's emotions. The emotional development of the child influences his reactions to certain situations. It is important that emotional growth be traced since changes in this area affect his total personality development.
13. Another aspect of the child's development is provided by the nursery school teacher's report. This analysis of the child's behavior in the group supplies information concerning his reaction and relations with other children, and also summarizes his progress during the year.

14. The speech development record seems to be applicable only to toddler age children, since older children have already passed the stages mentioned on the record. A knowledge of speech development is vital, because talking is an important factor in the social development of the child. Therefore, it seems that other speech forms are necessary to trace later development.

### III. RECOMMENDATIONS

On the basis of this study, the following recommendations have been made for the use of the records in the program of longitudinal studies planned by the Woman's College of the University of North Carolina.

1. In beginning the longitudinal study of individual growth, contact should be made with parents who have filed applications for their children to enter the nursery school, as they are most likely to be interested in cooperating with the purposes of the study.
2. In order to follow the child for as long as possible, it is suggested that the youngest children in the toddler groups be selected as cases for study.
3. To extend the scope of the study, mothers should be contacted during pregnancy. With their cooperation, the child can be traced from his prenatal growth through adolescence. By conducting the study in this way, even the earliest factors influencing growth can be considered.
4. It is suggested that the study of four children used as cases in the pretest and who will return to the nursery

school in the fall be continued. New cases should be added replacing those discontinued. If possible, considering the present staff, there should at least be eight case studies under way at all times. To insure this number of cases in the final analysis, more children may have to be selected to allow for the anticipated drop-outs.

5. The research staff should be enlarged to provide at least a part time staff member whose primary duty would be keeping the records. With the enlargement of the staff, the number of cases in the project can also be increased.
6. If a relatively complete picture of mental development is to be obtained, it will be necessary to administer mental tests periodically during the full extent of the study, for the results of only a single test give little indication of the child's mental development.
7. The speech record suggested for this study traces mental development only through the toddler age child. It is suggested that another record be formulated which can be used to indicate speech development in older children.
8. It is suggested that several staff members who have observed closely the children in the study complete behavior profiles. This will assure an objective view of the child's behavior.
9. On the basis of the information obtained in this project, a study may be conducted comparing the child's personality



and responses at home with those in the nursery school. Records made in one of the cases in the pretest showed that there was a considerable difference in the attitude of the child at home and at school.

10. A study tracing emotional development and stability may be conducted using information collected in the longitudinal project.
11. A study of the social development of an individual child can be made on the basis of information obtained in the longitudinal study.

The last two recommendations for further study have been made because there seems to be a need for more information in these areas of development. Many studies have already been conducted tracing mental and physical development, and information concerning the social and emotional growth of individuals is needed to complement the more inclusive data available concerning physical and mental growth.

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APPENDIX

- A. List of Schools and Other Agencies  
from Which Information Was Requested
- B. List of Evaluating Specialists
- C. Revised Record Forms

## APPENDIX A

## SCHOOLS AND OTHER AGENCIES FROM WHICH INFORMATION WAS REQUESTED

1. Association of Childhood Education International
2. Association for Family Living
3. Child Development Institution, Teachers College, Columbia University
4. Child Study Center, Yale University
5. Child Study Association of America
6. Fels Research Institute for Study of Human Development, Antioch College
7. Iowa Child Welfare Research Center
8. Institute of Child Welfare, University of California
9. The Merrill-Palmer School
10. National Association for Mental Health
11. National Association for Nursery Education
12. Science Research Association

November 8, 1957

Dr. Boyd McCandless  
Iowa Child Welfare  
Iowa City, Iowa

Dear Dr. McCandless:

We are interested in developing some longitudinal records for use in our nursery school and department of child development and family relations.

We know that you have done research along this line. Would you be able to send us the following:

1. Material showing how your records were developed and just what records you used or are now using.
2. A list of articles or books that you or the members of your department have written on the subject of longitudinal records, and your evaluation of them.

With thanks, I am

Sincerely yours,

(Mrs.) Rose M. Freedman  
Director, Toddler Group

## APPENDIX B

Record forms were sent for evaluation to child development specialists in the following schools:

University of Florida

University of Georgia

University of Kentucky

Louisiana State University

University of Mississippi

University of South Carolina

University of Tennessee

Virginia Polytechnical University



School of Home Economics  
The Woman's College of the University of North Carolina

March 18, 1958

Dear

We are trying to develop a program of longitudinal studies to be used in our department of child development and family relations. We hope eventually to have an infant center and thus be able to follow children from birth through childhood. We plan to use the information in teaching our students who will have first hand records to use. We will also have a collection of data which may be used by graduate students.

We have worked out the enclosed series of records. We hope they are of a type which can be kept by students and nursery school teachers in any university nursery school, and will give a fairly complete picture of the way a child develops. We would appreciate it if you would examine these records and let us know:

1. Would you and your staff be able to keep these records without an undue amount of effort?
2. Do you believe this series of records would give a relatively complete picture of the child?
3. Are there any items of information which you think might be superfluous?
4. Are there any types of information that should be added?

We would appreciate it if you could return these forms with your suggestions by April 1, 1958.

Sincerely,

(Miss) Joyce W. Herndon  
Graduate Assistant

JWH/acm

Enclosures

## APPENDIX C

## FAMILY INFORMATION

CHILD'S NAME \_\_\_\_\_ SEX \_\_\_\_\_

BIRTH DATE \_\_\_\_\_ DATE \_\_\_\_\_

## PARENTS:

FATHER'S NAME \_\_\_\_\_ MOTHER'S MAIDEN NAME \_\_\_\_\_

PRESENT ADDRESS \_\_\_\_\_ PHONE \_\_\_\_\_

LENGTH OF RESIDENCE AT PRESENT ADDRESS \_\_\_\_\_

FATHERMOTHER

DATE OF BIRTH \_\_\_\_\_

PLACE OF BIRTH \_\_\_\_\_

HEIGHT \_\_\_\_\_

WEIGHT \_\_\_\_\_

HEALTH \_\_\_\_\_

NO. BROTHERS \_\_\_\_\_ SISTERS \_\_\_\_\_ NO. BROTHERS \_\_\_\_\_ SISTERS \_\_\_\_\_

FATHER

EDUCATION: HIGH SCHOOL AND COLLEGES ATTENDED: (Indicate Below)

NAMEDEGREEMAJOR FIELD

1.

2.

3.

OCCUPATION: (Indicate Below)

Position held in present organization: \_\_\_\_\_

CIVIC ACTIVITY: Organization and church interests

NAME OF ORGANIZATIONCOMMITTEEOFFICE

1.

2.

3.

4.

5.

6.

## FAMILY INFORMATION (Cont'd.)

MOTHER

EDUCATION: HIGH SCHOOL AND COLLEGES ATTENDED: (Indicate Below)

<u>NAME</u>	<u>DEGREE</u>	<u>MAJOR FIELD</u>
1.		
2.		
3.		

OCCUPATION: Present or previous occupations other than housewife (Indicate part or full-time)

CIVIC ACTIVITY: Organization and church interests

<u>NAME OF ORGANIZATION</u>	<u>COMMITTEE</u>	<u>OFFICE</u>
1.		
2.		
3.		
4.		

OTHER ADULTS LIVING IN THE HOME

<u>NAME</u>	<u>AGE</u>	<u>RELATIONSHIP TO FAMILY</u>
1.		
2.		

OTHER ADULTS HANDLING CHILDREN SUCH AS MAID, BABY SITTER, ETC.

CHILDREN

<u>NAME</u>	<u>AGE</u>	<u>SEX</u>
1.		
2.		
3.		
4.		
5.		

## INITIAL PARENT INTERVIEW

Child's Name \_\_\_\_\_ Sex \_\_\_\_\_ Birthdate \_\_\_\_\_

## I. Developmental History

A. What kind of a baby was he? (Characterization) Lively, Quiet, Calm,  
Alert, Over-Active, Irritable, Tense, Happy

B. Age when able to:

1. Sit alone \_\_\_\_\_
2. Creep \_\_\_\_\_
3. Walk alone \_\_\_\_\_
4. Speak first word \_\_\_\_\_
5. Feed self with spoon \_\_\_\_\_
6. Drink from cup alone \_\_\_\_\_

C. Degree of self-help and independence in routine activities.  
Attitude.

## II. Health - Comment on health of child during infancy

## III. Eating History

A. Breast fed?      Weaned to bottle or cup?      Any difficulties?

B. Any trouble adjusting to solid foods?

C. Usual meal set-up - with family?      Child's chair or equipment?  
Table behavior?

D. Any special eating difficulties - special diet?      Allergies?  
Special dislikes?

E. Disciplinary techniques liked?

## IV. Toileting History

## A. Age when training was begun

1. Bladder \_\_\_\_\_
2. Bowel \_\_\_\_\_

## B. Age when training complete

1. Bladder \_\_\_\_\_
2. Bowel \_\_\_\_\_

C. How was training handled?                      Any difficulties?

D. Any special problems concerning toilet training?

## V. Sleep History

A. Usual nap procedure?

B. Attitude toward nap?

C. Sleeping conditions: Room alone?              Quiet?

D. Usual bedtime routine?

E. Attitude toward "bedtime"?

F. Go to sleep quickly?    Lie awake?              Demand attention?

G. Sleep pattern - restless or sound?

H. Disciplinary techniques used?

I. Do you feel he gets enough sleep?

## FOLLOW-UP INTERVIEW

## VI. ACTIVITY

- A. Brief outline of typical day's schedule for child?
  
  
  
  
  
  
  
  
  
  
- B. Is child's play at home usually active, sedentary, boisterous, quiet, energetic, self-initiated, dependent on adult direction?
  
  
  
  
  
  
  
  
  
  
- C. Playmates - age? Predominant relationship with this child?
  
  
  
  
  
  
  
  
  
  
- D. Space for play
  - 1. Indoors
  
  
  
  
  
  
  
  - 2. Outdoors
  
  
  
  
  
  
  
  
  
  
- E. Favorite activities
  - 1. Indoors
  
  
  
  
  
  
  
  - 2. Outdoors
  
  
  
  
  
  
  
  
  
  
- F. Main restrictions on play?
  - 1. Indoors
  
  
  
  
  
  
  
  - 2. Outdoors
  
  
  
  
  
  
  
  
  
  
- G. Play opportunities and arrangements satisfactory to parents?
  
  
  
  
  
  
  
  
  
  
- H. Many play materials? What kind?
  
  
  
  
  
  
  
  
  
  
- I. Regular time for reading? How much reading do you do? Does father read? Favorite stories?

J. Contact with music? In what ways? A family interest? Special attitude or interest?

K. Time spent with television?

L. Does family take "excursions" together?

M. Does child have home responsibilities? Of what nature?

#### VII. Emotional

A. What behavior has been of special concern? What have you attempted to do about it?

1. What situations most often lead to difficulties with the child?

2. For what is he most often punished?

B. What about child has pleased you most? What has been most satisfactory to father?

C. Any nervous habits? Parents' attitude toward this? Handling of it?

D. Child easily upset or disturbed when things go wrong?

E. Child excitable?

F. Predominant "mood" - happy and content, frustrated and cross?

#### VIII. Family Relationships

A. What is child's place in the family?

B. How does he get along with siblings?

C. Does he have responsibility for siblings in any way?

D. What is siblings' attitude toward child?

E. Amount of time spent with siblings?

F. Any behavior indicating rivalry or jealousy?

G. Any particular attachment to one member of family?

H. Check methods most often used with child:

Assistance	Demonstrating	Threatening
Praising	Reasoning	Scolding
Rewarding	Preparing child in advance	Spanking
Bribing	Diverting	Isolating
Offering choices	Cajoling	Putting to bed
Suggesting	Depriving of pleasure	Other
	Ignoring	

I. Reaction to Discipline:

1. Do parents agree on ideas of discipline and punishment?

J. Living arrangements adequate and satisfactory for all members of family?



- 6 -

K. Comment on activities jointly engaged in by members of the family and the child (routines, reading, hobbies, excursions to zoo, museums, railroad station, airport, marketing, nature walks, etc.)

1. Father and child

2. Mother and child

L. Do one or both parents have special interests outside the home?

1. Sibling and child

2. Family all together

IX. Child's group activities outside home

1. Sunday school

2. Bible school

3. Play group

4. Child's reaction to above group experiences



## PHYSICAL APPEARANCE

NAME \_\_\_\_\_ BIRTH DATE \_\_\_\_\_ DATE \_\_\_\_\_

HAIR \_\_\_\_\_

SKIN \_\_\_\_\_

EYES \_\_\_\_\_

HEAD (Shape and Size - Description with Unusual Characteristics Noted) \_\_\_\_\_

BUILD \_\_\_\_\_

POSTURE \_\_\_\_\_

GENERAL MOTOR COORDINATION: SMALL  
(Skillful, awkward)

LARGE

ENERGY (Over, Average, Lethargic) \_\_\_\_\_

OTHER DISTINGUISHING CHARACTERISTICS \_\_\_\_\_

\_\_\_\_\_

## PHOTOGRAPHS

FRONT

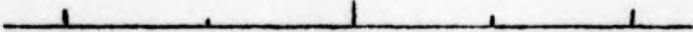
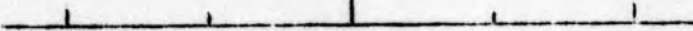
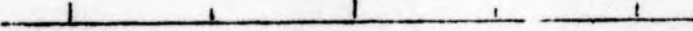
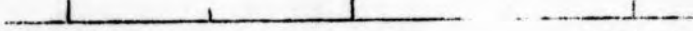
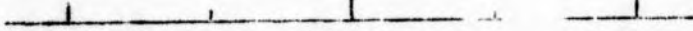




PROFILE

## BEHAVIOR PROFILE

Name of Child \_\_\_\_\_ Date of Birth \_\_\_\_\_ Date \_\_\_\_\_

Let each horizontal line below represent the various degrees or strengths of the particular behavior tendency indicated at the left of the line. In each instance the optimal or most desirable position on the rating continuum would be somewhere near the middle, the two ends of the line representing the less favorable extremes.

Place a dot on each line at a point which, in your judgment, indicates the child's position on that particular scale. Make a "profile" by drawing lines connecting the dots.

Activity (Amount)		Hypoactive	Active	Hyperactive
Vigor of Activity		Lethargic	Moderate	Impetuous
Sensitivity to Stimulation		Impervious	Moderately Sensitive	Hair Trigger
Reactivity		Sluggish in Reaction	Responsive	Violent
Alertness		Sleepy as if Preoccupied	Attentive Outwardly Oriented	Tensely Alert
Characteristic Mien		Serious Grave	Pleasant	Impish
Characteristic Mood or Reaction Toward World		Indifferent	Comfortable, Contented	Angry Hostile
Stability of Mood		Invariable	Moderately Stable	Extremely Cycloid
Frustration Tolerance		Imperturbable	Moderately Disturbed	Frustration extremely disrupting

NAME OF CHILDRECORDERBIRTH DATEDATESETTINGTIMECHILD'S BEHAVIOROBSERVER'S INTERPRETATIONS

<u>TIME</u>	<u>CHILD'S BEHAVIOR</u>	<u>OBSERVER'S INTERPRETATIONS</u>

Name \_\_\_\_\_ Date \_\_\_\_\_ Recorder \_\_\_\_\_

## Directions for Rating:

Check only those statements which you feel are really true of the child. Do not guess if you are not reasonably sure. A few true statements are better than many half-true ones.

- ( )-----Attempts to change conversation from suggested activity to other channels.
- ( )-----Adds cooperative additions to the suggestion.
- ( )-----Resists suggestion.
- ( )-----Plans evasion.
- ( )-----Proud of his cooperation.
- ( )-----Lags in following suggestion.
- ( )-----Responds without undue delay to authority.
- ( )-----Cries if has to submit to authority.
- ( )-----Runs away if called.
- ( )-----Comes quickly if called.
- ( )-----Thinks immediately of arguments against doing suggested activity.
- ( )-----Contemplates suggestion a long time before acting upon it.
- ( )-----Resists when required to do something new.
- ( )-----Says "No" but does suggested activity.
- ( )-----Says "Yes" but does not do suggested activity.
- ( )-----Frowns, shrugs shoulders, pouts, or stamps foot when suggestion is made.
- ( )-----Resists only when in a particular mood.
- ( )-----Pretends not to hear.
- ( )-----So absorbed in his own thoughts that does not comprehend.
- ( )-----Defies authority.
- ( )-----Accepts any command without question.
- ( )-----Experiments with new authority to see how far he can go.
- ( )-----Rebels physically: temper-tantrum, hitting, kicking, etc.
- ( )-----Pretends absorption to evade suggestion.
- ( )-----Cooperative and responsible.
- ( )-----Tries to get task done by the person who suggests it.
- ( )-----Follows suggestion only while teacher is in sight.
- ( )-----Resists if suggestion is not about the things he himself has planned.

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Name \_\_\_\_\_ Date \_\_\_\_\_ Recorder \_\_\_\_\_

## Directions for Rating:

Check only those statements which you feel are really true of the child. Do not guess if you are not reasonably sure. A few true statements are better than many half-true ones.

- ( ) -----Submits to any child who takes the initiative.
- ( ) -----Even submits to younger children.
- ( ) -----Submits to children of his own age (either sex).
- ( ) -----Dominates children less mature than himself.
- ( ) -----Dominates children of his own age (either sex).
- ( ) -----Dominates children more mature than himself.
- ( ) -----Will submit to a specific child only.
- ( ) -----Submits occasionally to some other child.
- ( ) -----Dominates a specific child only.
- ( ) -----Submits to a leader only after a struggle to dominate.
- ( ) -----Is a follower in one specific group only.
- ( ) -----Occasionally dominates a group.
- ( ) -----Dominates a specific group only.
- ( ) -----Usually leads a small group.
- ( ) -----Usually dominates a large group.
- ( ) -----Decides who shall participate in the group activities.
- ( ) -----Can organize the activities of a group to carry out a definite purpose.
- ( ) -----Is a leader in any group.
- ( ) -----Directs all activity about him.
- ( ) -----Leads or follows as the occasion demands.
- ( ) -----Neither leads nor follows; plays alone.
- ( ) -----Dominates other children by having greater material possessions which they covet.
- ( ) -----Other children make many appeals to him for information.
- ( ) -----Dominates other children through his ability to talk effectively.
- ( ) -----Other children appeal to him to make decisions for the group.
- ( ) -----Dominates other children through their love or admiration for him.
- ( ) -----Dominates other children through his wealth of ideas.
- ( ) -----Definitely schemes to get others to carry out his plans.
- ( ) -----Gives commands with an air of finality.
- ( ) -----Helpless unless someone organizes activity for him.
- ( ) -----Hesitates to initiate activity.
- ( ) -----Hesitates to make suggestions to other children.
- ( ) -----Usually follows the ideas of others for activity.
- ( ) -----Usually has his own ideas for activity.
- ( ) -----Can take the initiative if it is absolutely necessary.
- ( ) -----Usually takes the initiative.
- ( ) -----Seeks the approval of the leader before he acts.
- ( ) -----Does not push the issue in case of opposition.
- ( ) -----Stands aside to let others participate.
- ( ) -----Fights for his place as leader.
- ( ) -----Opposition spurs him on to greater activity.
- ( ) -----Refuses to cooperate unless he is the leader.
- ( ) -----Insists that other children do as he wishes.
- ( ) -----Does not defend his own rights with other children.
- ( ) -----Easily led into mischief by others.
- ( ) -----Much rivalry with other children.
- ( ) -----Fails to secure cooperation when he tries to direct activities.
- ( ) -----Gets willing cooperation easily.

SOCIABILITY WITH OTHER CHILDREN

Name \_\_\_\_\_ Date \_\_\_\_\_ Recorder \_\_\_\_\_

## Directions for Rating:

Check only those statements which you feel are really true of the child. Do not guess if you are not reasonably sure. A few true statements are better than many half-true ones.

- ( )-----Makes friends easily with other children.
- ( )-----Finds it difficult to approach other children and make friends.
- ( )-----Makes friends with any child who happens to be around him.
- ( )-----Resents interest shown by other children; wants to be left alone.
- ( )-----Does not respond to friendly advances.
- ( )-----Has a particular friend (Underline: own sex, opposite sex) whom he admires very much (hero worship or crush).
- ( )-----Tries to make entry into group of children but fails.
- ( )-----Other children refuse to play with him.
- ( )-----Is ridiculed or "picked on" by other children.
- ( )-----Unhappy if he is not playing with other children.
- ( )-----So absorbed in his own ideas that he pays no attention to other children.
- ( )-----Plays only with a gang or group of specific children, refusing to play with others.
- ( )-----Contributes to the ideas of the group though not a leader (cooperative companion).
- ( )-----Refuses to cooperate with other children unless he is the leader.
- ( )-----Hesitant in making suggestions to other children.
- ( )-----Interest of other children spurs him on to activity.
- ( )-----Assumes a protective attitude toward other children (Underline: same sex, opposite sex).
- ( )-----Usually pleasant with other children.
- ( )-----Often abrupt and surly with other children.
- ( )-----Has a pleasant manner of securing cooperation from other children.
- ( )-----Has strong likes and dislikes for other children.
- ( )-----Has rather placid attitude toward other children; neither likes nor dislikes them to any degree.
- ( )-----Quarrels with other children only over serious matters.
- ( )-----Quarrels with other children often over trivial matters.
- ( )-----Seldom quarrels with other children over trivial matters.
- ( )-----Picks on one particular child.
- ( )-----Rough and mean with other children.
- ( )-----Teases or torments younger children.
- ( )-----Hurts other children often through carelessness.
- ( )-----Impatient with other children.
- ( )-----Enjoys seeing other children reprimanded.
- ( )-----Ridicules other children.
- ( )-----Very critical of other children.
- ( )-----Is a good sport when he loses to some other child.
- ( )-----Sympathetic toward other children.
- ( )-----Affectionate toward other children.
- ( )-----Very thoughtful of other children.
- ( )-----Tries to help the smaller children.
- ( )-----Resents aid from other children.
- ( )-----Forgiving of other children who have hurt him, taken his belongings, etc.



SOCIABILITY WITH OTHER CHILDREN  
Cont'd

- ( )-----Tries to get even with a child with whom he is angry.
- ( )-----Talks to other children a great deal.
- ( )-----Seldom talks to other children.
- ( )-----Cries easily when playing with other children.
- ( )-----Generous in letting other children share activities and possessions.
- ( )-----Selfish with other children; does not want to share possessions or let them enter into his activities.
- ( )-----Does not want other children to get attention from adults.
- ( )-----Attention from other children leads him to "show off" or act silly.
- ( )-----Jealous if other children play with a specific child whom he likes very much.
- ( )-----Not jealous if other children play with his particular friends.

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FOOD INTAKE FOR ONE WEEK

NAME	BIRTH DATE			DATE
DAY	BREAKFAST	LUNCH	SUPPER OR DINNER	BETWEEN MEAL SNACKS
MONDAY				
TUESDAY				
WEDNESDAY				
THURSDAY				
FRIDAY				
SATURDAY				
SUNDAY				

REMARKS

## FOOD ATTITUDES PATTERN\*

NAME \_\_\_\_\_ BIRTHDATE \_\_\_\_\_ DATE \_\_\_\_\_

FOOD GROUP	EATEN DAILY	EATEN 3 OR MORE TIMES WEEKLY	FOOD DISLIKES	FOOD SKILLS
Fruits, raw _____				
Fruits, cooked _____				
Fruit juices _____				
Vegetables, raw _____				
Vegetables, cooked _____				
Potatoes _____				
Meat _____				
Milk _____				
Fish _____				
Cheeses _____				
Eggs _____				
Cereals _____				
Breads, crackers _____				
Butter & substitutes _____				
Ice Cream _____				
Pastry and cake _____				
Cocoa, tea, coffee _____				
Candies, sweets _____				

Favorite foods in order of preference: milk ( ), meat ( ), potatoes ( ), bread ( ), crackers ( ), pastry ( ), leafy vegetables ( ), root vegetables ( ), fruits ( ), cakes ( ), candy ( ).

Items asked for when hungry: \_\_\_\_\_

Always omits from diet: \_\_\_\_\_

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Rater \_\_\_\_\_

## SLEEP PATTERN FOR ONE WEEK

NAME \_\_\_\_\_ BIRTH DATE \_\_\_\_\_ DATE \_\_\_\_\_

DAY	NAP	NIGHT	REMARKS
MONDAY			
TUESDAY			
WEDNESDAY			
THURSDAY			
FRIDAY			
SATURDAY			
SUNDAY			

REMARKS

Name of Child \_\_\_\_\_ Date of Birth \_\_\_\_\_

Please pay particular attention to the child's vocalizations, speech sounds, words and expressions as his ability to express himself in speech develops. Carefully note the date on which each of the "indicators of progress", as listed on the attached record form, is first heard. If you are not sure whether you have noted a particular stage, wait till you are sure, or leave a blank for it on the record if the child seems to have passed it up. The various "stages" may not appear in the exact order listed. Normal children vary widely as to the ages at which these indicators first appear. Be alert to hear them, be quite sure you do hear them, then carefully record the date.

PROGRESS INDICATORS IN SPEECH DEVELOPMENT

INDICATOR OR STAGE	Date when first noted
<u>Pre-speech vocalizations</u>	
Definite consonant sounds, like "g", "k", "h" . . . . .	_____
Random vocalization making <u>All</u> speech sounds . . . . .	_____
"Babbling stage", Child now limits himself to sound common to our own language. Repeats certain sounds over and over ("da da da", ga ga ga" etc.) Seems to enjoy the sound of his own vocalizations . . . . .	_____
<u>Speech</u>	
<u>Single word sentence stage</u> - "give" "wa" (want) pointing to object, "ball" da (dog) when he sees the animal etc. . . .	_____
Generalized meaning of nouns, for example, "dada" (daddy) refers to any man . . . . .	_____
<u>Understands</u> action words, such as "drink", "go", "bye-bye" . . . .	_____
<u>"Early sentence stage"</u> - two or three words with no prepositions or pronouns, such as "Dada bye-bye" . . . . .	_____
<u>Understands</u> simple sentences, such as, "Where is the ball?" "Give mother the spoon." etc. . . . .	_____
<u>"Short sentence stage"</u> - three or four word sentences with articles and prepositions usually left out . . . . .	_____
Comprehends simple requests and is able to carry them out- "Give me the ball.", "Put the spoon in the cup." etc. . . .	_____
<u>Question asking, or "why?" stage</u> - Apparently mainly for pleasure of asking . . . . .	_____
<u>Complete sentence stage</u> - six to eight words, most parts of speech present . . . . .	_____
Can count three objects . . . . .	_____
Knows the meaning of "three", "nine", "five", "ten", "seven" . .	_____
Uses virtually every form of sentence structure . . . . .	_____
Knows meaning of "morning", "afternoon", "night", "summer", "winter" . . . . .	_____

MOTHER'S RECORD OF CHILD'S EMOTIONAL BEHAVIOR

Name of Child \_\_\_\_\_ Date of Birth \_\_\_\_\_ Date of Record \_\_\_\_\_

Young children commonly experience many emotions during the course of a day. A mother, knowing the circumstances in most instances, can identify and name the particular emotion the child is displaying quite accurately. Among the emotions common to children of this age are general excitement, joy, mirth, affection, fear, anger and jealousy. Please note, perhaps more carefully than you ordinarily would, each instance of emotional outburst or expression of your child during a full 24 hour period. Record the data in each case on the attached sheets as indicated.

NAME \_\_\_\_\_

DATE \_\_\_\_\_

Emotion	Time of Day	Object or Cause	HOW EMOTION WAS EXPRESSED		How episode was dealt with, Outcome, etc.
			Describe briefly Child's Behavior	Intensity (strong medium mild)	

Was this a typical 24 hour period as far as Child's emotional behavior is concerned? Explain.



## DIRECTIONS

Records to Be Filled Out by Nursery School Staff

Record I. Initial Parent Interview. This form is to be completed by the nursery school teacher during an interview with the mother of the child observed.

Record II. Follow-Up Interview. Guide for parent interviews throughout child's school attendance.

Record III. The Physical Appearance of the child is to be completed by the nursery school teacher. It includes:

1. The full name of the child and nickname, if he has one.
2. The date of his birth (day, month, year), his age, and the date the record is filled out.
3. The child's hair--color, texture, and any distinguishing characteristics, such as style, that might set him apart.
4. Skin--color and texture.
5. Eyes--color, whether bright, or dull, clear or inflamed, and any eye condition he might have (crossed, glasses, etc.).
6. Head--size and shape--description with unusual characteristics noted.
7. Build--whether heavy or slight, muscular or linear, tall or short for his age.
8. Posture--how he holds body (slouchy, droopy, poised, or balanced), curvature of the spine, rounded shoulders, protruding abdomen, and whether his legs are straight or bowed.
9. General motor coordination: how he handles his body--poise and control of movement, awkward or skillful.
10. Energy--over-energetic, average or lethargic; and speed of movement.
11. Any other distinguishing characteristics that would set him apart from the other children.

This record should also include two photographs of the child--(1) a profile, (2) a front view. The picture should be made once a year, near the child's birthday.

Record IV. Height - Weight Chart of the child. It should be recorded at six-month intervals.

Records to Be Filled Out by Nursery School Staff (cont'd.)

Record V. Diary Record. At the top of the page indicate:

1. Name of the child
2. Recorder's name
3. Setting
4. Date

In the first column record the time of observation to the nearest minute. Each time the location or activity of the child changes, note the time again.

In the second column there should be an objective record of what the child is doing at the time indicated. It should be very descriptive. When possible, describe tone of his voice, facial expression, attitude of his body, and quality of movement. Also include (1) actual locomotion of the child, (2) where he is, (3) where he goes, (4) what he does, (5) what he says and to whom he says it. The more accurate these observations the more useful they will be.

The setting should include the situation in which the child is operating, his attitude toward materials, and the tempo of work.

The third column is space for the observer to interpret the action of the child.

Record VI. Sociability With Other Children. Check only those statements which you feel are really true of the child. If you are not reasonably sure, do not guess. A few true statements are better than many half-true ones.

Record VII. Relationship With Other Children. (Same instructions as for Record V.)

Record VIII. Relationship With Adults. (Same instructions as for Record V.)

Record IX. Behavior Profile. Let each horizontal line represent the various degrees or strengths of the particular behavior tendency indicated at the left of the line. In each instance, the most desirable position on the rating continuum would be somewhere near the middle. The two ends of the line represent the less favorable extremes.

Place a dot on each line at a point which, in your judgment, indicates the child's position on that particular scale. Make a "profile" by drawing lines to connect the dots.

Record X. Mental Test - to be given by expert.

Record XI. Progress report by the nursery school teacher at the end of the school year. (No form.)

## DIRECTIONS

Records To Be Filled Out by the Mother

Record I. The Family Information record is to be filled out by the mother when she first brings her child into the group.

The Parent Interview blank is to be recorded by a staff member at a conference with the parent.

Record II. Shows food intake for one week and is to be completed by the mother.

It is a record of the types and amount of food eaten by the child during one week. The week chosen should be a typical one--not during any illness or under any other conditions that would upset the normal intake. The kind of food and the amount eaten should be recorded daily in the blank provided for each meal. Any pertinent remarks as to how the child ate--whether he had to be urged to eat or whether he ate of his own accord, whether mealtime was pleasant or not, and how the food affected him, etc., should be mentioned under the chart.

Suggestions for Indicating Amounts of Food Eaten

		<u>Examples</u>
Actual numbers	Eggs, raw fruit	1 egg, $\frac{1}{2}$ banana
Cups (standard measuring cup)	Milk, cereal, cooked fruit, vegetables, soup	1 cup milk, $\frac{1}{3}$ cup oatmeal $\frac{1}{4}$ cup applesauce $\frac{1}{3}$ cup buttered carrots
Tablespoons (Tbsp.)	Meat, cottage cheese	2 Tbsp. ground beef
Teaspoons (Tsp.)	Butter	3 Tsp. butter
Slices	Bread or Toast	1 $\frac{1}{2}$ slices bread
Size	Cakes, cookies, etc.	3 in. cookie 2 in. x 2 in. x 1 in. sponge cake

Record III. Food Attitudes pattern, is also to be filled out by the mother.

In appropriate columns, check the food which is eaten daily, that eaten 3 or more times weekly, food dislikes (not what he is allergic to, but simply what he does not like to eat), and food skills. At the bottom of the chart, number the food listed in order of the child's preference. Also state here what should be omitted from his diet--allergies, etc.

Under food skills describe child's ability to handle eating utensils--spoon, fork, knife, and cup. This will require more description for toddler than for the nursery school child.

Record IV. The Sleep Pattern for one week should be recorded by the mother, a daily account of the amount of sleep the child has had at naptime and at night. There is a column at the right for remarks about how the child slept, including any difficulties in getting the child to bed, wakefulness during the night, bed-wetting, fretfulness, and any other information about the soundness of his sleep that would be meaningful. Space is indicated also for other general comments about his

## Records To Be Filled Out by the Mother (Cont'd.)

sleep that might help the teacher. Again a typical week should be chosen for collecting this data.

### Record V. Emotional Behavior.

Young children commonly experience many emotions during the course of a day. A mother, knowing the circumstances in most instances, can identify and name the particular emotion the child is displaying quite accurately. Among the emotions common to children of this age are general jealousy, joy, mirth, affection, fear, anger, and excitement. Please note, perhaps more carefully than you ordinarily would, each instance of emotional outburst of your child during a full 24 hour period. Record the data in each case on the sheets as indicated.

### Record VI. Speech Development.

Please pay particular attention to the child's vocalization, speech sounds, words, and expressions as his ability to express himself in speech develops. Carefully note the date on which each of the "indicators of progress" as listed on the record form, is first heard. If you are not sure whether you have noted a particular stage, wait till you are sure; or leave a blank for it on the record, if the child seems to have passed it up. The various "stages" may not appear in the exact order listed. Normal children vary widely as to the age at which these indications first appear. Be alert to hear them. Be quite sure you do hear them, then carefully record the date. This record is mostly applicable to toddlers who are learning to talk.

### Record VII. Behavior Profile.