SCHOOL READINESS: A STUDY COMPARING THE
ATTITUDES OF SCHOOL PSYCHOLOGISTS AND
KINDERGARTEN TEACHERS

Thesis for the Degree of Ed. D.
MICHIGAN STATE UNIVERSITY
Eugene Alvin Scholten
1965

THESIS

This is to certify that the

thesis entitled

SCHOOL READINESS: A STUDY COMPARING

THE ATTITUDES OF SCHOOL PSYCHOLOGISTS

AND KINDERGARTEN TEACHERS

presented by

Eugene Alvin Scholten

has been accepted towards fulfillment
of the requirements for

___Ed. D.___ degree in __Education__

Date___May___

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ABSTRACT

SCHOOL READINESS: A STUDY COMPARING THE ATTITUDES OF SCHOOL PSYCHOLOGISTS AND KINDERGARTEN TEACHERS

By Eugene A. Scholten

The Problem. The purpose of this study is to ex-
plore and describe differences between kindergarten teach-
ers and school psychologists in their attitudes and concepts
towards school readiness.

The Procedure. An attitude survey called the School
Readiness Survey was given to a national population of 100
kindergarten teachers and 100 school psychologists. Various
approaches (consisting of five sections) were used towards
several kindergarten entrance issues, towards the general
appraisal of the spending of time in kindergarten, and as to
the relative importance of kindergarten activities, atti-
tudes and experiences.

The Results. In Section I of the survey which probed
attitudes towards several entrance and readiness issues,
there is agreement on one issue; that chronological age is
not a satisfactory criterion for the admission of kinder-
garten pupils. School psychologists are agreed that re-
search favors the early admission of advanced pupils whereas
kindergarten teachers are undecided. Kindergarten teachers
favor an earlier admission of girls; school psychologists
are undecided. School psychologists feel that adequate

measures of school readiness are available; kindergarten teachers are undecided.

In Section II, kindergarten teachers and school psychologists agreed that the development of social skills takes the most time during the school day in kindergarten. Both groups agreed that relatively little time is spent on academic work.

In Section III, the respondents were asked to judge the qualifications of a "ready" child as to some factors necessary for school admission. In this frame of reference, the social factor is regarded as only moderately important by both groups. The kindergarten teachers ranked the mental factor as more important and the school psychologists ranked mental and emotional factors as more important.

Section IV probed the relative importance of attitudes and activities for kindergarten success and little agreement is seen between these groups. Kindergarten teachers regard listening to directions, the ability to work in a group or independently, and to care for his person as major activities contributing to success. School psychologists regard intellectual curiosity, tolerance of situations, ready verbalization, and general knowledge as important.

Section V asked for evaluations of kindergarten experiences. School psychologists regard verbal experiences as most important. Kindergarten teachers regard experience

with peers and teachers as most important and verbal experiences as least important.

Kindergarten teachers and school psychologists do not agree as to the meaning of the term "social". To the kindergarten teacher, it appears that the socialization process means conforming to behavior standards and directed activities which are determined by the teacher and incorporated into the child's behavior. This is in marked conflict to basic kindergarten theory of Froebel regarding the social function of play which kindergarten teachers explicitly accept in their literature. School psychologists are aware of this usage of the term as a socializing effort to control and have turned instead to emotional references in their discussions of developmental maturity.

The most marked differences between these groups in relation to the relative importance of attitudes, activities and experiences of the kindergarten child seem to be in relation to intellectual and verbal development. The kindergarten teacher prefers the child who listens to directions and who works well independently or with a group whereas the school psychologist rates highest such qualities as intellectual curiosity and ready verbalization. Regarding the relative importance of experiences, school psychologists rate verbal experiences highest and kindergarten teachers rate this kind of experience lowest.

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A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF EDUCATION

College of Education

1965

ACKNOWLEDGMENTS

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CHAPTER I

INTRODUCTION

The meaning of education is variously defined and the many points of view are often incompatible. Similarly, there seems to be a basic conflict of viewpoints as to when children are ready for kindergarten and what the school should expect of kindergarten pupils. Therefore, school readiness too, has come to mean different things. This apparent conflicting point of view is expressed by two groups, both in active contact with kindergarten pupils; namely the kindergarten teachers and the school psychologists and has long been the concern of the investigator and is the focus of the present study.

In other words, although there seems to be superficial agreement, an investigation of interpretations might readily reveal some differing points of view which result in kindergarten teachers and school psychologists often working at cross purposes rather than together. The question may be asked whether these differences are of such a serious and fundamental nature that they might cause poor communication and coordination of efforts between these two groups in the schools. This situation, resulting from these different views as to qualities needed to ensure the success of a child entering kindergarten needs to be studied with care. There also seems to be misunderstanding as to

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the task of kindergarten. The study was designed to clarify these issues.

Although the primary focus of this study will be school readiness, the broader issues regarding the task of kindergarten and the activities and program of kindergarten classrooms will necessarily be involved because it is important to know what preschoolers are getting ready _for_. Readiness cannot be determined nor can a criterion for school readiness be developed without the program for which one is to determine and develop readiness clearly in mind. For these reasons, the various facets of kindergarten situations will be studied.

As mentioned above, a basic concern of this study is to determine the extent to which there are important differences in viewpoint of kindergarten teachers and school psychologists on the matter of when children are ready for kindergarten and what the kindergarten teacher should expect of children when they arrive. The investigator, a school psychologist, has observed, in working with kindergarten teachers, that they typically used a frame of reference and a vocabulary which emphasizes doing things -- especially as this doing relates to kindergarten activities. When the term school readiness was used by kindergarten teachers, it had both general and specific meaning indicating developmental or maturational levels which children should reach as well as the expectancy that children should

perform specific tasks such as cutting, writing, or skip-
ping. As a result, it seemed to the investigator, that
the kindergarten had become a series of activities through
which children were guided and that the typical kinder-
garten teacher made the assumption that such guiding would
foster development and maturation.

In contrast to this viewpoint found among kindergarten
teachers, the investigator had observed that school psych-
ologists used a different frame of reference, one which
might be called a mental health approach.[1] Psychologists
in general and school psychologists in particular usually
have accepted the objectives and philosophy which underlies
this approach, i.e., they place the primary focus on the
child and not on the school program. The psychologists
have seen their main task as making psychological assess-
ments and conducting conferences with parents and school
personnel. They have not been primarily concerned with
activities or curriculum. However, school psychologists
have had to make recommendations for school admission and
it is here that a conflict in point of view with the kinder-
garten teachers may come about. For example, school psycho-
logists may believe that learning experiences should be
tailored to the child rather than consisting of a set of
activities that are imposed upon all children. Such child-

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[1] "Mental health approach" will be specifically
defined in Chapter II.

centered objectives are typically held by many mental health workers and for school psychologists these have become the desirable objectives of the school as well.[2]

As has been suggested, the primary concern of the kindergarten teachers appears to have been with the activities of the classroom; what is to be taught and how it is to be taught. The mental health approach has been represented mainly by school psychologists who were brought to the scene as specialists to help determine readiness of individual children for kindergarten. In many respects, these two ways of looking at school admission criteria result in misunderstanding or open differences between the members of these two groups who are most concerned with admission practices in the schools.

Personal Interest. As has already been indicated, the interest of the writer stemmed initially from his experiences as a school psychologist. As the research and literature were searched in an attempt to gain further understandings and insights, he became increasingly aware of the conflicts and discrepancies. In psychological literature, the differences between the "ideal" and the "actual" assessment procedures were most obvious. In educational literature and research, the differences between theory and

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[2] See Chapter III of Paul E. Eiserer, The School Psychologist, Washington D.C.: The Center for Applied Research in Education, Inc., 1963.

practice were impressive. The problem of terminology became serious since operational definitions of school readiness and descriptions of the "ready" child were lacking. All of this led the writer to look more carefully at the situation as it existed in the schools.

Conferences were held with kindergarten teachers with respect to their theories of education, the connotations they were giving to various words, and their actual school practices. Problems and issues pertaining to school readiness were discussed. The writer was seeking greater understandings so that school readiness could be assessed more adequately, i.e., with greater satisfaction for all involved -- teacher, parent and school psychologist.

In addition to these informal discussions with kindergarten teachers, the writer made an effort to find out what school psychologists had to say on the problem. He initiated correspondence with many specialists on subjects related to school readiness which, over the past five years, has become extensive and has contributed to his understandings. The fact that there were basic conflicts in viewpoint between school psychologists and kindergarten teachers became more and more apparent.

Each year, as the writer returned to the task of assessing the readiness of preschoolers and became more sensitized to the differences between school psychologists and kindergarten teachers interpretations of the matter,

he became more determined to investigate and try to clarify some of the issues involved. The efforts of this concern have culminated in the study which is the basis of this dissertation. In order to carry out this study, the writer developed a survey instrument called the School Readiness Survey which was completed by groups of kinder-garten teachers and school psychologists. The results of this survey comprise the major portion of this study.

Initial Statement of Purpose. The purpose of this study is to explore and describe the observed differences by means of a survey of kindergarten teachers and school psychologists in their attitudes and concepts towards school readiness.

Plan of Study. In Chapter II, the basic positions of kindergarten teachers and school psychologists will be further stated and defined. Influences pertaining to kindergarten teacher attitudes and concepts will be examined. A brief history of the kindergarten movement will trace developments from Froebel to the present day and a survey of the current kindergarten scene will reveal some of the complexities of the problem. In addition, the typical kindergarten will be discussed in terms of present practices. Influences pertaining to the attitudes and concepts of school psychologists also will be examined from several vantage points. The mental health criterion for psychological

maturity as well as viewpoints on education will be examined in some detail. Much of the research pertaining to school readiness has come from early school admission studies which frequently have been conducted by psychologists. This literature will be summarized briefly. Preschool testing, in which school psychologists have focused directly on school readiness, will be discussed as it pertains to their position. From these examples of the literature, the two differing positions will be specified and comparisons will be made relating to the problem under examination.

Chapter III will be concerned with specific efforts of the writer to understand the problem more thoroughly by making a direct study of the situation. His decision was to develop and use a survey instrument for this purpose. The development of this instrument, the <u>School Readiness Survey</u>, will be reviewed. The questions which the survey was designed to explore will be set forth. The selection of the two population samples (100 kindergarten teachers and 100 school psychologists) used in the study will be described. Finally, the statistical procedures will be discussed.

In Chapter IV, the hypotheses which the survey was designed to test are stated. In the remainder of the chapter, the results of the <u>School Readiness Survey</u>, Sections I through V will be presented and discussed. In

Section I, opinions are sought on four major school readiness issues. The respondents were asked to express themselves on these issues so that comparisons with other problems which were to be probed by the survey could be made. These issues included:

1. Chronological age as a sole admission criterion.

2. The evaluation of early admissions research.

3. A differential admission to kindergarten based on sex (the earlier admission of girls).

4. The adequacy of school readiness measures.

Section II of the survey asked that kindergarten teachers and school psychologists indicate, by rating a series of items in order of importance, how children typically spend their time in kindergarten. Following this, Section III asked for judgments of the relative importance of a series of indicators of school readiness. In the next section, Section IV, it was requested that the respondents rate a series of ten activities and attitudes of the kindergarten classroom in order of importance. Section V completed the survey with the request that the usefulness of a series of kindergarten experiences be evaluated. In summary, images of the "ready" child as viewed by kindergarten teachers and school psychologists will be presented as derived from results and comments made on the School Readiness Survey.

In the final chpater, general conclusions regarding differences of opinion will be drawn. The implications of

these results in terms of the questions and issues raised about school readiness in Chapter III will be discussed. Finally, implications for further research will be suggested.

CHAPTER II

REVIEW OF LITERATURE AND STATEMENTS OF POSITIONS

In the preceding chapter, it has been noted that the investigator had become aware of two conflicting positions relative to attitudes towards school readiness. In this chapter, these positions will be stated more explicitly, and historical origins and philosophies which seem to underlie these positions will be examined. First, the position of the kindergarten teacher and its apparent origins will be examined. Following this, the position of the school psychologist and the mental health and the psychological literature out of which it apparently came will be delineated.

Development of the Kindergarten Teacher Position. American kindergartens have a unique development which started in Europe with the ideas of Friedrich Froebel. The modern kindergarten still claims to embrace these ideas, thus Froebel's theories will be reviewed and the "new" interpretations placed on them by American practitioners -- the kindergarten teachers -- will be examined. Other aspects of the American kindergarten scene will be studied, particularly with respect to the variety of influences and forces which effect it. The typical kindergarten will be described so that when school readiness is discussed, the reader will have in mind a meaningful criterion for the activities and expectancies.

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The Kindergarten Movement. Froebel initiated the kindergarten movement in Europe in 1837.[1] His concepts of the kindergarten and early learning experiences, although widely known, warrant restating;

> Kindergarten is to make use of play for meaningful experiences .2. . kindergarten is the free republic of childhood.[2]

> Play is the first creative utterance of man . . . the playing of children is an expression of serious activity. Play is the highest phase of human development at this period. Play is the only true bridge of control and spontaneity.[3]

> The inner symbolism of the child's play should not be brought into the child's consciousness by any formal explanations or moralizing by the teacher. Self discovery is the only true learning.[4]

> There should be free obedience in the place of blind obedience and children need to develop this freedom within through experiences. This is not lawlessness.[5]

In Froebel's kindergarten, these theories were translated into teaching practices and procedures. Suggested materials (Froebel called them gifts) were presented to children to explore and discover with little comment or supervision from the teacher. The gifts themselves had little objective significance; the purpose of the presentation of these tasks was to permit children to gain social experiences and to give them opportunities to make independent discoveries. There is no question but that Froebel's approach and emphasis

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[1] N. C. Vandewalter, The Kindergarten in American Education, New York: The Macmillan Co., 1908, gives a comprehensive history of early kindergartens.

[2] Friedrich Froebel, Education of Man, New York: Appleton and Co., 1887, p. 26.

[3] Ibid., p. 28.

[4] Ibid., p. 68.

[5] Ibid., p. 83.

involved considerable freedom and self direction for the child.

When kindergartens were introduced into American schools just over one hundred years ago, the basic public educational structure of grades and curriculum was already firmly entrenched. Exponents of the kindergarten indicated that this new educational venture would help counteract the rigidity of the grades. However, it would appear that Froebel's kindergarten theories were changed rather quickly when they reached America. Both Blow and Hill,[5] who were trained by Froebel and were America's foremost proponents of kindergartens in the late nineteenth century, became more concerned with the tasks and activities which were presented to the children than they were with the social and free play experiences which allowed the child to choose. By the turn of the century, kindergartens were preoccupied with activities which were prescribed for all children and the principle of free choice seemed to have been forgotten. Out of the original kindergarten movement and philosophy, it appears that only the activities were extracted and remained. However, general statements about the aims of kindergarten, i.e., the social intent, still continued to reflect Froebel's philosophy and sometimes to borrow his words.

In a National Education Association report in 1925,

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[5] See Isle Forest, _Early Years at School_, New York: Mc-Graw Hill, 1949, Chapter II.

Davis reports that "social experiences accomplished by
play activities" are the "actual objectives of kindergart-
en".[6] However, listening to stories, coloring and skipping
were listed as typical play activities. The amount of
self-directed social experience connected with most of
these activities is seriously open to question; certainly,
there seems to be little provision for what Froebel said
was the only true learning -- self discovery. Teacher-
directed activities appear to have been accepted, almost
without question, as meeting the "social" objectives of
kindergarten. There was little effort made to show how
these activities would meet the intellectual or the socio-
emotional needs of children as suggested by Froebel's
theories. Instead, their value in these terms seemed to be
accepted without critical examination. Yet the discerning
reader may ask how such activities can promote "self dis-
covery through free play" or develop independent control or
allow for free obedience.

The emphasis of the American Association for Childhood
Education's Centennial Report - 1937[7] is similar to the
earlier Davis report. Again, Froebel is quoted as to the
importance of play as it relates to social learnings and
the development of the child. These references are followed

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[6] Mary Dabney Davis, General Practice in Kindergarten,
Washington D.C.: National Education Association, 1925, p.
155.

[7] American Association for Curriculum Development,
Centennial Report - 1937, New York: American Association for
Childhood Education, 1937.

by a lengthy listing of typical kindergarten activities with no mention as to what such activities are intended to accomplish in terms of the stated aims which clearly had been adopted from Froebel.

The contribution of Gertrude Hildreth is a more insightful one although she does not, if she is aware of the conflict between theory and practice, bring this to the reader's attention. In Readiness for School Beginners,[8] she states the philosophical intent of kindergartens and attempts to reassess kindergarten objectives in terms of what she refers to as "new goals". In essence, her "new goals" are quite similar to Froebel's theories as well as sounding quite like the mental health theorists. On philosophical grounds, she defends play as legitimate education in a framework reminiscent of Froebel. She alludes to the repressive atmosphere in the elementary school. However, the kindergarten practices which Hildreth accepts rather uncritically and holds to be superior to education in general are generally restrictive and controlling activities and it is her contention that kindergartens should primarily prepare children for first grade (the doorway to the repressive school).

Hildreth does not seem to recognize the disparity between her theories and the practices she is suggesting. The exploratory experiences, the freedom of choice and the

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[8] Gertrude Hildreth, Readiness for School Beginners, New York: World Book Co., 1950.

social interaction stated in Froebel's theories, reiterated by Hildreth's new goals and implied by the term play seem to be generally ignored in the discussion of kindergarten activities. However, it is to these activities that the major portion of her books are devoted.

Activities assume such importance in kindergarten practices and procedures that Hildreth suggests that adjustment be defined as "conforming to activities".[9] She further suggests that pupil evaluation should be based on an activity oriented criterion. It is the child's ability to perform the activities which is assessed with little or no effort to assess the psychological growth of the child. In a literal application of Hildreth's suggested practices (as distinct from the aims), one might anticipate that in kindergarten a child is already expected to stand and sit straight, stay in line, keep quiet and keep his discoveries to himself. And, of course, it must be granted that it is not known how numbers of children can be managed without repressive socialization.

The fact that Hildreth limited the term school readiness to the kinds of specific activities which were already common practices with the teachers of school beginners might explain the universal acceptance by kindergarten teachers of this narrow frame of reference or it could simply indicate that Hildreth was a knowledgeable reporter.

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[9] Hildreth, op. cit., p. 38.

In any event, there is no doubt that Hildreth has contributed importantly to the present kindergarten orientation in which activities are the objective, the program and the method as well as the end result of kindergartens. This is underscored by both Forest[10] and Kellogg[11] who refer to Hildreth's books on kindergarten as classics.

Even a newer and supposedly research-centered approach of Fuller[12] appears to be activity-oriented. The research portion of this report consists of descriptive evidence pertaining to the teaching of kindergarten activities. There is no reference to experimental studies. Further, the learning and social aspects of kindergarten aims or objectives as well as any attempted translation into self-directed learning experiences, are conspicuously absent.

It is the impression and conclusion of the writer that the kindergarten theories of Froebel, despite almost universal acceptance at a verbal level, have been largely ignored in terms of kindergarten practices. Instead of a translation of Froebel's aims into practices of the nature which had been suggested, there has been a pre-occupation with practices of a very different nature, i.e., teacher-directed and teacher-centered activities.

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[10] Forest, op. cit., p. 32.

[11] Rhoda Kellogg, Nursery School Guide, Boston: Houghton Mifflin Co., 1949, p. vi.

[12] C.D. Fuller, What Research Says to the Teacher (No. 22), Washington D.C.: National Education Association, 1961.

The Typical American Kindergarten. (The second part
of the development of the kindergarten position.) School
readiness is obviously influenced by the educational
structure of which the kindergarten program is a part.
The school readiness problem is very much involved, as was
previously noted, by the compromising of social experience
and self discovery goals. In their place, the omnipresence
of activity programs is seen. (In the subsequent examina-
tion of the comments of the mental health theorists, their
concern with conforming to activities is not limited to
kindergarten, but is regarded as a characteristic of most
school classrooms.)

By social experience goals, a first year school exper-
ience can mean a direct application of Froebel's principles
only with appropriate school practices. However, it has
been noted that his ideas have been difficult to put into
effect, perhaps because the effort has been limited. The
American school situation undoubtedly effected the inter-
pretation of Froebel. Operating a kindergarten in a one-
room school, or with several grades in one room is difficult,
if not impossible. In many instances, a "beginners" class
prior to the first grade took the place of kindergarten and
often became a watered-down first grade experience. This
has added to the misinterpretation and confusion between
present day "beginners" and kindergarten classrooms.

A twentieth century innovation further usurped some of

the function of kindergarten. Nursery schools claimed social

experience through play as their goal as well. They have

appeared to be able to accomplish Froebel's objectives more

readily than have the kindergartens possibly because of their

independence from organized educational structure. An eval-

uation of nursery school education is beyond the scope of

this study. However, a closer examination of nursery school

might show more provision for individual differences, more

parent involvement, typically smaller classes and less teach-

er centering and direction.[13] Further, there appear to be

fewer controlled group activities and greater opportunity

for both independent play and free social interaction. Fin-

ally, the place of the nursery school in American education

and their continued growth serves as an example and a rather

constant reminder of the objectives which were once thought

to belong exclusively to the kindergarten.

Several modifications of kindergartens are appearing

which also involve school readiness. There are spring trial

kindergartens, kindergartens for four-year olds, third se-

mester kindergartens, day care centers as well as Montessori

schools. Teaching reading to five-year olds by television

and newspapers appears to influence kindergartens in areas

in which they appear.[14] The nongraded primary school implies

[13] See K. Read, The Nursery School: A Human Relations Laboratory, Philadelphia: Saunders Co., 1960, for a comprehensive look at nursery schools.

[14] B. M. Levinson, "Teaching Reading to Five Year Olds", Colorado Education Journal, October, 1963, p. 17.

definite modification of kindergarten standards. Recent

programs for culturally deprived or impoverished children

have also tended to emphasize a concern with readiness for

school.

A survey of the national kindergarten scene does not

reveal a uniform picture of programs and procedures. Atten-

dance laws vary considerably (70.4 percent of eligible pub-

lic school children attend kindergartens)[15] and the finan-

cial structure of kindergartens throughout American is most

complicated. State aid for kindergartens, optional atten-

dance, private kindergartens, states ignoring kindergartens;

all of these factors and varying policies and inconsistent

practices have alarmed the ardent kindergarten enthusiast

but also have provided for some flexibility and variation

which otherwise might not have been possible.

A case in point pertains to the relationship between

school readiness and the chronological age criteria for

kindergarten admission. Entrance dates for kindergartens

have varied as much as nine months between various states

and school districts. Most entrance dates run from the

first of June to the last day of December as the latest

date a child may be accepted if he is five years old. The

average entrance cutoff throughout the United States is

four years and nine months.[16] Some of the problems in-

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[15] National Education Association, Kindergarten
Research Bulletin, Washington D.C., 1962, p. 5.

[16] Kindergarten Research Bulletin, op. cit., p. 12.

volved in these differences as they pertain to school readiness are more specifically discussed in Section I of Chapter IV. The matter of school readiness, then, becomes a problem which needs to be specified in terms of the typical kindergarten.

It has been noted repeatedly that kindergarten teachers are much concerned with the activities of the classroom. Actually, these activities appear in classrooms in a continuum like fashion in terms of the emphasis of activities. One might also refer to the extent of structuring the classroom in terms of these activities. Toward one end of the continuum a highly structured academic program involving reading, numbers and writing for all children is seen. Toward the opposite end of the continuum would be a less structured situation involving more selection of activity, greater variation in involvement with an activity and considerably more and different kinds of activities going on in the classroom at the same time.

The usual or typical kindergarten is a combination of these extremes. Memorization exercises and such academic work as printing names and numbers as well as the alphabet are common and required for all children. Even listening to stories, sharing experiences and the various art and music activities represent mandatory participation involving the entire class. Choice of activities is usually confined to independent games or projects such as allowing children to play in a sandbox, others to paint, and still others to play

with playhouses.

It is particularly noteworthy that many of the activities listed by several sources are characterized by a lack of freedom as well as a lack of social experience connected with the various activities. These latter are, of course, the precise characteristics emphasized by Froebel.

School readiness cannot be taken to mean only kindergarten readiness because of entrance criteria of first grades. In general, first grade standards appear to be rather rigidly academic. To most kindergarten teachers, this fact means that their programs must be partially academic or preparatory to academics. To most kindergarten teachers, however, there is recognition of a theoretical independence of their own standards in the form of grading systems and report cards, in regards to promotion questions as well as the evaluation of the kindergarten child which have been based on an activity criteria which is partially academic.

The typical kindergarten on the national scene is seen as a classroom preoccupied with activities which are largely of a conforming, academic preparatory nature. While there may be social activities of a group nature, the social interaction and self discovery involving relationships between individual pupils is negligible. At a theoretical level, Froebel's ideas are recognized. At a realistic level, it appears that play and creative self discovery are not used in the sense Froebel suggested.

As was noted in Chapter I, the school psychologist was brought to the educational scene and the school readiness problem as a specialist. It was also suggested that the influences pertaining to school psychologists are unique, particularly in terms of their frame of reference.

Development of the School Psychologist Position. School psychologists operate in a frame of reference or by a criterion which will be referred to as a mental health criterion.[17] This point of view probably develops because of their training and appears to be further enhanced by their experiences with schools and children. Many of the psychologists who work in schools also have sharpened their focus on school readiness by their own research efforts. Some of the authorities commonly studied by the school psychologists are cited below. Following this, there will be a review of some of the research efforts involving early school admissions studies of school psychologists.

Mental Health Criterion. Writers who accept a mental health frame of reference are generally critical of education, particularly the activities of the typical classroom. Their criticisms can readily be applied to kindergarten. The kinds of questions which the mental health theorists often raise and the concerns which they voice are similar

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[17] See Chapter III of Robert Valett, The Practice of School Psychology, New York: Rinehart Co., 1964, and Chapter III of Susan Gray, The Psychologist in the Schools, New York: Holt and Co., 1963, for relevant discussion.

to the criticism of certain educational practices made by

Bruner:

> These activities . . . represent the precise details
> of learning in highly simplified short term situations
> which have lost contact with the long term educational
> effects of learning.[18]

Bruner indicates that today, the emphasis of the psychology

of learning is on understanding the social and the motiva-

tional aspects of the education of the self. Since school

psychologists ascribe to the education of the self, the

purpose and intellectual structure of activities (which

Bruner notes that no one seems directly concerned with) as

they affect the cognitive and affective growth of the child

become a matter of vital concern.

The more general mental health frame of reference is

well stated in the works of Maslow, Rogers and Allport.[19]

Maslow indicates that the goal of life and education is in

self-actualization. By this, it is hoped that an

> efficient perception of reality . . . and an increased
> awareness, integration, spontaneity and objectivity
> . . . which will lead to the recovery of creative-
> ness will be realized.[20]

Rogers adds openness to experience to his listing of goals.[21]

Allport places self-identity at the top of the list of objec-

tives of effective mental health.[22]

[18] J. S. Bruner, _Process of Education_, Cambridge:
Harvard University Press, 1960, p. 4.

[19] _Division Sixteen Newsletter_, Washington D.D.:
American Psychological Association, Summer, 1960.

[20] A. H. Maslow, _Toward A Psychology of Being_,
Princeton: Van Nostrand, 1962, p. 128.

[21] Carl Rogers, "The Place of the Person in the Behav-
ioral Sciences", _The Personnel and Guidance Journal_ XXXXIX,
No. 1, p. 442.

If such objectives, referred to here as the mental health criterion are accepted, then one has to ask if educational practices further these aims. To do this, opinions of some social scientists as to the effectiveness of the schools will be examined as to their meaning and meeting of the total growth needs of the child.

Maslow says that "schools add to the splits within a person -- a setting of one part of the person against another part".[23] In general, his position is that schools do not, in terms of current emphases, foster growth and motivation in the child.

Friedenberg, a teacher and social critic, is even more specific in his criticism and reminds us that

> . . . there are no studies to suggest that in school-
> work or school activities are there sufficient
> intellectual satisfactions to supply its own
> motivation. 24

His case for asking that goals of education be brought into a mental health frame of reference is stated in these terms;

> . . . self-identity is the crucial problem in our
> schools. Schools have taught children that they can
> win identity and esteem only by how they look and
> behave, not for what they are or how they think.
> This is a severe form of alienation.25

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[22] Gordon Allport, _Becoming_, New Haven: Yale University Press, 1955, p. 41.

23 Maslow, _op_. _cit_., p. 136.

[24] Edgar Friedenberg, _The Vanishing Adolescent_, Boston: The Beacon Press, 1960, p. 65.

[25] Friedenberg, _op_. _cit_., p. 71.

Kelley, from an educational psychologist's frame of reference, is also alarmed at what goes on and feels that there is great need to change the schools. He contends;

> The schools are too busy teaching such matters as adverbial clauses that we have notime to teach attitudes. Elementary schools have a long way to go before it can be said that they are really good places for children. By the very definition of the word, schools use procedures designed to train rather than educate.[26]

Kelley blames the adults who "have worked out a complicated and effective system of rejection of children which runs throughout our social structure". He points specifically to "courses of study, grading systems and all the so-called learning activities which help reject children" and says that "conformity is for those who don't fight. Where is the love of learning? Where are they taught the beauty of humanity?"[27]

Henry, an anthropologist who has made extensive studies within classrooms, is also critical of how children are taught. It is his observation that

> . . . schools mainly criticize and tear down children. School metamorphases the child, giving it the kind of self it can manage and then proceeds to minister to the self it has just made. Schools give training in skills. It can do nothing else. It must train the children as it is. It cannot teach creativity. The child must accept alienation as the rule of life. [28]

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[26] Earl C. Kelley, _In Defense of Youth_, Englewood Cliffs: Prentice Hall, 1962, p. 67.

[27] Kelley, _op. cit._, p. 84.

[28] Jules Henry, _Culture Against Man_, New York: Random House, 1963, p. 82.

These comments are specifically taken to mean that schools
are activity conscious and force children rather ruthlessly
into patterns of conformity without the careful weighing
of these activities against good mental health criterion.

Translating mental health goals into suggestions for
actual educational practice has received considerable
attention in recent years. Lindner, a psychiatrist who was
much concerned with mental health, devotes the last chapter
of Must We Conform to the schools and suggested needed
changes. [29] After being critical of current practices in
education, he set forth goals which he considered approp-
riate for today's children. Considering the aim of educa-
tion as "self maturity" [30] he suggested certain qualities
that should be fostered by the education process. These
gaols (working toward the development of desirable human
qualities) are much the same as those suggested by Allport,
Rogers and Maslow. Awareness, openness to experience,
search for identity or self discovery, and an opportunity
for unifying or relating learning experiences are regarded
as the most important. Skepticism is added to these in
order that the child can effectively test reality. The
opportunity of questioning and selecting from varied assign-
ments or choices puts skepticism into practice. Tension

[29] Robert Lindner, Must We Conform, New York: Rine-
hart and Co., 1956.

[30] Lindner, op. cit., p. 286.

should create dissatisfaction with things as they are.
Lindner feels that a conforming, unthinking adjustment
destroys the individual. Thinking and searching for
solutions are indicated as desirable. Note this in con-
trast to Hildreth, who, as a spokesman for the kinder-
garten teacher point of view, defines adjustment as con-
forming to required activities and seems to willingly
accept such educational patterns.

Barron,[31] reporting on a number of psychological
studies, draws certain conclusions about mental health
goals and how these might be translated into appropriate
educational usage. In the language and terminology of the
Maslow, Rogers and Allport frame of reference, Barron re-
fers to process, i.e., ". . . perceiving, planning, syn-
thesizing, and the adaptive relationship to reality"[32] as
all important. He also illustrates how planning and per-
ceiving in independent ways helps to build the ego and how
success in the meaningful application of skills (in con-
trast to the frequently meaningless activities currently
found) might develop a strong sense of reality. He describes
how feelings of personal adequacy are gained by free and
self determined social interactions of the type Froebel
suggested at the kindergarten level. Barron's examples
which are of a more general nature suggest that classroom

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[31] Barron, op. cit., p. 126.

[32] Barron, op.cit., p. 66.

activities might be one part of the intra-individual learning objectives and experiences.

Hunt, in a review which evaluates current learning theory, suggests that it is of the activity-oriented vintage and quite outdated.[33] All learning skills, he insists, are still dependent on the state of the organism. And he goes on to make the point that the human organism is energized by the criterion under discussion, namely good mental health.

Gordon, in a critical review of literature relating to psychological research and theory, arrives at a dynamic description of a new human being controlled by an open energy system with a dynamic "feedback motivation" suggesting that our learning theory model of man is quite outdated.[34]

Hughes, in a report of extensive and well-planned research in which she studied classroom teaching practices, has discussed the inadequacies of present approaches and has set forth a model of good teaching commensorate with good mental health criterion.[35] Some of her suggestions for a kind of teaching that will meet the needs of children follow: a change in attitude toward the authority of so-called facts, an ability to deal constructively with tension

[33] J. McV. Hunt, _Intelligence and Experience_, New York: Ronald Press Co., 1961, p. 126.

[34] Ira Gordon, (From a mimeographed pre-publication copy of a chapter for the 1966 ASCD Yearbook).

[35] Marie M. Hughes, _Development of the Means for the Assessment of Teaching_, Salt Lake City: University of Utah, 1959.

and anxiety, and, to note that the world is also human
wherein the unit is man and that it is educationally de-
sirable to deal with his personal attitudes as well as
political or scientific knowledge. These suggestions
indicate that changes in both what is taught and how it is
taught are needed. For kindergarten, it is her view that
there should be a return to not only Froebel's theories
but his practices as well.

Barron's and Hughes' research tend to be both critical
of current educational patterns and to represent attempts
to translate mental health principles into educational
practices. The studies are well executed at both the re-
search and theoretical levels. The research involved con-
sists of attitude surveys, personal interviews and class-
room observations. Its relevance to this study is that the
overemphasis of activities in education in general is simi-
lar to prevailing patterns in kindergarten. As an example,
Henry's comment that "schools give training in skills" can
be interpreted at the kindergarten level as activity train-
ing. In general the skills and activities which demand
conforming behaviors on the part of the child and which
tend to be largely teacher-centered and teacher-assigned,
have been criticized extensively by these writers and re-
searchers and also by those writers more generally concerned
with educational philosophy and psychological theory. They
would suggest, instead, the development of a setting where

freedom of inquiry, discovery, individualized activities and creative behaviors are encouraged. And, as has been noted previously, school psychologists function within the framework of the mental health criterion and generally accept such educational patterns as desirable.

As a result of such an outlook, school psychologists may be critical of much that happens in schools. They were brought to the educational scene as specialists. Despit their broad concerns, the issues to which their attention was directed were usually problem areas, such as learning, behavior and personality problems and habit or conduct disorders. The need for study and research of these problem areas was one to which school psychologists responded. However, in the area of school readiness (testing for admission to kindergarten) they were able to work more directly within the mental health framework. Here was a normal population and, if intellectual and affective growth problems were encountered by the children, many of these might easily be seen as stemming from restrictive patterns in education.

In the further development of the position of school psychologists and the purposes of this study, it is noted that study and research have been of vital concern to school psychologists where learning problems and their prevention were involved. In the matter of school readiness, much of the research pertaining to the issues has been done in the areas of early school admissions of intellectually advanced

pupils and in the development of psychological testing
instruments for the assessment of school readiness. As
will be noted later, school psychologists appear to be
familiar with this research, have often engaged in carry-
ing it out and in general, can be assumed to agree with
its findings.

Preschool Readiness Testing and School Entrance.
Much of the attention pertaining to the psychological
assessment of school readiness in the preschooler has been
focused on a somewhat controversial issue usually referred
to as "early school admission". Because these experimental
studies and literature are extensive and not directly rel-
evant to the present research, they are summarized and
reviewed in Appendix B. However, there are certain signi-
ficant contributions in understandings about school readi-
ness as well as the position of the school psychologists
which will be reviewed.

A basic issue in the area of school entrance pertains
to dissatisfactions with chronological age as the sole en-
trance criterion. Hildreth indicates that this has been
an area of controversy for most of this century.[35] A recent
issue of the Review of Educational Research lists seventy
references to articles on this problem in the last five
years. The majority of the writers suggest that a better
criterion for school entrance is available. School psych-

[35] Hildreth, op. cit., Chapter IV.

ologists have favored flexible school admission over
rigid age policies for quite some time.[36] As was noted,
school psychologists have been largely responsible for
leadership in research in early school admissions and in
calling attention to the problem. As a further indication
of the intensity of the issue, school superintendents,
usually regarded as educationally conservative, indicated
that eighty-five percent of their group were dissatisfied
with chronological age as the sole entrance criteria.[36] As
of that time, sixty-eight were willing to accept the re-
commendation of the school psychologists regarding a
child's readiness for school. Up to this time, there has
been no survey of kindergarten teacher opinion on this
issue.[38] (For this reason, opinion is sought regarding
chronological age as the sole entrance criteria on the
School Readiness Survey.)

Considerable agitation directed against rigid school
entrance procedures came from the "gifted child" move-
ment. Gifted child programs were on the scene by 1920

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[36] American Psychological Association, Division
Sixteen Newsletter, Washington D.C.: American Psycho-
logical Association, 1962, p. 8.

[37] J. J. Porter, School Executive 74 (March, 1955), p.80.

[38] Differential or delayed admission has been allowed
for slow and retarded pupils for some time. With the advent
of Special Education programs came an emphasis on early
identification and placement, frequently at preschool levels.
Marked concern for the slow and the retarded were apparent
in educational literature by 1920 although large numbers of
children were not involved until 1950 when legislation at
state and national levels provided funds for programs.

but have developed rather sporadically. Some of the more recent studies have directed attention towards curriculum enrichment and later elementary grade acceleration as well as the early entrance of intellectually advanced pupils. However, it was through these kinds of programs that school readiness testing was actually initiated (A question relating to the early admission of intellectually advanced pupils is also asked on the survey.)

At first, the issue in the early entrance of intellectually advanced pupils seemed to be that mental age should simply be substituted for chronological age as the determining entrance criterion. Some highly respected educators and psychologists still insist that mental age is the best available single indicator of school readiness.[38] The early emphasis on mental age and the IQ encouraged the building of a better intelligence test. While on the other hand, the concern with limitations of typical IQ measures lead to considerations of other facets of child development. The multi-factor approach was emphasized in which the physical, social and emotional factors (as well as the intellectual) received attention and resulted in new, broader approaches to the assessment of children for school readiness. (On the School Readiness Survey, the respondents were asked to comment on the adequacy of current readiness measures.)

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[38] James R. Hobson, "Mental Age as a Workable Criterion for School Admission", Elementary School Journal 48: (1940), p. 48.

As indicated above, the initial concern in preschool testing was simply in finding a better intelligence test. Later efforts at building a distinctive perschool readiness test attempted to account for emotional and social factors in the measurement of a child's development as well. The earliest of these, the <u>Merrill-Palmer Preschool Scale</u>,[39] seemed to meet test-making specifications. However, those who had to administer this instrument found it hopelessly cumbersome -- lengthy and complicated. It had an even more serious flaw in the eyes of the psychologists in that it seemed to measure rather generally the kind of maturity which a child who had learned to follow directions might have achieved. In contrast to other later measures, this scale seems to fall within the narrow frame of reference towards school readiness which kindergarten teachers were holding.

In preschool testing as in their general outlook on educational problems, a rather broad orientation is apparent among school psychologists. Emotional and social behavior as well as the clinical and school orientations are held to be appropriate aspects of preschool testing. School readiness, too, is weighed against these criteria. And again, this is largely within what is regarded as the mental health frame of reference. (The field of preschool testing

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[39] <u>The Merrill-Palmer Preschool Scale</u>, Detroit: The Merrill-Palmer Institute, 1937.

remains highly specialized and demanding of skills in working with traditional psychological testing instruments as well as specific training with school readiness measures, observations and conferences with parents.)

For the purposes of this study, the relative importance of various series of factors, i.e., the intellectual, the social, the emotional and the motor are extensively probed by the School Readiness Survey. A major portion of the survey is concerned with these differences. Opinions as the importance of various school activities, admission factors and certain kinds of kindergarten experiences are sought. The purpose of this survey will be to clarify and specify similarities and differences between kindergarten teachers and school psychologists.

Today, preschool testing de-emphasizes quantitative testing. An assessment study based on simply academic or mental skills for school readiness purposes is regarded as inadequate. However, single "school readiness tests" continue to appear and will undoubtedly continue to receive limited use. Their greater use will be as part of a battery of tests brought to the readiness assessment scene.

There are few clear-cut answers to many of the issues which are discussed and have been researched. As an example, research on developmental differences between boys and girls at the five-year level has produced conflicting results. However, the recognition that children will be

best understood by looking at a number of aspects of their
development rather than one, and that the great range of
differences revealed by psychological assessment should be
taken into account in school admissions does not exhaust
the problem. It was found that on the basis of careful
social, physical and intellectual measures that there were
rather consistent mean differences between populations of
girls and boys who were the same age and who came from
similar socio-economic backgrounds.[40] (The _School Readiness_
Survey sought opinions on this issue too.)

In reviewing the literature and evaluating early school
admissions practices, there appears to be confusion and
misunderstanding among the personnel involved. Some of the
problem may stem from differences in perceptions between the
groups involved. The success or failure of early admission
programs in the past depended largely on whether the selec-
tion criteria was relevant to the school expectancies.
Kindergarten teachers and others who represented an activity-
oriented approach tended to measure success in school strict-
ly by adjustment andconforming criterion. Studies which use
this evaluation approach consistently report negative re-
sults concerning early school admissions.[41] Studies which
use other evaluation approaches, such as standardized tests,

[40] Frank R. Pauly, "Sex Differences and Legal School
Entrance Age", _Journal of Educatinnal Research_ (45: 1950),
pp. 1 - 9.

[41] See Irene M. Oliviari, _The Relation to School_
Entrance Age, New York: Fordham University Publications,
1957, as an example of this viewpoint.

measures of academic success such as grade point averages
and academic honors consistently report positive and sup-
porting results favoring early school admissions. [42]

It would appear that the greatest influence which the
early entrance of advanced pupils brought to the scene was
a further recognition of individual differences in child-
ren. Such terms as "flexible school entrance" appeared
and a realistic look at the issues involved in breaking
down the chronological age school barrier was taken. Many
of these studies were carried on by school psychologists
and have aided in their focus on school readiness. Speci-
fically, it has broadened the testing approach, pointed up
areas in need of research and identified potential learn-
ing problems. Through the early screening of pupils, the
deprived child, the child with speech problems or verbally
inadequate, as well as perceptual deficits were identified.
Finally, of course, further definition of school readiness
criteria is sought. It is in this respect in particular,
that this study hopes to clarify and specify frames of
reference. For the school psychologists, the larger frame
of reference of mental health criteria appears to provide
the theoretical bases for discussion of school readiness.

Chapter Summary. The frame of reference of kinder-
garten teachers is referred to as an activity approach

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[42] See Jack Monderer, "An Evaluation of the Nebraska
Program of Early Entrance", Unpublished Thesis, Lincoln:
University of Nebraska, 1953, as an example of this view-
point.

because their primary concern appears to be with kinder-
garten activities rather than with the growth of the indi-
vidual child. This emphasis does not seem to support
Froebel's kindergarten theories to which kindergarten
teachers profess allegiance. The kindergarten teacher's
orientation is also in conflict at several points with what
has been referred to as a mental health criteria and which
has become the operational philosophy of school psycho-
logists. Both kindergarten teachers and school psycho-
logists accept social development as highly desirable but
by this the kindergarten teachers seem to mean a conform-
ing to teacher-directed classroom activities whereas
Froebel, psychologists with a mental health concern, and
school psychologists appear to mean a series of autono-
mously determined social interactions and experiences
taking placemainly between individual pupils and groups
of pupils. In addition, school psychologists have been
attempting to arrive at adequate school readiness assess-
ments through involvements with early school admissions
programs, the early identification of learning problems
in pupils and with considerable attention andstudy of
measurement procedures involving preschoolers.

CHAPTER III

DEVELOPMENT OF THE SURVEY AND HYPOTHESES

As indicated in the Initial Statement of Purpose in the introductory chapter, the purpose of this study is to explore and describe the attitudes and concepts of school psychologists and kindergarten teachers towards school readiness by making a survey study. What has been discussed thus far has been intended to set the stage for this focus on school readiness. Reviews of certain issues and ways of looking at the problem have been made in an effort to convey to the reader its multi-faceted nature. The writer has attempted to portray, for example, some of the typical experiences of kindergarten, or what preschoolers are getting ready for. It is out of this frame of reference that the following questions have been posed;

1. What is school readiness? Do kindergarten teachers have an operational definition of a "ready" child? Do school psychologists have an operational definition of a "ready" child?

2. What are the differences and what are the similarities in attitudes towards school readiness among kindergarten teachers? Among school psychologists? Between kindergarten teachers and school psychologists? What is the significance of these similarities and differences in attitudes and concepts towards school readiness?

These questions were developed to serve as a framework for surveying the field of school readiness and thus ultimately would contribute to the development of the survey instrument, the School Readiness Survey. It should be noted

that for the purposes of this study, school readiness is defined to cover not only school admission requirements but also an ability to cope with the kindergarten situation. This means then, that understandings as to what goes on in kindergarten and attitudes as to what should go on in kindergarten are also involved. The related issues in Chapter II indicated general as well as more specific problems in terms of differences of opinion and in theory between kindergarten teachers and school psychologists. The review of literature also reveals that there are explicit differences between the current statements made by official spokesmen about kindergarten aims and practices and other statements regarding desirable educational aims found in the mental health literature. Both general **and** specific differences in the viewpoints of kindergarten teachers and school psychologists then, are of direct concern in the School Readiness Survey. There are also undoubtedly differences in viewpoint which are implicit and which result from different interpretations of such terms as social. These are simply acknowledged and not taken to be the province of the present study.

Background and Development of the Survey. As noted in Personal Interest in Chapter I, the writer has been intensely interested in the school readiness problem for several years,has talked to many kindergarten teachers about their views, has dealt with the problems of early

admissions as a school psychologist and has, in an effort to understand the issues involved and apparent differences of opinion, read widely on the problem. These personal experiences and the reviewing of the literature aided in giving the problem focus and also served as a basis for designing an approach to studying these questions. As has been noted earlier, the final decision was to design an instrument which became the School Readiness Survey and to use it to clarify and describe these apparent differences in opinion between kindergarten teachers and school psychologists.

The School Readiness Survey was designed to sample opinions and concepts relating to several issues, all growing out of problems involving school readiness and each represented in a section of the survey.

In Section I of the instrument, opinions are sought on four major school readiness issues. These are not new issues; in fact, they have been studiedand researched at some length. In the educational world at large, there are divided opinions about each of these issues. The litera- ture did not reveal any dramatic splits of opinion between the spokesmen of the kindergarten teachers and the school psychologists. However, differences were apparent between statements made regarding kindergarten education and mental health theory. Beyond these differences, the investigator has observed that in the translation of educational theory

into classroom practice, in this case -- kindergarten

practice, there has been a seemingly widening gap between

the views of the kindergarten teachers and the school

psychologists. These major school readiness issues were

included in the survey to permit the respondents to have

an opportunity to express themselves on the most import-

ant issues and to permit further comparisons with other

problems which were to be probed by the survey. The issues

that were judged by the writer as most important were the

following;

A. Chronological age as the sole admission criterion.

B. The evaluation of early admissions research.

C. Differential admission based on sex (the earlier

admission of girls).

D. The adequacy of school readiness measures.

It was felt that reponses to these issues would provide a

basis for an understanding of the presumably different

attitudes held by kindergarten teachers and school psycho-

logists with respect to school readiness.

The development of the four remaining sections re-

quired a more intensive search for meaningful approaches

(specific factors which might differentiate between the

views of the kindergarten teachers and the school psycho-

logists) because there were none which were readily avail-

able and applicable for the purposes of this study. Each

factor was selected by the investigator only after a study

of the literature and informal try-outs with both kinder-
garten teachers and school psychologists.

Section II of the survey asked that respondents make
judgments regarding the relative importance of each of a
series of factors with respect to how the child usually
spends his time in kindergarten. Kindergarten teachers
and school psychologists were asked to report their opinions
regarding the amounts of time spent by children in the dev-
elopment of mental, social, physical and emotional maturity.
Because there appeared to be some question in the literature
regarding the extent to which social and play activities
are utilized, this section particularly sought to probe this
question. In the development of the survey, preliminary
forms were tried with kindergarten teachers and it became
obvious that the meanings of several factors or skills which
had been selected for inclusion in this section were ambig-
uous. A further breakdown of these skills or factors was
suggested by the kindergarten teachers who were observing
aspects of growth directly. Thus they suggested that the
mental factor be divided into verbal and academic. A per-
sonal factor was added to account for the various apparent
individual involvements. Physical skill was changed to
"motor" since this was regarded as more specific to the
kindergarten situation. After these changes, six skills
remained; social, personal, verbal, motor, academic and
emotional.

Section III was concerned with the importance of certain factors related to school admission. The respondents were asked to rank these in terms of their relative importance as indicators of kindergarten readiness. To do this, it was suggested that they take a theoretical frame of reference. From this point of view, the approach of considering mental, social, emotional and physical factors seemed appropriate and unambiguous. Chronological age was added to the four factors so that it could be evaluated against other indicators.

Section IV asked that the respondents list a series of activities and attitudes in order of importance, in this case ten were selected in which children commonly engage in the kindergarten classroom. This listing was difficult to establish in that it needed to be inclusive of the variety of activities and attitudes which the child might express in the school situation. The early effortsof the writer contained a much longer list of facets of kindergarten life. To develop this, the writer had made extensive use of Hildreth's book as well as previously cited works by Fuller, Davis and a Research Bulletin of the National Education Association. Ultimately, through varying approaches and combinations, the list was reduced to ten rather definite activities and attitudes which in the try-out sessions had been understood and considered relevant by kindergarten teachers and school psychologists. The list included such

activities and attitudes as tolerates situations, shows

general knowledge, memorizes readily, works independently,

and has intellectual curiosity. It was hoped that an eval-

uation of the importance of these qualities would serve to

contribute insights into those approaches considered as

well as the actual and the practical situations in kinder-

garten.[1]

Section V of the School Readiness Survey asked that

the usefulness of certain kindergarten experiences be eval-

uated. A four-way categorization was suggested by Brenner.[2]

This experience approach to kindergarten has been presented

in recent years as a new and unique attempt to evaluate

the total kindergarten situation. Brenner's feeling was

that most references to kindergarten were not particularly

meaningful because of misunderstandings of such terms as

activities, program and curriculum. Hence, this new cate-

gorization of experiences (also referred to as "transactions").

These categories include experiences with peers, teachers,

objects and verbal symbols. This approach, it was hoped,

would serve as a general check on other approaches and also

provide another frame of reference to the study.

Pretesting. Over a two-year span of time, the invest-

igator discussed the general issues related to school readi-

[1] The Bureau of Educational Research of Michigan State
University advised on the construction of Sections II and
IV of the survey. Particular credit is due Mrs. Blum.

[2] Anton Brenner, "Nature and Meaning of Readiness for
School", Merrill-Palmer Quarterly 3 (1958), p. 114.

ness with kindergarten teachers and school psychologists. These interchanges helped in the formulation of questions out of which a preliminary survey was developed. Upon the development of a trial form of the survey, two pre-tests were undertaken. The preliminary survey was developed in the summer of 1963 after extensive informal try-outs of questions with both kindergarten teachers and school psychologists. In October of 1963, a pretest was conducted using kindergarten teachers at a Teachers Institute in Grand Rapids. The participation by members of this group was optional. After the investigator reviewed the purpose of his study, sixty kindergarten teachers remained and completed the survey. Upon completion, they were asked to comment on questions which were not clear to them and to make suggestions.

As a result of this pretesting with teachers, several changes were made in the wording of the survey in order to make meanings clearer. For example, in Section II, the changes which have already been noted in regards to the further specification of skills were made as a result of these suggestions. In Section III, chronological age was added as a factor and in Section IV, examples of various activities and attitudes were changed so that they could be more readily understood.

Changes in Section V mainly resulted from an informal research session in the fall of 1963 at a workshop with

twenty school psychologists. Their suggestions also in-
cluded further changes in the activity and attitude exam-
ples in Section IV. In Section V, the school psychologists
suggested that Brenner's term "transactions" would not be
appropriate to use with a national group. The writer, in
personal conference with Dr. Brenner, was assured that the
substitution of the word "experiences" would not affect
the meanings of the various categories and this change was
thus made.

The groups of the pretesting samples also served as a
try-out for the various statistical procedures which were
being considered.

Survey Sample Selection. In the selection of the
samples for the study proper, care was taken to select
groups of kindergarten teachers and school psychologists
who came from similar school systems and thus could be
compared meaningfully. In this way, variables regarding
entrance policies, program and curriculum, as well as the
various school practices of a regional nature would be
accounted for.

Inasmuch as there are relatively few school psycho-
logists in comparison to the numbers of kindergarten
teachers, a national sample of school psychologists was
selected first with the intent of finding a comparable
sample of kindergarten teachers. Because of the varying
roles of school psychologists, a random sample of the

membership of Division Sixteen (school psychologists) of the American Psychological Association was not regarded as appropriate. Previous investigation by the writer revealed that some school psychologists do not accept preschool referrals or evaluate school readiness.

It was ascertained from a 1962 Research Interest Check-list which was sent to the division membership that school readiness was listed among the areas of "major concern" by 140 school psychologists.[3] The stated interest of this group was regarded as indicative of a willingness to further ex-plore the issues and problems pertaining to school readi-ness and it was decided to use them as the population of school psychologists for the research. The names of these school psychologists were made available by the Office of the Secretary of Division Sixteen. Comparing this group to school psychologists in general, it was noted that they represented an appropriate sample geographically and were also comparable to unselected school psychologists in terms of professional training and years of experience.[4]

The sample of kindergarten teachers, which was ot be comparable to the school psychologist group, was obtained by studying national listings of kindergarten teachers. A listing was located through a publishing concern which

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[3] Division Sixteen Newsletter, Washington D.C.: American Psychological Association, Summer, 1962.

[4] Paul E. Eiserer, in The School Psychologist, Washington D.C.: The Center for Applied Research in Education, inc., 1963, describes school psychologists nationally in Chapter I and these descriptions were used as a model.

handles listings for several national educational org-

anizations.[5] The effort was to determine whether the

school districts which the selected school psychologists

served employed kindergarten teachers. The school district

employers of the school psychologists were obtained from

the Directory of the American Psychological Association.

The listings of kindergarten teachers were available by

school districts. Ultimately, one kindergarten teacher

was paired with each school psychologist. This teacher

was randomly selected fromthe total number of kindergarten

teachers within a school district by using a table of ran-

dom numbers. This was necessary since no information with

respect to years of experience and training was available

regarding individual teachers. Four school districts had

no kindergarten teacher listed and the sample was reduced

to 136.

In the school psychologist sample, it was noted that

no school psychologists were listed from private or par-

ochial kindergartens. This has limited the sample to a

public school group. It should also be noted that the

sample consists, in Eiserer's terms, of large and medium-

sized school districts. Only in two instances were school

districts represented with less than 5000 pupils. These

seem to be the primary limitations in the selection of the

groups to be surveyed. A major objective of obtaining

[5] Service Press, Davenport, Iowa.

comparable groups and controlling a number of variables
was realized by the selection of kindergarten teachers
from the same school districts in which the school psycho-
logists were employed.

The School Readiness Survey was sent to both the
kindergarten teacher and school psychologist groups with an
identical cover letter which invited them to participate in
a research survey. The surveys were sent to the school
psychologists in February, 1964 and to the kindergarten
teachers in March, 1964. The surveys were inconspicuously
coded and the respondents identified themselves only if they
desired. Reminder notices were sent to those who had failed
to return the surveys by May 1, 1964. By the first of June,
108 paired surveys (school psychologist and kindergarten
teacher in the same school district) were returned. An
initial analysis indicated that several from each group
were not completed. Each incomplete survey, together with
its paired survey was dropped. As a result, one hundred
paired surveys remained, representing a 70.3 percent return.

Statistical Procedures. As soon as the instrument was
constructed, an extensive search and consultation was carried
out for an appropriate statistical analysis of the survey.
The initial concern was in obtaining a measure of the ex-
tent of association or relation involving sets of attitudes
of two groups. However, in order to accomplish this, it was
necessary to determine the association both within each of

the groups as well as between the two groups. In essence, then, three measures became involved. The first would note the association or agreement among the school psychologists as a group. The second measure was concerned with the extent of agreement among kindergarten teachers as a group. The third measure was concerned with the extent of association or agreement between the two groups. In order to carry this out, the two groups were combined and in this study are referred to as the "combined group".

The complexity of the rankings was almost unmanageable when the usual chi-square, tests of significance, and tests of same-different populations were considered. The use of a contingency table would serve to simplify the data. The Kendall Coefficient was considered as a possible appraoch but rejected, in that it too was highly involved with correction procedures which made it almost unmanageable. Ultimately, a little-used approach suggested by Siegel called the Contingency Coefficient (C) was selected.[6] It satisfied all the criterion in that it could readily be computed from a contingency table and the procedure itself was designed for populations or groups of this size which mean considerable less involvement with correction measures than other formulations and procedures.

An added advantage of the Contingency Coefficent (C)

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[6] Sidney Siegel, <u>Non-Parametric Statistics for the Behavioral Sciences</u>, McGraw Hill: New York, 1956.

is that it is easily interpreted. It is directly compa-
rable to simple coefficients, i.e., coefficients above .70
indicate high agreement or contingency, from .50 to .70
indicate moderate agreement, .25 to .50 indicates low agree-
ment and below .25 indicates very little agreement.

Chapter Summary and Statement of Hypotheses. In the
development of the School Readiness Survey, the investigator
worked with school psychologists and kindergarten teachers
at first in individual conference situations and later, as
the pretesting was carried out, in groups. Pretesting dic-
tated certain modifications of the instrument as it was
originally constructed. Following this, the School Readi-
ness Survey was completed and the experimental sample se-
lected. Finally, an appropriate method of statistical
analysis was selected. The survey sections were developed
concurrently with the hypotheses and follow the same gen-
eral outline.

In order to explore similarities and differences in
attitudes and concepts of school psychologists and kinder-
garten teachers towards the various considerations involv-
ing school readiness, specific hypotheses are stated to
give direction to the study;

I It is hypothesized that kindergarten teachers and
school psychologists do not agree in their attitudes
and concepts towards certain major readiness issues:
A. Chronological age as the major entrance criteria.
B. The early entrance of intellectually advanced
children.
C. A differential admission based on sex (the
earlier admission of girls).

D.   The adequacy of school readiness measures and assessments.

II   It is hypothesized that kindergarten teachers and school psychologists do not agree in their judgments as to how time is spent in kindergarten.

III It is hypothesized that kindergarten teachers and school psychologists do not agree in their judgments as to the relative importance of admission factors.

IV   It is hypothesized that kindergarten teachers and school psychologists do not agree in their judgments as to the relative importance of certain activities and attitudes for kindergarten children.

V   It is hypothesized that kindergarten teachers and school psychologists do not agree in their judgments as to the relative usefulness of given kindergarten experiences.

CHAPTER IV

SURVEY RESULTS

Chapter Procedure. The results of the School Readi-
ness Survey will be summarized at the outset and this in-
formation will be followed by a detailed examination of
the findings of each of the five sections. In summar-
izing the results of the survey, it seemed desirable to
divide the information into two parts; the first derived
from Section I, is concerned with opinions on four issues
which had been determined to be of major concern in the
matter of school readiness and the remaining four sections
concerned with the importance of admission factors and the
kindergarten experience, both the way time is spent there
in a real sense and two sections -- one dealing with the
relative importance of a series of activities and the
other dealing with the relative usefulness of a series of
experiences for success in kindergarten.

In addition to the statistical findings from the
various sections of the survey, there is a report on the
comments which the respondents were invited to make after
each of the questions. There were many comments and they
give added insights into attitudes and interpretations
which are not available from the survey results alone.
In order that they are not confused with the specific
findings of the survey results, they will be noted under a

separate heading called Discussion.

A table including the Contingency Coefficients (C), actual numbers of respondents and the mean rank differences will be made for each of the five sections as well as the summary of general results. The method of reporting statistical data will be described when presented.

Summary of General Results. As indicated in Chapter III, four major issues were identified in the survey of the literature and in preliminary discussions with kindergarten teachers and school psychologists as having a specific relevance to school readiness and were placed at the beginning of the survey as Section I. The results of Section I pertaining to the hypotheses are presented in Table 1. The chi-square (at the .01 level of significance) and Contingency Coefficients determine the acceptance or the rejection of hypotheses, i.e., that kindergarten teachers and school psychologists do not agree in their attitudes and concepts towards certain major readiness issues. Of the four issues, it is apparent that kindergarten teachers and school psychologists are in agreement on only one -- that chronological age is not a satisfactory criterion for kindergarten admission. Regarding the sufficiency of early admissions research as a basis for early admission of intellectually advanced children, kindergarten teachers as a group are undecided whereas school psychologists as a group are accepting. With respect to the early admission of girls

TABLE 1

SECTION I SUMMARY: MAJOR SCHOOL READINESS ISSUES

	Hypotheses:	Results:
A	Chronological age as the admission criterion	Rejected
B	Early school admissions research as favorable	Accepted
C	Earlier admission to kindergarten for girls	Accepted
D	Adequacy of school readiness measures	Accepted

kindergarten teachers as a group are more accepting of this than are the school psychologists as a group. Finally, on the issue of the adequacy of school readiness measures, the kindergarten teachers as a group are undecided and school psychologists as a group responded positively. Thus, it is apparent, if we generalize from this survey, that the kindergarten teachers and school psychologists differ considerably about admission procedures -- what should be the criteria and how the situation should be evaluated.

The general results of Sections II, III, IV and V are presented in Table 2. The chi-square (at the .01 level of significance) determines the acceptance or rejection of the hypotheses, i.e., that kindergarten teachers and school psychologists do not agree in their judgments in regards to

TABLE 2

GENERAL RESULTS: Sections II, III, IV and V

Section:	Hypotheses:	Result:
II	Ranking of time spent in kindergarten at various skills.	Rejected
III	Ranking of the importance of admission factors.	Rejected
IV	Ranking of activities of kindergarten classrooms.	Accepted
V	Ranking of the usefulness of kindergarten experiences.	Accepted

the various questions asked in the School Readiness Survey.

As noted in Table 2, the hypotheses are rejected for Sections II and III and accepted for Sections IV and V. There is agreement reported as investigated in Sections II and III by kindergarten teachers and school psychologists in two areas, as to the relative amounts of time devoted to different activities by children in kindergarten classrooms and the relative importance of a series of admission factors. However, judging from the results of Sections IV and V, there is little agreement between kindergarten teachers as a group and school psychologists as a group as to the relative importance of a series of activities common in kindergarten classrooms and similarly, that there is little agreement as to the relative usefulness of a series of kindergarten experiences.

Survey Section I: Results. The first section of the
survey dealt with four of the major school readiness issues.
As was noted earlier, the respondent was asked to judge in
terms of agreement (Yes), disagreement (NO) or indecision
(Undecided). The first question which asked for a judgment
was the following:

> In your judgment, is chronological age a satisfactory
> criteria for kindergarten admision?

The results are presented in Table 3. As noted by the
Contingency Coefficients (C), high agreement is seen both

TABLE 3

SECTION I-A: CHRONOLOGICAL AGE AS AN ENTRANCE CRITERION

Group:	Numbers of Respondents			C.
	Yes	Undecided	No	
Kindergarten teachers	6	8	86	.74
School psychologists	11	5	84	.72
Combined groups	17	13	170	.73

within each of the groups as well as between the groups, or
as indicated in Table 3, with the combined groups. In terms
of percentages, eighty five percent of kindergarten teachers
and school psychologists are not satisfied with chronological
age as a criterion for kindergarten admission.[1]

Survey Section I-A: Discussion. The results of this

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[1] Because the numbers of respondents in each group was
100, these numbers are also percentages.

survey tend to corroborate other studies which also show considerable disagreement with chronological age criterion. It is noteworthy that all groups surveyed on this issue report quite similar results. However, to the writer's knowledge, this is the only survey specifically involving kindergarten teachers.

Survey Section I-B: Results. The second question of Section I was asked in an attempt to have the kindergarten teachers and school psychologists judge the value of the research and studies on early school admissions. They were asked to respond to the following:

> In your judgment, is research concerning the early admission of advanced pupils sufficient to justify such a practice?

The results of the question are reported in Table 4. The area of highest agreement regarding this survey question is among the kindergarten teachers and this "agreement" indicates that they are undecided as to the adequacy of research relating to early school admissions. The next highest area of agreement, supported by a moderate Contingency Coefficient (C. of .48) points out that sixty percent of school psychologists in this sample are satisfied with research supporting this issue. In the total percentages, the combined groups indicate that they are undecided regarding the research.

Survey Section I-B: Discussion. The comments made by kindergarten teachers were to the effect that most of their

TABLE 4

SURVEY SECTION I-B: JUDGMENTS AS TO THE VALUE OF EARLY

ADMISSIONS RESEARCH

| Group: | Numbers of Respondents | | | C. |
	yes	Undecided	No	
Kindergarten teachers	11	76	13	.67
School psychologists	60	16	24	.48
Combined groups	71	92	37	.31

reading and experiences regarding early school admissions practices were satisfactory. They avoided specific references to studies and research. In contrast, school psychologists cited several studies and research relevant to early school admission. In the comments section, the school psychologists also were questioning the problems involved in administering such programs, the time involved in screening procedures for preschoolers and the follow-up of these pupils. On the basis of such comments, it might be assumed that these complicated problems may have influenced the responses of the school psychologists as well as the more basic question of their evaluation of early school admissions research. However, they still were largely in favor of the practice in spite of the questions raised.

Survey Section I-C: Results. The third question was asked in an attempt to obtain the opinion of the respondents regarding the need to make adjustments to mental differences

TABLE 5

SECTION I-C: JUDGMENTS REGARDING EARLIER ADMISSION OF GIRLS

| Group: | Numbers of Respondents | | | |
	Yes	Undecided	No	C.
Kindergarten teachers	82	7	11	.7.
School psychologists	22	46	32	.26
Combined groups	104	53	43	.36

between boys and girls at the five-year level. They were

asked to respond to the following:

> In your judgment, should girls be admitted to kinder-
> garten at an earlier age than boys, i.e., three to
> six months?

The results are summarized in Table 5. Kindergarten teach-

ers are highly agreed that girls should be admitted to

kindergarten at an earlier age than boys. Nearly half of

the school psychologists were undecided on this question and

a third were unfavorable to the proposition.

Survey Section I-C: Discussion. The comments of the

kindergarten teachers were in the main of the tongue-in-

cheek type to the effect that they "have known this for

years". The comments of the school psychologists indicated

that they recognized that there are developmental differences

between boys and girls at this age level. However, they

appear to be unwilling to suggest that the problem is a

case of simply starting the girls in school earlier than the

boys. They noted other problems in boys which might need attention, such as coordination, more aggressive behaviors, and possibly less interest in school, and that these problems might not be lessened by a later school entrance.

Survey Section I-D: Results. The final issue pertaining to school readiness in Survey Section I was probed by this question:

> In your judgment, is an adequate measure of school readiness available?

The results are presented in Table 6. In effect, the question asks to what extent adequate measures of school readiness are available for making judgments concerning the individual child. The highest area of agreement, as noted by the Contingency Coefficients, is with the school psychologists noting that school readiness measures are adequate. Kindergarten teachers are largely undecided on the matter. Moderate agreement is noted with each of the groups. Between the combined groups, actual agreement is low.

Survey Section I-D: Discussion. Most of the kindergarten teachers did not comment on this question other than indicating their unfamiliarity with readiness tests. After the question, both kindergarten teachers and school psychologists were asked to describe what they believed would be an adequate measure of school readiness. Again, the kindergarten teachers, in the main, did not respond to this request.

Most of the school psychologists commented to some

TABLE 6

SECTION I-D: JUDGMENTS REGARDING THE ADEQUACY OF SCHOOL

SCHOOL READINESS MEASURES

| Groups: | Numbers of Respondents | | | |
	Yes	Undecided	No	C.
Kindergarten teachers	20	63	17	.44
School psychologists	56	10	34	.47
Combined groups	76	73	51	.22

length. Many also mentioned specific school readiness
measures. Nearly half of the school psychologists mentioned
the Binet first. However, opinions regarding the Binet are
quite divided. Some say that the "binet is still the basic
measure" while others "would hate to damn a child with the
Binet". The next most frequently mentioned measures were
expressions of hope in three new instruments: The Brenner
Gestalt Test of School Readiness, the new preschool version
of the Wechsler, and the Gesell Institute's Developmental
Scales for School Readiness. Many mentioned the various
perceptual measures, such as the Bender Gestalt, the Rutgers
Drawing Tests, the Perception Forms Test and several ment-
ioned informal and projective drawings as desirable. Pro-
jective drawings were regarded as good indicators of social
maturity as well as a good index of personal or develop-
mental maturity and were frequently mentioned as a necessary

part of the readiness assessment study. Several ment-

ioned the clinical judgment of the psychologist as an

adequate indicator of emotional maturity. However, the

Vineland Social Maturity Scale was mentioned but severely

criticized for its inappropriateness to school readiness

by several of the respondents.

Survey Section I Summary. With respect to the major

school readiness issues studied in this section of the

survey, it may be concluded that:

(1) Kindergarten teachers and school psychologists

agree that chronological age is not a satisfactory criterion

for kindergarten admission.

(2) Kindergarten teachers are undecided as to the

value of research pertaining to the early admission of ad-

vanced pupils; school psychologists are inclined to accept

the supporting research.

(3) Kindergarten teachers are highly convinced that

girls should be admitted to kindergarten at an earlier age

than boys; school psychologists are undecided.

(4) There is little agreement among either the kinder-

garten teachers or the school psychologists as to whether

an adequate measure of school readiness exists. However,

school psychologists are more apt to feel this is true.

Survey Section II: Results. The second section of

the survey required kindergarten teachers and school psych-

ologists to make judgments as to how kindergarten children

should spend their time. Six skills were ranked from

"taking the most time" to "taking the least time". The

directions and skills to be ranked were as follows;

> Please rank these skills as to actual time spent in
> kindergarten; rank 1 as taking the most time, to 6
> as taking the least time. (Skills to be ranked
> included social, personal, academic, motor, verbal
> and emotional.)

The results are presented in Table 7. The Contingency

Coefficients on these rankings show high agreement within

TABLE 7

SURVEY SECTION II: JUDGMENTS OF TIME SPENT IN KINDERGARTEN

Rank	Kindergarten teachers	School psychologists
1	social skills $(155)^2$	social skills (141)
2	personal skills (244)	emotional maturity (244)
3	verbal skills (344)	verbal skills (289)
4	motor skills (421)	personal skills (442)
5	emotional maturity (433)	motor skills (481)
6	academic skills (500)	academic skills (503)

AND BETWEEN THE GROUPS. The C. for the kindergarten teachers

is .67, for the school psychologists is .73, and for the

combined groups is .66. The area of greatest agreement

is amongthe school psychologists. Agreement among the kin-

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[2] The numbers in parentheses are the true difference
ranks which Siegel regards as the truest indicator of the
differences in rankings. They represent the sums of the
rankings for a given item.

dergarten teachers and for the combined groups is some-
what lower; yet is significantly indicative of good agree-
ment. Both the first and the last positions are identical.
The development of social skills is chosen by both groups
as the area in which most time is spent. The mean rank-
ings in both instances are near 1.5. Both groups perceive
that the least time is devoted to the development of
academic skills.

Among the school psychologists, emotional maturity
and the development of verbal skills are ranked high in
terms of their mean rankings (2.4 and 2.8). School psych-
ologists appear to have common agreement as to what emot-
ional maturity means to them and in their evaluation, it
occupies a primary spot as to the actual spending of time
in kindergarten. Verbal skills are also given primary time
consideration. The fourth and fifth rankings of the psych-
ologists are filled by personal skills and motor skills
with rather low mean rankings of 4.4 and 4.8. These rank-
ings were also close in terms of the true difference ranks
and are considered as having definitely secondary signifi-
cance in terms of time consumption.

In contrast, kindergarten teachers ranked personal
skills a close second in terms of time consumption. Posi-
tions of secondary importance, according to the kindergarten
teachers, were assigned to a group of three skills. Verbal
skills was ranked third and in close succession, motor

skills and emotional maturity. It should be noted that
verbal skills was ranked a full position below that given
by the school psychologists. This suggests an area of
difference in their judgment as to how time is spent. Kin-
dergarten teachers do not see themselves as spending much
time in the development of verbal skills. Motor skills
are ranked somewhat higher by kindergarten teachers than
they are by school psychologists.

Survey Section II: Discussion. In the comments of
the respondents, kindergarten teachers and school psycho-
logists alike, regarding the judgment of time spent in kin-
dergarten, there were repeated references to the belief that
the way kindergarten is presently arranged, it is primarily
a social experience. Both groups further emphasized that
kindergartens are not academically oriented by which they
referred to reading, reading readiness material, number
workbooks and the like. Several respondents noted that
academic tasks are sometimes used for other purposes, such
as teaching work habits and developing concentration and
attention. A few of the school psychologists noted that
formal academic tasks should not be assigned to kinder-
gartens but that the intellectual pursuit of general know-
ledge, discussion and sharing of experiences was to be en-
couraged.

Two different rankings in this section corroborate
other study and research. The first is that of the rather

primary emphasis given <u>verbal skills</u> by school psychologists. Stutsman reports that verbal facility is highly valued by psychologists.[3] In this survey section too, the indication is that psychologists think considerable time is spent in its development. Psychologists seem to view the importance of <u>motor skills</u> as of secondary importance according to Bayley.[4] Several kindergarten teachers noted that games and play activities as well as perceptual tasks may be regarded as <u>motor skills</u> and it appears that they give this term a somewhat broader interpretation than the school psychologists did. This might account for the higher ranking.

The area of greatest difference in perception of the way time is spent in the kindergarten is related to the ratings given <u>personal skills</u> and <u>emotional maturity</u>. The high time emphasis given <u>personal skills</u> by the kindergarten teachers, judging from their comments, is a reflection of their awareness of the amount of time taken in a kindergarten classroom with such activities as dressing and the teacher's helping the pupils individually with responsibilities regarding their person. The comments of the school psychologists regarding <u>personal skills</u> suggests that knowledge about time spent of these activities may not

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[3] Rachel Stutsman, <u>Mental Measurement of Preschool Children</u>, Yonkers-on-Hudson: World Book Co., p. 38.

[4] Nancy Bayley, "Correlates of Mental and Motor Development", <u>Child Development</u> IV (1937), p. 329.

be common to school psychologists. Under the comments
sections relevant to _emotional maturity_, it appears that
kindergarten teachers are not agreed as to its meaning or
may have regarded it as too general to attach a time vari-
able to it. Several respondents noted that it was the total
kindergarten experience which produced _emotional maturity_
rather than its being taught as a skill which took a def-
inite amount of time. School psychologists made few com-
ments to _emotional maturity_ other than underscoring its
importance. Obviously, they cannot know how much time is
spent on the development of such a general quality but it
might be inferred that psychologists think kindergarten
teachers spend a good deal of time trying to help children
mature. This group difference regarding _emotional maturity_
is thus far the most significant expressed difference be-
tween these two groups.

Survey Section II Summary. With respect to the judg-
ments of time spent in kindergarten which were studied in
this section of the survey, it may be concluded that:

(1) Kindergarten teachers and school psychologists
agree that _social skills_ require the most time in kinder-
garten and that _academic skills_ require the least.

(2) The area of greatest disagreement has to do with
emotional maturity. School psychologists rank it as taking
a primary amount of time whereas kindergarten teachers are
of the opinion that less time is involved. There is the

possibility that these groups interpret the term differ-ently and that it has such general meaning that assigning an amount of time to teaching it is hard to conceptualize.

(3) School psychologists rank <u>verbal skills</u> as re-ceiving primary attention in time and kindergarten teachers feel its role is secondary; yet is ranked third by both groups in their perceptions as to how time is spent in kindergarten. Actually, all differences should be regarded as minor; over-all agreement is still at high levels.

<u>Survey Section III: Results</u>. The third section of the survey added the dimension of the judgment of the rela-tive importance of a series of factors as bases for admission. The question asked and the directions given follow;

> What do you feel is the relative importance of the following in consideration for admission to kinder-garten? Rank 1 as the most important to 5 as the least important. (Factors to be ranked included mental age, soial maturity, chronological age, emotional maturity and physical maturity.)

The results are presented in Table 8. The Contingency Coefficients within and between the groups is high. The C. for the kindergarten teachers was .73, for the school psychologists was .72 and for the combined groups was .70.

The actual rankings are interesting from several van-tage points. The mean rankings as noted by the true diff-erence ranks are within one mean difference and suggest that the top three rankings of both groups are a cluster of rankings. Further, <u>mental age</u> is chosen over <u>social</u>

TABLE 8

SURVEY SECTION III: JUDGMENTS REGARDING THE RELATIVE

IMPORTANCE OF ADMISSION FACTORS

Rank	Kindergarten teachers	School psychologists
1	mental age (175)	emotional maturity (200)
2	social maturity (184)	mental age (204)
3	emotional maturity (276)	social maturity (266)
4	physical maturity (391)	physical maturity (381)
5	chronological age (473)	chronological age (444)

maturity (supposedly the goal of kindergarten) by both

groups.

Kindergarten teachers rank mental age and social

maturity very high with emotional maturity somewhat lower.

School psychologists rank both emotional maturity and

mental age very high with social maturity somewhat lower.

Again, the high priority given emotional maturity by

school psychologists is emphasized.

Chronological age was ranked last and of least

importance as an admission factor by both groups. Physi-

cal maturity also receives a low (fourth place) rank, i.e.,

is perceived as having relatively low significance as a

factor when admission to kindergarten is considered.

Survey Section III: Discussion. In the differential

ranking of the relative importance of admission factors,

both the results and the comments of the respondents hint
that the kindergarten situation is apparently regarded as
somewhat broader than a social experience. Several of the
respondents noted that mental age is becoming increasingly
inclusive as a concept and very important. Many of the
comments in this section were in regards to chronological
age and physical maturity Mainly, the respondents stated
their opposition to the use of these factors in considering
the admission of pupils to kindergarten.

Survey Section III: Summary. With respect to the
judgments of kindergarten teachers and school psychologists
regarding the relative importance of admission factors and
based on results obtained from Section III of the survey,
it may be concluded that:

(1) There is high agreement between kindergarten
teachers and school psychologists as to the relative
importance of admission factors.

(2) There is a suggestion that both groups are not
strict adherents to kindergarten as a social experience.
Mental age was ranked as the most important consideration
by the groups combined for admission. Again, school
psychologists underscore the importance of emotional
maturity (ranked 4 true difference points higher than
mental age).

(3) Both groups rank chronological age and physical
maturity as least important in admission considerations.

Survey Section IV: Results. In the fourth section

of the School Readiness Survey, an attempt was made to

understand more about what the task of the kindergarten is

seen as -- what is the relative importance of certain atti-

tudes and activities which the child is seen as needing in

the kindergarten. The question asked and directions given

follow:

> What is the relative importance of these skills or
> activities for success for kindergarten children? Rank
> 1 as the most important, to 10 as the least important.
> (Skills and activities to be ranked include; works
> with a group, works independently, cares for his per-
> son, verbalizes readily, tolerates situations, listens
> to directions, coordination, intellectual curiosity,
> general knowledge and memorizes readily.)

Table 9 documents the results of this question. The Con-

tingency Coefficients for these rankings are most reveal-

ing; kindergarten teachers, a C. of .81, school psycho-

logists a C. of .78 and the C. for the combined groups is

.50. Only moderate agreement is seen between the groups,

i.e., when they were combined. The kindergarten teacherss,

among themselves, and the school psychologists, among them-

selves are in high agreement. In fact, the highest coeffi-

cients of the entire survey are in this section. And there

are significant differences in the judgments of teachers

and psychologists. Further, this section elicited the

greatest number of comments from the respondents which also

might suggest critical differences.

The examination of these rankings and their true

differences ranks indicate clusters or groups of activities.

TABLE 9

SURVEY SECTION IV: JUDGMENTS REGARDING THE RELATIVE

IMPORTANCE OF ACTIVITIES AND ATTITUDES

Rank	Kindergarten teachers	School psychologists
1	listens to directions (158)	intellectual curiosity (289)
2	works with a group (276)	tolerates situations (350)
3	works independently (321)	verbalizes readily (393)
4	cares for his person (380)	works with a group (446)
5	verbalizes readily (578)	general knowledge (500)
6	tolerates situations (585)	listes to directions (576)
7	coordination (618)	works independently (600)
8	intellectual curiosity(797)	coordination (626)
9	general knowledge (832)	cares for his person (851)
10	memorizes readily (949)	memorizes readily (946)

The kindergarten teachers rank four activities as of
primary importance for success in kindergarten. These four
are; listens to directions as a high first, second is works
with a group, works independently is ranked third and fourth
is cares for his person.

Listens to directions is given a very high first
position with a mean ranking of 1.5. Another activity in
this cluster of primary importance is works with a group
and following closely, works independently. Cares for his

person was ranked fourth and speaks to the amount of time spent in kindergarten in the various personal activities.

A secondary group of activities ranked by kindergarten teachers as important for success in kindergarten includes three activities. Given moderate recognition in the fifth ranking is verbalizes readily. Ranked as sixth in this cluster of secondary activities was tolerates situations. Coordination is ranked as seventh and last in this cluster.

Activity areas given minimal recognition include a group of three activities or attitudes. Intellectual curiosity was ranked as eighth. General knoweldge was ranked ninth and memorization was ranked tenth and last.

The rankings of the school psychologists are not as widely distributed as those of the kindergarten teachers. The top six rankings of the school psychologists as indicated by the true mean differences fall within three rankings (between the second and the fifth) of the kindergarten teachers. In short, their attitudes towards these activities appear to be more general in terms of their rankings.

In this group of six primary activities, intellectual curiosity was ranked first. Tolerates situations was ranked second and verbalizes readily was ranked third. Ranked as fourth in the list of primary activities was works with a group. General knowledge was ranked as fifth and listens to directions sixth.

Receiving secondary recognition by the school psych-

ologists was seventh-ranked <u>works independently</u> and

<u>coordination</u> was eighth. Minimal recognition was given

<u>cares for his person</u> which was ranked ninth and <u>memorizes</u>

<u>readily</u> which was ranked tenth.

<u>Survey Section IV: Discussion.</u> This section elicited

more comment from the respondents than the other sections

did. Many of the comments are quite revealing and perti-

nent to a discussion of the rankings.

In regards to the kindergarten teacher's ranking of

<u>listens to directions</u> as first, several teachers noted that

listening appeared to be an almost-forgotten skill or acti-

vity. Others noted that it was a prerequisite to many

other kindergarten activities. School psychologists, who

ranked this activity sixth, noted that this activity might

be more important later in school than in kindergarten. A

few also noted that <u>listening to directions</u> appeared to be

an attention span factor or that it could be assessed by

attention span factors on psychological tests. School

psychologists also noted that this might be more of a moti-

vational matter whereas kindergarten teachers appear to be

responding to this activity in terms of relationships to

direction and authority -- certainly a needed skill for a

child if he is to do well in the tasks required in kinder-

garten.

It also appears that works with a <u>group</u> and <u>works</u>

<u>independently</u>, ranked second and third by kindergarten

teachers, were taken to mean a conforming to authority by the kindergarten teachers. Several noted that this meant "working quietly without bothering others". Others noted that this might well be considered the primary goal of kindergarten and that subsequent grades and learning experiences would be easier if this goal were readily realized. A few teachers commented to the effect that kindergartens tend to be as large as other classrooms in terms of numbers of pupils and that because of this fact, it is regarded as quite mandatory that children are able to work with a group, to get along with others, to share attention of the teacher and become perceptive to the fact that they belong to a group and must subserviate their needs and identity to this group.

School psychologists appeared to see these activities which they ranked as fourth (works with a group) and seventh (works independently)somewhat differently. Their comments were of two kinds. First, their comments were to the effect that if pupils were responding to the group situation without being forced to do so, this was surely indicative of social maturity. Some school psychologists appeared to see this working with a group as a cooperative and voluntary participation on the part of the pupil. Quite in contrast, other school psychologists viewed these activities as implying attention and conformity to the direction of the activity of the kindergarten classroom and the teacher.

They viewed these activities in a "work" frame of reference
suggesting that completion of an assigned task independently
without undue support or attention from the teacher while
other pupils are working. The critical element of the
latter viewpoint was the required participation in a work
assignment.

Cares for his person.also drew many comments from the
kindergarten teachers and their ranking this activity as
fourth speaks to the amount of time they see themselves as
spending in the personal care of their pupils. They alluded
to the time-consuming tasks of assisting with dressing,
cleanliness, and such "times" in kindergarten as "rest time"
"snack time" and "bathroom recess". The school psychologists
ranked this activity a low ninth and their lack of comment
to this activity probably speaks to the fact that this
activity is somewhat outside the realm of experience of
the school psychologist.

Three activities -- intellectual curiosity, verbalizes
readily and general knowledge were ranked high (first, third
and fifth respectively) by the school psychologists who
also commented extensively regarding these activities.
These skills or attitudes were frequently noted as the goals
of kindergarten and involve the best content for all acti-
ties. The respect and desire for learning were also noted
as quite dependent on the development of these three acti-
vities. The school psychologists tended to be rather

excited about these activities and indicated concern with the lack of interest in these activities in many kindergartens. Several school psychologists commented regarding the creativity aspects of mental development and suggested that facility in thinking up questions might serve as a "creativity index". Others noted that the inquiring mind has become the every-day concern of the psychologist who confronts pupils singly. School psychologists, in commenting on the importance of verbalizes readily underscored the importance of the ability to communicate and that psychological testing relied heavily on verbal facility, even at the five year level. Such comments by the psychologists tends to corroborate others expressed in the testing literature and discussions of intelligence regarding the importance of the verbal factor and a general mental factor as viewed by psychologists.[3] Intellectual curiosity was also noted as implying a high level of interst and motivation towards learning in the child which would be regarded as indicative of school success for the child.

Kindergarten teachers commented negatively to these activities and ranked them considerably lower (fifth, eighth, and ninth). Several noted that kindergarten teachers did not have time to handle spontaneous and extraneous questions. Several also noted that kindergarten teachers regard the development of verbalization and general knowledge as first grade objectives. Others noted that there

[3] Nancy Bayley, "On the Growth of Intelligence", American Psychologist X (1955), p. 805.

were few activities geared to developing these activities
in the present kindergarten program. The fact was alluded
to the effect that the teacher is confronted with the child-
ren in a group and with the class as an audience and that
this leads her to be unlikely to appreciate the ability
of individual children to focus on more questions and prob-
lems. Kindergarten teachers noted that verbalization
abilities were highly over-rated by parents and generally
over-emphasized. Both kindergarten teachers and school
psychologists added that general knowledge might be an un-
fair activity to culturally disadvantaged children if it
were competitive.

As was noted in previous sections, tolerates situa-
tions was regarded as emotionally-toned by school psycho-
logists, who ranked it second and have consistently scored
the emotional factor high in importance. The school psych-
ologists commented that this activity or attitude suggested
that pupils were responsive and accepting of the stresses
and involvements of the classroom and that they were using
the attitudes of tolerating situations as highly indicative
of personal and developmental maturity. Kindergarten teachers
commented very little on tolerates situations, and as on
previous occasions, de-emphasize emotionally-toned activi-
ties. Kindergarten teachers seem to be uncomfortable with
emotionally-toned references to development and maturity.

Coordination was ranked comparably by the kindergarten

teachers (who ranked it seventh) and the school psychologists
(who ranked it eighth). Many of the kindergarten teachers
commented to the effect that "either you have it or you
don't . . . it can hardly be taught". In the literature,
the development of the skills involving coordination and
perception are important and seem to be given considerably
more prominence in the kindergarten program.[4] School psych-
ologists commented that it was important to screen for
perceptual deficits in children but also ranked it low.
Several mentioned that the development of coordination was
not crucial until first grade.

Memorizes readily received considerable comment from
both groups and was ranked tenth and last by both groups.
Most of the comments were to the effect that memorization
was greatly over-emphasized. Several school psychologists
noted that of all the activities listed, it was the least
related to intelligence. Current kindergarten practice,
as suggested by the literature, assigns to memorization a
rather prominent role in the list of activities; certainly
greater than that accorded it by this survey.[5] One wonders
whether the role assigned to memorization in this survey
represents an ideal rather than an actual appraisal. Sev-
eral kindergarten teachers alluded to the idea that memo-
rization sounded too much like academically-oriented activi-
ties and, as such, less importat in kindergarten.

[4] Hildreth, op. cit., Chapter III.

[5] Hildreth, op. cit., Chapter IV.

In conclusion, mention is made of several indications. All of the activities which were rated as primary by kindergarten teachers are non-verbal and tend to be conforming kinds of activities. Even the comments of <u>works with a group</u> referred to non-social situations. In saying that verbally-involved skills and activities are minimal to success in kindergarten further underscores their listing of primary activities, i.e., the listening skills and the like. It would surely seem that kindergarten teachers regard verbal activities as quite incompatible with the listening and working activities which they rank as primary.

The school psychologists noted generally that several of the listed activities and skills overlapped. They noted that <u>works independently</u> might be taken to mean the ability to carry out a task and that emotional maturity was involved as well. They also noted that the ability of ready verbalization was also indicative of this understanding of a situation, which in turn was indicative of emotional maturity. Several school psychologists noted that they referred to activities specifically as taught by teachers and learned by pupils which apparently caused them to rank the activities as they did.

<u>Survey Section IV: Summary</u>. With respect to the judgments regarding the relative importance of kindergarten activities, it may be concluded that:

(1) In the ranking of kindergarten activities by kinder-

garten teachers, primary importance is attached to listening, conforming, and non-social activities.

(2) In the ranking of kindergarten activities by school psychologists, primary importance is attached to verbal, intellectual and social activities.

(3) Kindergarten teachers are highly agreed among themselves as to the relative importance of skills and activities. School psychologists are also highly agreed as a group. Agreement between the two groups is moderate.

(4) The conflict in attitudes towards kindergarten activities suggests that school readiness is viewed according to different criteria in regards to what is expected of the child in kindergarten by these two groups.

Survey Section V: Results. The final section of the survey attempted to assess the kindergarten situation in terms of a four-way experience categorization. The question and directions follow:

> Which of these experiences of the kindergarten child do you feel are the most useful for school success? Rank 1 as the most useful to 4 as the least useful. (Experiences to be ranked include: experience with peers, teacher, objects and verbal symbols.)

Both within and between the groups, the Contingency Coefficients are moderate: kindergarten teachers, a C. of .60, school psychologists, a C. of .59, and the groups combined, a C. of .45. The results are presented in Table 10. The results of this section can hardly be considered conclusive because of the low Contingency Coefficients.

TABLE 10

SURVEY SECTION V: JUDGMENTS REGARDING THE RELATIVE

IMPORTANCE OF EXPERIENCES

Rank	Kindergarten teachers	School psychologists
	Experience with:	Experience with:
1	peers (138)	verbal symbols (165)
2	teacher (200)	peers (233)
3	objects (323)	teacher (272)
4	verbal symbols (335)	objects (329)

The rankings of the kindergarten teachers are commensorate with previous survey results. Experience with peers is ranked first. In this somewhat more theoretical approach, the social goals and aspects of kindergarten are called forth. Experience with teachers was ranked second and the importance of the teacher in guiding the pupils is probably what is implied. The third-ranked experience with objects and the fourth-ranked experience with verbal symbols are close with mean rankings of 3.2 and 3.3. These results are also consistent with their tendency to down-grade verbalization and academic activities in kindergarten.

In marked contrast, the school psychologists rank experiences with verbal symbols first. As they have done throughout this survey, verbal factors have been regarded

as having primary importance in kindergarten experiences. Experience with peers was ranked second by school psychologists and almost a full mean ranking below that assigned it by the kindergarten teachers. Ranked as least important by school psychologists were experiences with teacher as third and experiences with objects as fourth.

Survey Section V: Discussion. The comments on the last section were quite typical of previous remarks. School psychologists again reiterated the importance of verbal symbols and experiences. Kindergarten teachers again commented adversely concerning verbal development in kindergarten. Kindergarten teachers underscored the role of the teacher as the director and guide to learning and activities. They made frequent references to teacher-involvement in all phases of kindergarten experience. The kindergarten teachers referred to the amount of time and the intensity of the teacher-pupil relationship or experience as most critical for success in kindergarten. Their comments were often of the "teacher makes the kindergarten experience" variety.

School psychologists made reference to the importance of peer interaction as being a primary function of kindergarten. In this respect, they noted that the role of the teacher was regarded as more limited. Experience with peers was ranked first by the kindergarten teachers and almost a full mean ranking above that assigned it by the school psychologists. However, the comments made by kindergarten

teachers again suggest that they view the experience as conforming to teacher-directed group activities. On the other hand, comments made by school psychologists suggest that they view experience in a peer social interaction manner. It is in this fashion that the school psychologist's regard for the teacher as the director or guide of kindergarten experiences is not held to be as significant as it was by the kindergarten teachers.

The example of underline experience with objects suggested learning tools such as crayons and toys. As such, it may have struck a responsive note of the academic skills variety which caused lower rating by both groups. However, both groups apparently hold the value of these kinds of objects as relatively unimportant. Many of the respondents noted that the activity involved with the object would determine its importance. Several kindergarten teachers noted that there were too many play objects in kindergarten classrooms and that these kinds of objects were frequently distracting to the pupils and deterrants to other experiences and activities.

Survey Section V: Summary. With respect to the judgments regarding the relative importance of kindergarten experiences, it may be concluded that:

(1) This particular frame of reference appears to be less meaningful than the others used in the survey as suggested by the low and moderate correlations.

(2) The kindergarten teachers reiterated their stand to the effect that social conformity is the most important experience and that verbalization experiences are the least important experiences in kindergarten.

(3) The school psychologists underscore previous findings in their persistant attitude that verbal experiences are the most important of the kindergarten experiences.

Chapter Summary. In conclusion to this chapter, the contrasting images of the kindergarten child as viewed by the kindergarten teachers and school psychologists will be constructed on the bases of responses and comments to the survey.

As viewed by the kindergarten teachers, the ideal kindergarten child is a passive, listening child who cultivates conformity to classroom activities and teacher direction. His personal maturity is represented by his ability to take care of himself and work by himself at whatever tasks are asked of him. The child is the recipient of learning from the teacher and the group. He is secondarily involved in the learning process. What he may know, or how well he can express himself, are considered less important. (Abilities in thinking up questions or in memorization are regarded in poor judgment.) The kindergarten is regarded as a social experience but it is a limited, directed and conforming situation which demands personal self control and maturity.

The image of the ideal kindergarten child, as viewed by the school psychologist suggests an active, verbally involved

child. The verbal facility is emphasized to the extent that he is encouraged to think up questions and verbalize experiences. Social experiences tend to be open and less controlled with the teacher farther in the background. Mental facility and an inquiring mind are held in high regard and the child is actively involved in both learning and experiences. Personal maturity is expressed mainly in terms of the ability to tolerate situations. There is less emphasis on conformity and more on sharing and social interaction. There is less teacher, object, or activity control. There seems to be a give-and-take social atmosphere wherein the child is allowed to seek and experience rather than be controlled and directed. From the pupil's standpoint, the atmosphere is considerably more verbal and pupil involved.

The implications of these conflicts and contrasts between kindergarten teachers and school psychologists will be evaluated against the questions and hypotheses which have been set forth. Their significance will be weighed against rather specific school readiness criteria which will be summarized in the next chapter.

CHAPTER V

CONCLUSIONS AND IMPLICATIONS

Five topics are considered in this final chapter.
First, the general conclusions based on the School Readi-
ness Survey are reviewed. These conclusions are drawn
from the five sections of the survey and show both simi-
larities and differences among and between kindergarten
teacher and school psychologist groups. Following this,
the social implications of the findings are discussed.
Particular emphasisis placed on the role of activities --
the similarities and differences of opinions about acti-
vities held by school psychologists and kindergarten
teachers as noted in the survey results as well as in the
comments made on the survey. The problem of assessing
school readiness is reconsidered in light of the implica-
tions of the survey. In the summary of this chapter,
several implications for further research are presented.

General Conclusions Based on the School Readiness
Survey. These results are based on the survey which was
given to a national population of kindergarten teachers
and school psychologists. The survey consisted of five
sections and each section will be briefly discussed as to
both similarities and differences in ratings made among
and between kindergarten teacher and school psychologist
groups.

In terms of the differences of opinion on four major

school readiness issues which were examined in Section I,
there is general agreement of the combined groups of
respondents on only one issue, namely that chronological
age is not a satisfactory criterion for the admission of
kindergarten pupils. On the second issue, early admissions
research, school psychologists are agreed that the research
favors the early admission of intellectually advanced
pupils whereas kindergarten teachers are undecided. The
third issue is concerned with a differential admission to
kindergarten based on sex. Kindergarten teachers favor
the earlier admission of girls whereas school psychologists
are undecided on the issue. On the fourth and final issue
considered in Section I, the adequacy of school readiness
measures, school psychologists feel that adequate measures
are available but the kindergarten teachers are undecided.
In the main, differences of opinion between the groups on
the four issues appear to be greater than the similarities.
School psychologists feel that the research resalts regard-
ing early school admissions as well as actual school readi-
ness measures are valid and favorable. On the other hand,
kindergarten teachers favor an earlier admission to kinder-
garten for girls whereas school psychologists are undecided
on the issue.

In Section II of the School Readiness Survey, there
was more pronounced agreement between the kindergarten
teachers and school psychologists. Both groups were asked

to consider how time is actually spent in the kindergarten during the school day. Both groups agreed that the development of social skills or maturity takes the most time. Both groups agreed that relatively little time is spent on academic work in kindergarten.[1]

In Section III, the respondents were asked to shift their frame of reference to the individual child and to a hypothetical situation. They were asked to judge the qualifications of the "ready" child in terms of the relative importance of a series of factors necessary for school admission.[2] In this frame of reference, the social factor[3]

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[1] See page 43 for a complete breakdown of this section.

[2] See page 44 for a complete breakdown of this section.

[3] In the construction of the School Readiness Survey, the writer failed to recognize clearly all of the ramifications regarding the term social and consequently, the reference to social factors and activities are less precise than desirable. However, itappeared to the writer that kindergarten teachers were using quite a different frame of reference than were the school psychologists. This was noted after a careful examination of the comments relative to Section IV. All examples of kindergarten teachers to the socialization process referred to the pupil's conforming and adapting to teacher-oriented classroom activities. In contrast, all examples noted by school psychologists referred to the socialization process in terms of peer interaction in independent play activities of an unsupervised nature such as on the playground, during recess, or at "free play". On this basis, at least in part, it has been assumed that kindergarten teachers and school psychologists are very much in disagreement regarding both the use of the term "social" as well as the purpose and function of the socializing process in kindergarten.

To the reader, then, it should be understood that information relating to the usage of the term "social" may, at times during this chapter, be dependent on sources other than the direct results of the School Readiness Survey.

is regarded as only moderately important by both kinder-
garten teachers and school psychologists. The kindergarten
teachers ranked the mental factor as more important and the
school psychologists ranked both the mental and the emot-
ional factors as more important than the social factor. It
is interesting to note that when both groups were asked to
report how time was actually spent in kindergarten, social
activity was rated as the most important factor but on a
question related to the importance of factors determing
admission qualifications, it was regarded as somewhat less
important.

Section IV of the School Readiness Survey probed the
relative importance of a series of activities and attitudes
for success in the kindergarten classroom as judged by
kindergarten teachers and school psychologists. Little
agreement is seen between these groups in attitudes and
concepts which concern school readiness in terms of the
individual kindergarten child in this section. Kindergar-
ten teachers regard listening to directions of the teacher,
the ability to work in a group or independently and to
care for his person as the major activities and attitudes
which contribute to the success of a kindergarten child.
School psychologists regard intellectual curiosity, tol-
erance of situations, ready verbalization, ability to work
with a group and general knowledge as important kindergarten
attitudes and activities. Neither the kindergarten teachers

nor the school psychologists regard memory skills or the development of coordination as primary activities of the kindergarten. School psychologists rate ready verbalization somewhat higher than do kindergarten teachers and give intellectual curiosity and general knowledge much higher rankings than do the kindergarten teachers.[4]

Kindergarten teachers and school psychologists were asked to rate the relative importance of a series of kindergarten experiences in terms of school success in Section V of the School Readiness Survey. It is in this section of the survey that the differences in thinking become clearest. Of the four areas in which the relative importance of school experiences are rated, school psychologists choose verbal symbolsas most important and kindergarten teachers rate these as least important. The rank importance of the three remaining experience areas -- peers, teachers, and objects is the same for both groups. However, the kindergarten teachers feel that these three kinds of experiences tend to be relatively more important than verbal experience.[5]

In conclusion, it can be seen that there are some major agreements and disagreements between kindergarten teachers and school psychologists. In Section I, the two groups agree that chronological age is not a satisfactory criterion for kindergarten admission. However, the two

[4] See page 45 for a complete breakdown of this section.

[5] See page 46 for a complete breaddown of this section.

groups are not agreed as to what considerations should go into early admissions. In Section II, it is noted that both groups agree that social skills take the most time in kindergarten classrooms and that relatively little time is spent on academic work. In Section III, kindergarten teachers and school psychologists agree that mental age, emotional maturity, and social maturity are important factors to consider when a child is being admitted to kindergarten. Both groups also agree that chronological age and physical maturity are the least important factors. In Section IV, listening to directions and the ability to work independently or with a group are regarded as most important by kindergarten teachers while the school psychologists regard intellectual curiosity, ready verbalization and general knowledge as most important. Section V also reveals a rather striking difference between the two groups. They were asked to make judgments regarding the relative importance of certain experiences for the kindergarten child. School psychologists rate experience with verbal symbols as the highest as before, while kindergarten teachers rate this kind of experience lowest.

Social Implications and Discussion. As was noted earlier, one of the terms which has been used repeatedly and has become very much involved in this study is the term "social". The dictionary specifies it as a ". . . tendency to form cooperative and interdependent relationships . . .

the interaction of the individual and the group."6   The

writer has been concerned about the meaning of this word

throughout this study.   In the development of the survey

instrument as well as in earlier discussion with kinder-

garten teachers and school psychologists, he realized some

confusion and became quite aware of the problem when he

read the comments that accompanied the survey.   As a re-

sult of this, he has concluded that the term often means

quite different things to kindergarten teachers and

school psychologists.

It has been stated previously that kindergarten

teachers appear to generally use the term "social" to mean

conforming behaviors to teacher-directed group activities,

i.e., they refer to this as a socialization process and

this accounts for the group activities which are so greatly

emphasized in the kindergarten literature.   The extent to

which kindergarten practice is preoccupied with these acti-

vities is indicated by Hildreth who suggests that adjustment

of individual pupils should be defined in terms of conform-

ity to the socialization process and that children must be-

come adjusted to the group.   This view suggests that it is

expected that changes or modifications of behavior will be

made from without the child rather than that these will come

autonomously from within.   It would appear then, that to

the kindergarten teacher, the socialization process may

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6 Webster's Collegiate Dictionary, 7th edition.

often mean conforming to behavior standards and activities

which are, for the most part, set and determined by the

teacher herself and then incorporated into the child's

behavior. This can be taken to mean that teaching listen-

ing skills, seatwork and group games would be seen as

developing social maturity in children. Social maturity

is then interpreted as having learned conforming behavioral

patterns rather than learning to behave independently.

In contrast, it is the writer's impression (gained

from his evaluation of the comments of school psychologists

to the survey) that school psychologists are more concerned

with "creative becoming". For these psychologists, the

critical element seems to be that the behavior comes more

directly from the child (a kind of self control) rather

than imposed standards from without. Social maturity is

marked by the <u>internalization</u> of behavioral expectancies.

This is also the frame of reference in which mental health

theorists generally use the term. It may be noted that

such terms as "adequate perception of reality", "openness

to experience", and "integrative" behaviors imply a recog-

nition of the social standards of behavior. And in turn,

social experience would foster growth toward maturity,

self actualization, and other behaviors indicative of

personal and social maturity.

School psychologists seem to be aware of the use of

the term social as a "socializing"effort to control and

have turned instead to the term "emotional maturity" in
their reference to a developmental type of maturity. It
will be recalled that in Section II of the School Readi-
ness Survey, both kindergarten teachers and school psych-
ologists indicated that social activities took the most
time in kindergarten. However, in Sections III and IV, as
the reference to hypothetical kindergarten situations was
called for, school psychologists indicated that emotional
maturity was more important. Particularly in the comments
of school psychologists, repeated references are made to a
child's ability to tolerate, to adapt and to adjust to the
direction of the teacher and to conform to the activities
of the group. These experiences appear to demand greater
emotional maturity than what is usually referred to by
school psychologists as social maturity. School psycho-
logists, by their comments, tend to agree with the Webster
definition of social and by it refer to individual and
group interaction and this kind of social experience is,
of course, still regarded as moderately important. But
the greater significance for the kindergarten child, accord-
ing to the school psychologists, is with emotional maturity
and emotional experiences. As will be noted later, this
frame of reference appears to have greater validity in terms
of school readiness assessments as well.

It has already been noted that the generally accepted
philosophical viewpoint of kindergarten literature is that

the experience for the child is to be primarily social.
At least at a verbal level, kindergarten teachers appear
to believe that the activities into which pupils are dir-
ected have social experience goals. In practice, however,
it might be said that kindergartens have departed markedly
from the theory of Froebel. Kindergartens are obviously
entitled to changes in either theory or practice if indi-
cated. However, it would cause much less confusion if
this shift of emphasis were recognized as well as the fact
that different people define the terms differently. How-
ever, as is also noted by a careful examination of the
literature, American kindergartens have become involved
with teacher-directed activities and less involved with
peer social interaction and the use of independent play and
discovery methods as suggested by Froebel.[7]

This difference and conflict in meaning between
kindergarten teachers and school psychologists is particu-
larly important in this context of school readiness. Kin-

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[7] The word play has, to some extent, come under the
same confusion. Webster refers to play as ". . . the
spontaneous activity of children . . . to move aimlessly
about . . . as involving free or unimpeded motion". Even
the term "free play" of kindergarten in which children
are permitted to choose a particular activity hardly meets
this definition. However, Froebel's statements regarding
kindergarten play agree rather precisely with Webster.
His kindergarten involves the kind of play in which
children would be permitted to develop and discover quite
independently, or cooperatively with peers, with little
direction from the teacher. Such also appears to be the
reference of mental health theorists in their quest for
intra-personal maturity through inter-personal experiences.

dergarten teachers appear to want quiet, listening, con-
forming children (the results of the socializing process)
whereas school psychologists tend to regard children as
mature and developing in positive ways if they perceive
situations and can objectify and understand the reality
of the social scene (the outcomes of social experience
according to the school psychologists). These differences
in the interpretation of the meaning of social maturity
can, of course, mean that the child is judged as ready for
school by one standard (the school psychologist's) and
after he gets there, is held accountable to quite a
different standard (the kindergarten teacher's).

The Role of Activities. In examining the values held
by those professional workers closely involved with kinder-
gartens, it can be seen that kindergarten teachers place
an emphasis on activities. Historically, these seem to
have come out of Freobel's early efforts. However, accord-
ing to Froebel's kindergarten theories, activities should
represent an attempt to foster the natural play aspects of
children and thus to provide greater opportunity for social
growth and experience. The activities which were intro-
duced to the children had no particular didactic value.
They were intended to be enriching experiences. The role
of the kindergarten teacher was simply to present the
activities and then remove herself from the situation to
permit self-discovery and social interaction to take place.

Currently, in American kindergartens, the situation appears to be different. The role of the kindergarten teacher seems often to be that of the presenter, the director and the enforcer of activities which have become, in effect, the objectives of kindergarten. These activities are viewed by kindergarten teachers as social learning experiences and children are required to participate. Whether the activity is listening to a story read by the teacher, playing a group game, singing as a group, or participating in an art project, it appears that successful conforming and achieving in the given activity is the objective.

Kindergarten teachers apparently fail to recognize the control that they exercise and the academic orientation implied when they use activities in these ways. It may be recalled that Hildreth spoke of the rigidity and repressive atmosphere of the grades and that she intended the kindergartens were not to be like this. She went on to say that the academic subjects in elementary school were introduced in an atmosphere which was not condusive to best growth and learning in children. Yet, her book recommended and kindergarten teachers appear to have used activities much the way academic requirements in the grades have been used and seem to require much the same kind of conforming and repressive patterns in their classrooms as do other elementary teachers.

School psychologists appear to recognize the role
assigned to activities by kindergarten teachers and thus
view the kindergarten as somewhat more controlling and
more academically oriented than do the kindergarten teach-
ers. In an ideal or hypothetical situation, they regard
the development of verbal abilities through verbal sharing
and telling of experiences as important. They seem to
realize that the development of intellectual curiosity
and verbal facility calls for a considerable de-emphasis
of the typical kinds of kindergarten activities. In con-
trast, the kindergarten teachers regard the development of
verbal facility and intellectual curiosity as distinctly
minor objectives.

However, the perception of the school psychologists
as to the role that teacher-directed activities should play
in the classroom differs markedly from the views of kinder-
garten teachers. The school psychologist seems to be pri-
marily concerned with the individual child and in helping
him develop intellectual and emotional independence. School
psychologists apparently recognize that kindergartens actu-
ally place heavy emphasis on this socializing process as
achieved through teacher-directed activities. However,
school psychologists do not consider this, or at least the
way it is done, as an ideal condition. They make it rather
clear to them, that a major goal of the kindergarten exper-
ience (beyond development of emotional maturity) is the

intellectual and verbal abilities of the child.

Assessing School Readiness. The results of this sur-
vey indicate that the assessment of school readiness is no
simple matter. The rather decisive rejection of chronolo-
gical age as an appropriate entrance criterion puts both
kindergarten teachers and school psychologists on record
as believing in a flexible approach to admitting children
to kindergarten. This finding suggests that our concern
is not only with the early admission of mentally advanced
children but also with the delayed entrance of mentally
slow children as well as with a staggered admission of
children according to their readiness for school tasks.

In speaking of kindergartens generally and referring
back to questions regarding the kindergarten teacher's
description of a "ready" child, we may now proceed to put
together some impressions.

The kindergarten teacher's frame of reference against
which school readiness is discussed is in terms of a
developmental maturity. This mature child is able to
accept direction and conformity from the teacher and the
group. He is a good listener and can work independently
as a member of a group to which a task has been assigned.
He is not particularly aggressive or verbally responsive.
The image is one of rather receptive, passive learners who
are alertly awaiting the teacher's orders so they can be
obediently carried out. Kindergarten teachers feel that

this demands at least average intelligence (several noted
this in the comments sections) but more frequently refer
to a child's readiness in terms of what they call maturity.
Their problem children are invariably referred to as "im-
mature". Sometimes, they are the youngest members of the
class. In other instances, they are the children who can-
not curb their aggressions, who talk too much, who are not
personally responsable for their clothing and care or who
fail to carry out assignments. The "ready" child is re-
cognized by the kindergarten teachers as the mature, con-
forming, listening child.

The school psychologist's image of the "ready" child
is quite in contrast to that of the kindergarten teacher.
As was noted previously, the school psychologists want a
high level of verbal facility. They are most impressed
with a child's ability to verbalize concerning his school
experiences. They seek an expression of intellectual cur-
iosity and active excitement about learning.

Another facet of the school psychologist's image of
the "ready" child amounts to a mental health appraisal.
The school psychologist is far more impressed with a child's
understanding, perceiving and tolerating than he is with
simple conforming and following. These characteristics
are more typically a part of emotional maturity as viewed
clinically than they are of social maturity in inter-
personal relationships.

At this point, as school readiness is more specific-
ally noted, mention must be made to the specifics of a
local kindergarten situation, i.e., will the child read
in kindergarten, etc.? Reference should also be made to
the regard for individual children with unique problems
such as the verbally shy and unresponsive child, the child
with speech deficiencies, the hyperactive child, etc. as
to the school's willingness to accept and work with these
children.

As assessment procedures are noted in terms of the
results of the School Readiness Survey as well as the
added comments of the respondents, which in this regard
were rather extensive, it is seen that the testing stan-
dards of the "ready" child consist of two facets. The
first is gained through a basic clinical measure of intell-
igence which is already highly verbal at the five year
level. The second facet is impressions of emotional
maturity gained from reactions to stress and authority in
the testing situation, understandings and insights, and
general response and maturity in accepting a new situation.
This latter facet may be tapped by projective drawings
which show levels of conceptualization or organization.
Emotional maturity may also be evaluated by impressions of
this kind of maturity. Most of the comments in the survey
regarding social maturity indicated that this was the most
difficult area to assess. Several respondents noted the

inadequacies of psychometric instruments in this area.
Other than the Vineland Social Maturity Scale (which was
frequently referred to as unsuitable for school readiness
purposes) there is no psychological testing instrument
which even suggests that it measures social maturity.
School psychologists are actually without an assessment
tool or technique for determining a level of social matu-
rity. Typically, it is generally alluded to in an assess-
ment study as part of general maturity or else ignored.

The school psychologist's frame of reference towards
school readiness represents this same dual-faceted approach.
Both Sections III and IV of the School Readiness Survey
give credence to the importance of the mental and the
verbal factor in school readiness. Adn much of the research
in regards to early school admissions as well suggests that
some indication of mental age or level of intelligence is
advisable. However, the usual clinical measures of intell-
igence present complications with such pupils as the verbal-
ly resistive child and the socio-economically deprived child.
In this respect, some school psychologists are reluctant to
use the traditional Binet Scale. It is in this area that
the second facet becomes involved. Again, Sections III and
IV underscored the importance of the emotional factor. The
current trend towards the "gestalt" tests suggests that its
proponents feel that it gives a more realistic appraisal of
development and maturity (including emotional) than the more

traditional measures. There is good research evidence to support this impression. School psychologists have insisted that a developmental measure is appropriate in adequately assessing school readiness.

As to agreement between school psychologists and kindergarten teachers regarding the intelligence factor in school readiness, its similarity with general development suggests basically high agreement. Activities which kindergarten teachers ask of children can be carried out reasonably well if average intelligence is present. In many cases, the dull and slow student becomes obvious to the kindergarten teacher after a short time in kindergarten as he does to the school psychologist in a preschool testing session.

As was noted previously, school psychologists tend to assess this general maturity as emotional maturity. Judging from responses and comments in the survey, kindergarten teachers and school psychologists seem to be talking about comparable behaviors when maturity is mentioned even though their approaches to terminology differ. To the school psychologist, the emotionally mature child tolerates situations and adapts readily because he has the understandings and insights regarding expectancies and the maturity to achieve these expectancies. At this point, there is probably no disagreement with the kindergarten teacher as to the expectancies of the child. They want conformity and the ability in the child to listen and follow directions although they may not be concerned with the child's insights and under-

standings. However, the kindergarten teachers tend to refer to the conforming process as either simply maturity or the socialization process. The school psychologist would not be directly concerned with the teaching process involved but would be calling the maturing process and the apparent conformity an internal emotional maturity.

In summary to assessing school readiness, kindergarten teachers and school psychologists appear to be in moderate agreement. Both groups agree that general development as measured by a basic intelligence factor is involved. The terminology of this phase of school readiness is referred to by both groups as maturity. As a second facet of this maturity, school psychologists refer to emotional maturity. Kindergarten teachers are most uncomfortable with the emotional maturity frame of reference. They prefer to speak of the second facet of maturity in socialization terms although their usage of this term is not in keeping with the accepted usage of Webster or with the theory of Froebel, or for that matter, with the school psychologists.

Implications for Further Research. During the time of the writer's concern with school readiness and the attitudes and concepts of kindergarten teachers and school psychologists, there have been occasions when the involvements of the problem seemed hopelessly immense. In this respect, a new appreciation has been gained for research and a constant need has been felt for additional study and

research. Some of these areas of concern relating to school
readiness are briefly noted here.

This survey has clarified some of the departures of
kindergartens from Froebelian theory. Certainly, a more
extensive analysis of kindergarten teacher attitudes and
concepts regarding all facets of kindergarten is indicated.
This analysis should elicit some of the differences between
kindergarten education and education in general. An ex-
tensive statement of the philosophy of kindergarten is
indicated and if Froebel is outdated, a more realistic
philosophy should be set forth. On the other hand, a
reconsideration of the educational objectives and practices
of kindergartens may be in order.

Education seems to be particularly slow in intro-
ducing indicated change. Flexible entrance has seemingly
been acceptable to a wide range of school personnel for
some time. However, most of the projects relating to
school admission have been concerned only with the early
school admission for the intellectually advanced which is,
of course, a first step towards flexible entrance. These
programs have received considerable attention and have
achieved the sanction of several states.- A shift in focus
now appears to be indicated and specific projects with
flexible entrance, possibly based on school readiness test-
ing, are needed to carry out research implications.

Terminology also needs to be operationally defined

with groups who are using terms differently. Reference
has already been made to the terms _social_ and _emotional_.
These terms could be used more appropriately if agree-
ment could be reached as to their meaning. By their
generality and vagueness, communication is hampered. Some
terms, such as "immaturity", through over-use and mis-use
become so general that the meaning conveyed merely repre-
sents condemnation. As was noted in this study, however,
this is no simple matter. For example, terminology needs
to be approached from several levels. In this case, it
was noted that at least three levels of interpretation
were involved; there were the spokesmen for the kindergarten
teachers, there were occasional interpretations from the
kindergarten teachers themselves, and finally, the practi-
cal application of what was thought to have been said or
done to carry out an objective. All of this, of course,
underscores the ideal that communication concerning school
learners and learning problems needs to be as articulate
as possible.

Differences noted in the survey also appear to be
worthy of study. The whole matter of the relative importance
of verbal abilities needs clarification. What accounts for
the vast differences between these two groups of educational
specialists regarding intellectual curiosity? It would
appear that this represents a very basic question involving
all of learning and particularly early school experiences.

Once again, the matter of goals, philosophy and programs
to fit these goals are long over-due.

As was noted at the outset of this study, the role of
the school and the meaning of education are variously
defined indeed! It then becomes the responsibility of
kindergarten teacher and school psychologist alike in
noting school readiness that our focus and perceptions of
these varying and sometimes incompatible points of view
do indeed need constant re-assessing.

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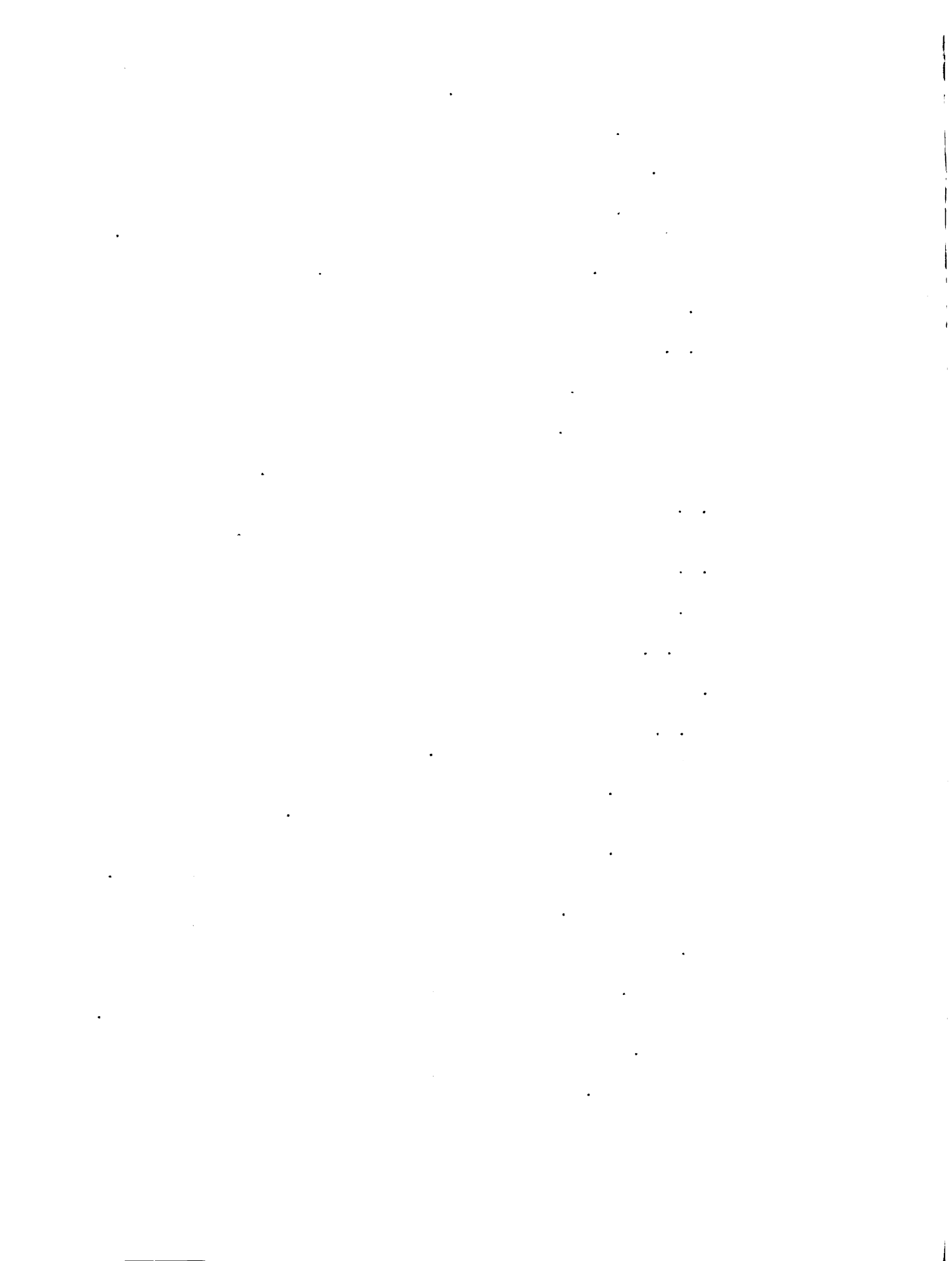
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COPY: School Readiness Survey.

March 20, 1964

Dear Colleague;

What is meant by School Readiness? The attached School Readiness Survey is an attempt to examine the kindergarten experiences of children as these pertain to school readiness. It is hoped that a consideration of these issues may have a bearing on early school admission practices and the psychological assessment of the preschooler.

Judgments of various personnel concerned with early school experiences of children are being gathered. The research survey is supervised by Dr. Elizabeth M. Drews of Michigan State University.

You need not identify yourself on this survey. If you wish to comment further, it will be appreciated. Your helpfulness in completing this survey will be appreciated.

Eugene Scholten
61 West 16th Street
Holland (Michigan) Public
Schools.

School Readiness Survey.

I   Please check in the Appropriate response:

In your judgment, is chronological age a satisfactory criterion for kindergarten admission?

_____Yes   _____Undecided   _____No

Comment:

In your judgment, is research concerning early admission of advanced pupils sufficient to justify such a policy?

_____Yes   _____Undecided   _____No

Comment:

In your judgment, should girls be admitted to kindergarten at an earlier age than boys (i.e., three to six months)?

_____Yes   _____Undecided   _____No

Comment:

In your judgment, is an adequate measure of school readiness available?

_____Yes   _____Undecided   _____No

Would you please describe what you believe is or would be an adequate measure?

II Please rank these skills as to <u>actual</u> time spent in kindergarten: Rank 1 as taking the most time to 6 as taking the least time.

_____developing social skills (e.g. living with social rules)

_____developing personal skills (e.g. dressing self)

_____developing emotional maturity (e.g. accepting direction)

_____developing verbal skills (e.g. telling experieces)

_____developing academic skills (e.g. writing numbers)

_____developing motor skills (e.g. rhythm activities)

Please comment:

III What do you feel is the relative importance (ideally) of the following in consideration for admission to kindergarten; Rank 1 as the most important to 5 as the least important.

_____emotional maturity (e.g. ability to accept direction)

_____chronological age (e.g. 4 years 9 months old)

_____mental age (e.g. as measured by the Binet)

_____social maturity (e.g. ability to get along with peers)

_____physical maturity (e.g. general size, motor facility)

Please comment:

IV What is the relative importance (ideally) of these skills or activities for success for kindergarten children? Rank 1 as most important to 10 as least important.

_____general knowledge (e.g. knows basic colors)

_____development in coordination (e.g. prints name legibly)

_____intellectual curiosity (e.g. thinkgs up questions)

_____listens to directions (e.g. pays attention)

_____works independently (e.g. carries out a task)

_____works with a group (e.g. participates cooperatively)

_____cares for his person (e.g. dresses self)

_____memorizes readily (e.g. pledge to the flag)

_____tolerates situations (e.g. accepts direction)

_____verbalizes readily (can relate experiences)

Comment:

V Which of these experiences of the kindergarten child do you feel are the most useful for school success? Rank 1 as the most useful to 4 as the least useful.

_____experience with verbal symbols (e.g.language ability)

_____experience with peers (e.g.social interaction)

_____experience with teacher (e.g. accepts direction)

_____experience with objects (e.g. crayons, toys)

Comment:

APPENDIX B.

Related Literature Review.

Early School Admissions and Preschool Testing.

Purpose. The Intention of the review of the litera-
ture regarding early school admissions and preschool test-
ing is to present in historical perspective those facets of
study and research which have a bearing on school readiness.
The rather extensive literature is alternately well executed
and again rather poorly carried out. Although the topics
appear to be separate, they are quite inter-related in that
early school admission programs for intellectually advanced
pupils are highly dependent on preschool testing. In turn,
preschool testing has developed to a considerable extent
in order to assess school readiness for possible early
admission candidates.

Early Preschool Assessments. As has been indicated in
Chapter II, the mental age and the IQ were regarded as all-
sufficient in the early twentieth century and through the
1920's. Diagnoses of retardation, verification of gifted-
ness, and acceptance of early school admission candidates
were satisfied with the quantitative results of tests.[1]

The two revisions of the Binet (the 1905 Binet-Simon
and the 1916 Binet) and a lesser used version, the Kuhlmann
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[1] See Chapter I of Beth Lucy Wellman, The Intelligence
of Children as Measured by the Merrill-Palmer Scale, Iowa
City, Iowa: The University, 1937.

127.

Binet were the most common measures of intelligence. At
that time, these tests were universally revered and were
rarely criticized. These tests were the standard and the
criterion. Other group tests of intelligence were stand-
ardized by them. The psychologists of the day were for the
most part uncritical of these tests.[2] They administered
these tests and set up programs based on test scores.

These tests were accepted as authorative and few
studies were concerned with validation or with the criter-
ion which was decided by test results. A 1931 appraisal of
the situation discussed only what could be gained from the
use of testing instruments.[3] In the early thirties, studies
by Handy[4] and Knight[5] were reported which questioned pro-
cedures of preschool testing or alluded to the limitations
of testing instruments. The criticisms were mainly directed
at the over-emphasis of verbal and sensory factors of the
tests. Mention was also made of the shortness of the early
revision of the Binet at the preschool level.

The Influence of Reading Studies. In the early thirties,
the study of reading was receiving much attention which was
ultimately to affect preschool testing and school readiness

[2] Wellman, op. cit., p. 340.

[3] See Chapter I of Rachel Stutsman, Mental Measurement
of Preschool Children, Yonkers-on-Hudson, World Book Co.,
1931.

[4] A.E. Handy, "Admission of Underaged Pupils", American
School Board Journal 83 (August, 1931), p. 46.

[5] J. Knight, "Age of School Entrance and Subsequent
School Record", School and Society 32 (July 5, 1930), p. 24.

assessment. Gates determined that a mental age of six
years and six months was advisable before a formal reading
program was begun[6] His studies influenced educators to the
extent that lowering of school entrance ages was halted.[7]
Within a few years, studies in reading were considerable
both in numbers and the extent of areas covered.

Gertrude H. Hildreth was concerned with providing a
realistic measure of reading readiness.[8] She stated that a
chronological age of five years and nine months was a pre-
requisite to reading readiness in the first grade. Dr.
Hildreth felt that a minimal mental age of six years was
advisable for successful reading. The work of both Gates
and Hildreth in the early thirties called attention to a
child's early school experiences. It established a common
pre-reading vocabulary and readiness in reading was broken
down into teachable skills such as visual discrimination.
And it added another dimension to the assessment of the
preschool child, that of development in areas critical to
readiness for reading.

Two studies by Thompson indicated increasing concern
with teaching reading too early.[9] Both studies were small

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[6] Arthur I. Gates, "The Necessary Mental Age for Begin-
ning reading", Elementary School Journal 37 (March, 1937),
p. 497.

[7] Gertrude H. Hildreth, "Age Standards for First Grade
Entrance", Childhood Education 23 (September, 1946), p. 22.

[8] Roger T. Lenner, "Trends in Age-Grade Relationship",
School and Society 82 (1955), p. 123.

[9] Jennie L. Thompson, "Big Gains from Postponed Reading",
Journal of Education 117 (October, 1934), p. 445.

in terms of numbers observed but clear and conclusive in
recommendations. Children read better and faster when the
mental age as a pre-requisite for reading was adhered to.

The Development of School Readiness Measures. By the
early thirties, Dr. James R. Hobson was already admitting
a highly selective group of pupils to school early on the
basis of mental age.[10] He maintained careful record on
his pupils and became a vocal proponent of early school
admissions based on mental age. He was very much interested
in the assessment of these pupils in terms of school readiness.
Although his major approach in terms of assessment was that
of intellectual capacity, Hobson later indicated that social
and emotional factors were informally taken into considera-
tion. This was the beginning of one of the best publicized
and probably one of the best longitudinal stuies in early
school admissions.

By the late thirties, both Goodenough and Stutsman were
becoming increasingly critical of the Binet Scales and were
soon to begin work on school readinss scales of their own.
The study of Goodenough, who worked at the Institute of
Child Welfare at the University of Minnesota, was a critical
review of the Kuhlmann Binet Scale.[11] Her concern was with
the shortness of the measure at the four and five year lev-
els. Her critical work was published in 1928. Ten years

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[10] James R. Hobson, "Mental Age as a Workable Criterion
for School Admission", Elementary School Journal 48 (1948),
p. 64.

[11] Florence Goodenough, Mental Testing, New York: Rine-
hart and Co., 1938, p. 68.

later, she published a scale in cooperation with Katherine'
Maurer and M.J. Van Wagenen. This scale was the Minnesota
Preschool Scale and was a lengthy instrument which has re-
ceived little attention or study.[12] It will be referred to
more specifically later.

During this time, Florence L. Goodenough was also at
work on a longitudinal study of mental growth which resulted
in a well-documented study which was not published until
1942.[13] She was also at work on a study of drawings as a
measure of intelligence and her book on this subject was
published in 1938. This introduced anew technique for a
global or conceptual approach to the whole child rather
than the facet approach of the usual types of intellectual
measurement. The Draw-A-Man Test has caused much excite-
ment and considerable research and study in subsequent
years. Dr. Goodenough's dual contribution in the assess-
ment of the preschooler and the young school-aged child is
probably unsurpassed. It was she who insisted that techni-
ques must be developed exclusively for four and five-year
olds which were not watered-down versions of tests for
older children.

Rachel Stutsman developed a test during the early
thirties called the Merrill-Palmer Preschool Scale which
was designed as a school readiness measure.[14] Like other

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[12] F. L. Goodenough, "A Study of the Predictive Value
of the Minnesota Preschool Scales, Minneapolis: University
of Minnesota Press, 1942.

[13] Ibid.

[14] Stutsman, op. cit.

instruments of this type, the scale was an age scale which did not recommend converting to IQ's. In most other respects, it was like the Binet except that it placed greater emphasis on performance-type items, particularly sensorimotor co-ordination. Anastasi reports that the scale was not widely used because it seemed cumbersome and did not have enough verbal items.[15] In short, both the Merrill-Palmer and the Minnesota Scales which were designed as school readiness measures, were used very little. The lack of studies or research involving these instruments tends to substantiate their lack of popularity. However, competition in the form of the RSB was also on the scene.

The 1937 Revised Stanford Binet. With the appearance of the 1937 revision of the Binet, the attention of those concerned with preschool measurement shifted almost exclusively towards this new instrument. This revision of the Binet almost completely dominated the testing scene for twenty-five years. The addition of the two to five-year scales pre-empted the use of other measures which were designed for preschool testing.

At the time the Binet was released, several studies were published which were highly critical of preschool scales. J.E. Anderson did a comparative study with the Merrill-Palmer, the Minnesota and the Kuhlman and suggested

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[15] Anne Anastasi, Psychological Testing, New York: The Macmillan Co., 1960, p. 675.

that preschool scales were inferior because of the great variances between the three instruments.[16] His highest correlations were at the moderate level between verbal portions of the scales.

Marjorie Honzik was discouraged with the lack of constancy of mental test performance on a single instrument.[17] She examined a group of children annually from two to five-years and concluded that the inconsistent scores indicated poor instruments.

McHugh found "gross inconsistencies" in the measurement of intelligence as measured by the Minnesota Scales. In the first two months of school attendance, the average mental age growth was measured at six months.[18]

Meanwhile, studies concerning the Binet were coming out. One of the most ambitious of these was done by Bradway who had access to the original Binet standardization data.[19] She studied 138 children who were originally tested between two and five years of age. She repeated the Binet and attempted to single out four factors for a preschool scale. These factors were verbal, memory, number concept and a non-verbal factor. Correlations between the first and second testings

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[16] J.E. Anderson, "The Limitations of Preschool Tests", Journal of Psychology VIII (1939), p. 351.

[17] Marjorie P. Honzik, "The Constancy of Mental Test Performance During the Preschool Periods", The Journal of Genetic Psychology 52 (1938), p. 285.

[18] Geolo McHugh, "Changes in Goodenough IQ at the Preschool Level", Journal of Educational Psychology 36, p. 17.

were .68 on verbal items, .49 on nonverbal items, .62 on

memory and .57 on number concepts. Her conclusions stated

that items tended to correlate well with total test perform-

ance (about .70), hence suggesting that the early testings

were valid. She indicated that attempting to use any fact-

ors as a short preschool scale was not advisable. Further,

verbal items appeared to offer the greatest hope in the

direction of predictive credence in preschool assessments.[19]

McNemar reported a correlation of .70 on a group of

preschoolers using the Binet and the Minnesota Preschool

Scale.[20] However, these children were being tested for

early school admission s and they had a mean IQ of 126. This

suggests that the study really proves very little except in

terms of the comparability of instruments at very high IQ

levels.

Levinson replicated the McNemar studies except with

children of average intelligence. His correlations between

the Binet and the preschool scales were only moderate. The

correlation between the Binet and the Merrill-Palmer Scale

was .52 and with the Minnesota, .62.[21]

The conclusions and tone of most of these studies

[19] Katherine Bradway, "Predictive Value of S-B Preschool
Items", Journal of Educational Psychology XXXVI (1945), p. 3.

[20] T. McNemar, "A Comparative Study of the Binet and the
Minnesota", Journal of Educational Psychology XXXIV (1943)p. 22.

[21] B.M. Levinson, "Binet Nonverbal Preschool Scale",
Journal of Clinical Psychology 16 (1960), p. 12.

suggested the superiority of the Binet, even at preschool levels. Both of the preschool scales were already having difficulty gaining recognition, and the increasing popularity of the Binet all but dealt the fatal blow.

As the Binet increased in popularity and received much study and research, portions of the Binet were receiving some attention as short measures of school readiness. Levinson worked on the use of the vocabulary section of the Binet as an independent measure.[22] Although as late as 1958 the vocabulary section correlated highly with totat test performance, the use of the vocabulary section independently by the Binet scoring system was never proved valid. Levinson felt that the vocabulary section of the Binet was the weakest at the preschool level. In spite of this, Levinson reports that psychologists continue to believe in the vocabulary section of the Binet as the best available indicator of intelligence.

After a lack of credence in working with the vocabulary section of the Binet, Levinson turned his attention to a nonverbal section of the Binet (also called the "limen" Binet).[23] Levinson reported inconclusive results with a small population of preschoolers. He felt that too many critical school readiness factors were left out with the use of the

[22] B.M. Levinson, "Re-Evaluation of the RSB Vocabulary Test as a Test of Intelligence for Kindergarten and Primary Schod Children", Childhood Education 93 (1958), p. 237.

[23] Levinson, op. cit., p. 237.

nonverbal measure. In the last ten years, the writer has been unable to locate any reference to the limen Binet.

The Limitations in the Use of a Single Measure. Along with the increasing popularity of the Binet and the feeling that the Binet "did the job" at all levels, there were studies which suggested that a single test of intelligence was not measuring through all involvements.

Nancy Bayley Reported a longitudinal study in 1937 in which she suggested that the environment was as, or more significant than what was thought of as basic intelligence. She was studying environmental correlates of mental and motor development and concluded that test scores would be altered by added environmental experiences.[24]

The studies of the thirties which reported that experiences greatly influenced test performance were studied during the forties as social and cultural considerations. The early forms of the Vineland Social Maturity Scale were used mainly in connection with retarded children. Its applicability for use with children of average intelligence and with preschoolers has been particularly questioned by Hobson.[25] Yet, for school readiness purposes, there seemed to be a growing concern that such considerations as "maturity" and "motivation" were not tapped by the Binet.

There also seemed to be an increasing concern with

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[24] Nancy Bayley, "Environmental Correlates of Mental and Motor Development", Child Development IV (1937), p. 329.

[25] Hobson, op.cit., p. 64.

measures of geometric drawings and the beginnings of "out-
line form perception" were seen. Designs of this type were
a part of the new Binet as well as the preschool scales.
However, the Gestalt influence was strong in Europe and
there was considerable experimentation there with preschool
readiness assessments.

Pfaffenberger investigated the visual Gestalt percep-
tion of preschool children. In a longitudinal study of the
production of geometric designs in three to seven-year olds,
he found that copying patterns involved two rather distinct
and separate skills. One of these skills was a motor skill
and the other a visual discrimination skill. He was hoping
to develop a group test of intelligence or development but
concluded that this would be invalid because the simply
copying of patterns confounds the two skills. He later
standardized a procedure for a developmental test of visual
perception using directed questions which was to be indi-
vidually administered.[26]

In America, the Bender Gestalt was used by Koppitz in
an experiment as a predictor of reading readiness in first
grade.[27] The Bender Gestalt was administered to 272 first
graders in the first week of school. At the end of the year,
the Bender Gestalt correlated .59 with the reading achieve-

[26] Hans Pfaffenberger, "Visual Gestalt Investigations",
Kommission Verlag, 1960, p. 20.

[27] E.M. Koppitz, "Prediction of First Grade Achievement
with the B-G Test and Human Figure Drawings", Journal of
Educational Psychology 52 (April, 1961), p. 80.

ment scores. This correlation is at the same level as other visual and perceptual indicators. This initial study was later used in screening school beginners with comparable moderate results. Both of these studies suggest that the visual motor or perceptual factor is undoubtedly involved and necessary in school readiness assessment.

Early School Admission Programs and Studies. Other than the Hobson study, there were few actual programs specifically aimed at admitting mentally advanced pupils to school early in the early 1930's. There were individual instances and in some cases, efforts at studying the problem from differing vantage points.

The most dissappointing comment during the thirties came from the so-called studies reported in a few educational publicatons. In most cases, the studies consisted of judgments and observations completely lacking verification or experimental control. The studies of Nemzek,[28] Partington,[29] Patterson,[30] Hausman,[31] and Dwyer[32] are of this type. They attempted to indicate that the older a child is when admitted

[28] C.L. Nemzek, "Relationship Between Age at Entrance and Achievement in the Secondary School", School and Society 49 (June, 1939), p. 778.

[29] J.M. Partington, "Relation Between First Grade Entrance and Success in the First Six Grades", Elementary Principal 16 (July, 1937), p. 292.

[30] H. Patterson, "C.A. of Highly Intelligent Freshmen", Peabody Journal of Education 12 (July, 1934), p. 19.

[31] E.J. Hausman, "Ready for First Grade?", School Executive 59 (February, 1940), p. 25.

to school, the better he will do. Their studies were rather frankly stated as attempting to prove that early school admissions were unworkable. The "facts" of their study added to "years of experience" showed that the younger children in each classroom were of necessity the poorer students. Individual instances were sometimes cited to "prove" the case against early school admission. Actually, these studies have to be completely dismissed as lackingor failing to meet even minimal standards of study and research.

One of the best early studies of individual students who had been admitted to school early was by Keys and published in 1938.[33] It followed several hundred underaged pupils and compared them to expected stadards for the age group against which they were competing. She found that underaged pupils were overwhelmingly more successful in the academic achievement area. When rated by their teachers in the social area, they were rated as being as well adjusted as their peers. This study concerned pupils then in high school and college.

The Manwiler study of early admissions in Pittsburgh was published in 1936 and also indicated success.[34] The study

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[32] P.S. Dwyer, "Correlation Between Age at Entrance and Success in College", _Journal of Educational Psychology_ 52 (April, 1939), p. 251.

[33] N. Keys, _Underage Students in High School and College_, Berkeley: University of California Press, 1938.

[34] C.E. Manwiler, "Follow-Up of Pupils Tested for Placement in Grade One before a C.A. of Six", _Pittsburgh Public Schools_ 10 (January, 1936), p. 68.

actually involved a follow-up of pupils tested for place-
ment in the first grade before they were six years old. The
results suggest that they were academically achieving well
above their peers but that their social adjustment, by
teacher ratings, was moderate.

Several other studies which produce conflicting re-
sults warrant examination. Carter matched 25 pairs of child-
ren enrolled in the first grade before and after six years
of age.[35] Conclusions stated that the older group main-
tained its lead in 87 percent of the cases. No mention is
made as to other controls used. No mean ages or IQ's were
given. There is no mention as to how allowances for ex-
pected differences in achievement due to age were handled.
It is rather unfortunate that this information was not made
available and that the study was carried out in this way.
This study by Carter is often quoted as conclusive.

The note sounded by Lorr was to the effect that test
data at the preschool level was not adequately used.[36] Lorr
examined a series of test protocols of children who had
been admitted to school early. Because of a number of
failures with these early admissions, the study was set up
to determine whether the test data was carefully utilized.
His conclusion was that although quantitative test evidence

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[35] Lowell B. Carter, "Effect of Early School Entrance
on the Scholastic Achievement of Elementary School Children
in the Austin Public Schools", _Journal of Educational
Research_ 50 (1956), p. 91.

[36] Maurice Lorr, "The Optimum Use of Test Data",
Educational and Psychological Measurement II (1942), p. 339.

was conclusive, other qualitative test evidence suggested a lack of school readiness. Although Lorr's sample was small, the evidence appears to be valid.

Bythe late thirties the work of Dr. Hobson was becoming widely known although the formal study was not published until 1948. Hobson used mental age as the primary criterion for early school admission. Later, Hobson indicated that he had an opportunity to observe all children who were admitted early. His evidence in 100 cases indicated that pupils admitted early did better in two out of three cases as measured by later standards such as grades and academic honors. This study remains as probably one of the best and most carefully executed as well as conclusive studies in early school admissions.[37]

The Current Scene. During the last fifteen or twenty years, the preschool testing for school readiness and early school admissions has changed considerably. The assessment study of the preschool child has been broadened and the programs have become more involved.

Although the Wechsler Intelligence Scale for Children did not appear until the early fifties, there was increasing belief that performance or motor factors were valid indicators or measures of ability. At this time, the Columbia Mental Maturity Scale appeared primary as a measure for

[37] Hobson, op. cit.

physically handicapped children but a valid factor for all children as well. Correlations with the Binet and the Wechsler at the five year level have been reported from a very low .20 to a high .70.[38] These studies involved small groups. A larger study showed moderate correlations.[39] The studies with the Columbia Scale show that visual discrimination is an important indicator of school readiness but is not sufficiently valid as a single measure.

The same appears to be the case with the picture vocabulary scales. Both the Peabody and the VanAlystyne scales are reported by Weiss as having moderate to high correlations with the Binet and the Wechsler at the five year level.[40] Again, this scale has a particular use and that is as a screening instrument. However, there are types of children (the fearful, the culturally disadvantaged) who do poorly on these types of measures. In summary, picture vocabulary scales used independently are not sufficient measures.

In addition to the visual discrimination factor and the picture vocabulary tests, there were several other kinds of tests which were studied as appropriate in assessing school readiness. One of these was the study of outline form per-

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[38] Ernest S. Barrott, "The Relationship of the Columbia MMS to the WISC", Journal of Consulting Psychology 20 (August, 1956), p. 294.

[39] B.M. Levinson, "Research Note on the Columbia MMS", Journal of Clinical Psychology 16 (April, 1960), p. 158.

[40] R.G. Weiss, "Validity of Early Entrance Into Kindergarten", Unpublished Doctoral Dissertation, New York University, 1960, p. 87.

ception by Graham.[41] He correlated a measure of outline
form perception with six other measures. With 108 two to
six-year olds, he found no significant correlations with
any of the measures. He used six major individual measures
as well as a mental age factor and a physical growth factor.
Graham used eight typical geometric forms. He concluded
that such a measure was not valid as an indicator of ability
nor was it consistently related to other factors considered
predictive of either ability or school readiness. This
study appears to be particularly well executed.

Bijou developed an informal measure of visual discrim-
ination and suggested that it could be used for screening
preschoolers.[42] He set up mental age equivalency standards
and his validation study showed that it was valid as a base-
line for individual analysis of young children.

A European study by Meinert compared physical growth
standards based on physical examinations by medical personnel
with traditional measures of school readiness.[43] An elabor-
ate study of 300 five-year olds comparing the physical growth
norms with school readiness indicators showed that the meas-
ures of physical growth were insufficient and not predictive
of school readiness.

[41] F.K. Graham, "Development in Preschool Children of
the Ability to Copy Forms", Child Development 31 (June,
1960), p. 339.

[42] Sidney W. Bijou, "Discrimination Performance as a
Baseline for Individual Analysis of Young Children", Child
Development 32 (March, 1961), p. 163.

[43] Rudolph Meinert, "Investigations on School Readiness",
Psychologie Rdsch. 6 (1955), p. 188.

DeHirsch attempted to predict school and reading readiness by neurological examination.[44] Pupils were classified as primitive, average, or outstanding. The theory was that if the neurological organism is primitive, the pupil would be a poor school and reading risk. The pupils were re-evaluated after a year of kindergarten and the results were confirmed as positive. Actual correlations were not reported and descriptions of the groups were not given. It was noted that language experience was not readily noted by a neurological examination and that this was a limitation. The study is interesting and it would seem to warrant further investigation under usual research specifications.

Simon reported a study in 1959 in which an attempt was made to classify pupils into physical body types and correlate these with school readiness measures.[45] The physical body typeswere not specified as to categories. From the discussion it appears that coordination, perception and general physical type were involved. The author reports that no highly significant correlations were obtained. Simon did suggest that girls tended towards uniformity of body types comparable to school readiness more than boys. Without more of the details of the study available, the applicability of this study for our purposes is limited.

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[44] Katrina DeHirsch, "Tests Designed to Discover Potential Reading Difficulties at the Six Year Level", American Journal of OrthoPsychiatry 27 (1957), p. 566.

[45] M.D. Simon, "Body Configuration and School Readineess", Child Development 30 (December, 1959), p. 493.

Certainly the most ambitious measure of school readiness in recent years is the Brenner-Gestalt Test of School Readiness. This test was developed during the 1950's at the Merrill-Palmer Institute. The measure is primarily a test of the "gestalt" frame of reference with an added number concept factor. It requires individual administration and can be given in 20 minutes. An extensive rationale and theoretical framework has been developed by its author.[46]

To date, research studies with the instrument give high credence to the test. Correlations with the Binet at the four and five year level have been at .70 and with a follow-up teacher judgment, an even higher .76.[47] A large scale study by Ralph also reports high correlations with teacher judgments and with individual clinical measures of intelligence.[48] The test was published in the spring of 1964 and other studies with this instrument are currently under way. It seems to satisfy many of the requirements of a school readiness screening measure (short, easily administered and scored, can be given by teachers) and is a test which bears watching.

Informal drawings have also been used as school read-

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[46] Anton Brenner, "A New Gestalt Test for Measuring Readiness for School", Merrill Palmer Quarterly 4 (1958), p. 196.

[47] William E. Vieweg, "A Longitudinal Study of Readiness for School Tasks as Measured by the Brenner Gestalt Test", Waldonwoods Collected Papers, 1960, Chapter VIII.

[48] Jean Ralph, "The Brenner Gestalt as a Measure of Readiness for School", Waldonwoods Collected Papers, 1960, Chapter V.

ness measures by Shipp.[49] The study is particularly in-
teresting in that it is held that drawings are not indicative
of mental age (as suggested by Goodenough, et. al.). He re-
ports that it is indicative of a level of conceptualizatinn
or what teachers refer to as maturity, particularly when
these may be at variance with general mental levels or when
levels of mental functioning are highly varied. The study
was done on a fairly large sample and the research evidence
is impressive. It also suggests that probably our concern
with attempting to make mental age and the IQ all-inclusive
frames of reference is quite at odds with initial purposes.

Another informal measure having information of value
in the assessment of school readiness is by Marion Mŏnroe
and reported in Chapter IV of Growing Into Reading. This
oral vocabulary inventory notes the level of verbalization
and discussed these levels in terms of maturity of the child
and readiness for social and reading experiences. Although
no research evidence is presented, such a theoretical
reference warrants attention. Others, such as Milton Wilson
have gathered several informal measures intended to add to
the assessment study.[50]

Looking back at the instruments which are currently
available for school readiness purposes, there appears to be

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[49] D.E. Shipp, "The D-A-M Test and Achievement in the
First Grade", Unpublished Doctoral Dissertation, Louisiana
State University, 1956.

[50] Milton Wilson, "Screening Instruments for School
Entry" Conference Workshop Notes (Mimeographed), California
Association of School Psychologists and Psychometrists, 1961.

greater agreement today to a rather thorough assessment study involving several psychological measures. The days of a one-test study are hopefully over along with the single quantitative score. Certainly any discussion of instruments suggests that they are only as valid as the skills which are brought to the testing session by the users. Another of these skills consists of the ability of the users in selecting appropriate measures to fit the given situation.

In recent years, there is little reference to either the Minnesota Preschool Scale or the Merrill-Palmer Scale. The writer has been unable to locate a single reference in the literature to either of these instruments in the last ten years although both are still available. As has been previously noted, both of these instruments are long, cumbersome and difficult to administer and score. And the studies involving these instruments have generally been unfavorable. The Hurst study of the Merrill-Palmer consisted of a new factor analysis which indicated that three factors account for more than half of the variance in the instrument.[51] His subjects were one hundred superior children and his major criticism was with the intra-individual variation in levels of response. The three factors identified by Hurst are most interesting and tend to agree with teacher rankings of activities in this survey. They include following directions, persistance at a task, and fine motor coordination. These factors are also referred

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[51] John C. Hurst, "A Factor Analysis of the Merrill-Palmer", _Educational Psychology Measurement_ 20 (1960), p. 519.

to by Brenner and appear to be mandatory for any preschool assessment study. It would appear that this broad frame of reference in which school readiness is currently assessed represents a more realistic approach to this task.

There are several current studies of early school admission programs which have been carefully executed. One of these is the Monderer study in Nebraska where flexible entrance policies are encouraged by the state. He studied 138 children who were admitted to school early and compared them to 468 of their classmates who were not admitted to school early. Their academic and social progress in school suggested increasing superiority of the early-entrance children. Monderer's data overwhelmingly supported early entrance for children who had been assessed by a complete study.[52]

An ambiguous study by Hamalainen found that four times as many underage children had adjustment problems as over-age children. The study also pointed out that overage children also frequently had adjustment problems. Tabulations were not completed on the overage children so the actual intended purpose of the study is negated. The authors claims regarding his data are unjustified.[53]

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[52] Monderer, op. cit.

[53] Arthur E. Hamalainen, "Kindergarten-Primary Entrance Age in Relation to Later School Adjustment", Elementary School Journal 52 (March, 1952), p. 406.

King attempted to carry out her study in much the same fashion. However, she also noted differences between boys and girls. She indicated that underage children tended to achieve less well and were more likely to be educationally retarded. She noted that the young boys in particular are likely to have problems in their early years at school. She suggested that this was as true of average-aged boys as of under-aged. Actually, her study has pointed out another problem involvement, that of all boys in school, rather than simply the under-aged boys.[54]

Pauly further studied sex differences at this age level in relation to adjustment and achievement in school. In his ambitious study of 1502 pupils, he noted that boys present more than ninety percent of what teachers regard as adjustment and achievement problems in both kindergarten and first grade. Girls present no problem whether admitted up to six months early or six months late. From the standpoint of educational planning, Pauly concluded that the problems with early school experiences needed to be approached differently for boys. He recommends that boys should either be admitted later or should have an extended kindergarten or first grade readiness experience. Pauly's evidence is well executed and impressive.[55]

[54] Inez King, "Effect of Entrance Age into Grade One Upon Achievement in Elementary School," Elementary School Journal 53 (February, 1955), p. 331.

[55] Frank R. Pauly, "Sex Differences and Legal School Entrance Age", Journal of Educational Research 45 (1951), p. 1.

In the same fashion, Shane and Yauch recommend a broader kindergarten experience.[56] They suggested a two-year kindergarten for four and five-year olds. Under this proposal, the mature child might spend as little as one year in kindergarten and the mature child as much as three years which would include a readiness program. Although Shane and Yauch report no research, they spent considerable time and effort in observing flexible kindergarten programs.

DeVault conducted a survey study in Texas of children entering the first grade before they were six years old. The children were rated by their teachers as to social adjustment and academic achievement which was measured by achievement testing in grades two and four. Among the conclusions which DeVault claims were that children who are not more than two months underaged when admitted hold their own in personal-social adjustment and academic achievement. If more than two months underaged, they again hold their own in personal-social adjustment but do less well in academic achievement. This study involves all children rather than specifically intellectually advanced children. However, the results are significant in that they contradict some reports which try to suggest that underaged children ipso facto

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[56] Harold G. Shane and Wilbur A. Yauch, Creative School Administration, New York: Holt and Co., 1954, Chapter 5.

have adjustment problems as well as achievement problems.[57]

The Oliviari study matched two groups of children who had entered school between four years nine months and five years and the second group between five years and five years three months. The children were studied in grades three through six in terms of academic achievement. The groups were matched in terms of socio-economic status, verbal and non-verbal intelligence. The conclusions were that achievement in later elementary school between the two groups was not significant. This study seems to have been carried out carefully and involved three hundred children. Once again, it suggests that the chronological age differential in considering school readiness and later school achievement is not critical.[58]

There are several excellent studies done with large numbers of pupils admitted early with a broad assessment study. This is the note sounded by Birch with his studies in Pittsburgh.[59] McCandless and Worcester have also put considerable study into the problem of early school admission and the assessment study.[60] They report favorable results

[57] M.V. DeVault, Underage First Grade Enrollees, Dallas: University of Texas, 1957.

[58] Irene M. Oliviari, The Relation of School Entrance Age, New York: Fordham University Publications, 1957.

[59] Jack W. Birch,"Early School Admission for Mentally Advanced Children," Exceptional Children 21 (December, 1954, p. 84.

[60] Boyd McCandless, "Should A Bright Child Start School Before He is Five?" Education 77 (1957), p. 370.

provided a broad assessment study is carried out. The terms of such an assessment study include the establishment of mental age, some indication of personal and social maturity and a general appraisal of such facets of development as motor coordination, perception, language development and learning motivation.

It is rather surprising to note the number of studies which suggest that there are those who feel that the "right age" can be determined chronologically for all pupils or by a single test indicator. Rowland and Nelson feel that the age may need adjusting but fail to recognize a problem.[61] They feel that the failure of teachers to provide for individual differences is the problem. Forester seems to see the issue in the same way.[62] Gelles and Coulson simply changed the terms and talk of a "readiness age" for all children which can be substituted for chronological age.[63] The manner in which they speak of this readiness age suggests a single test score type of appraisal.

Several others urge a very cautious approach until further evidence is gathered. This seems to be the approach of most of the authorities who have studied the learning

[61] T.D. Rowland and C.C. Nelson, "Off to School - At What Age?" Elementary School Journal 60 (October, 1959), p. 18.

[62] J.J. Forester, "At What Age Should a Child Start School?" School Executive 74 (March, 1955), p. 80.

[63] Herbert M. Gelles and Marion G. Coulson, "At What Age Should a Child Start School?", School Executive 79 (August, 1959), p. 110.

problems of kindergarten and first grade children. Trow
has suggested a longitudinal study of learning thresholds
to note high and low learning thresholds and their rela-
tionships to the various indicators of school readiness.[64]
Pinneau and Jones suggest that all involvements need to be
more carefully weighed and researched before school entrance
laws are changed or "wholesale movements" of early admission
are launched.[65]

Heffernan feels that the status quo represents the best
possible solution to the present involvements. She feels
that some parents are out of step and overly anxious for
their children. She is generally critical of early school
admissions and is a rather prolific writer who defends
current educational procedure in this regard.[66]

The new approach or "new look" at readiness to which
the reader has been referred by Birch and Worcester is
commonly discussed in several journals and publications.
Brondy feels that school readiness assessment is highly
desirable for all children.[67] DeLoudres feels that parents
are not keenly aware of the importance of kindergarten and

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[64] William C. Trow, "When Are Children Ready to Learn?"
Education Digest 21 (September, 1955), p. 21.

[65] S. Pinneau and P. Jones, "Early School Entrance",
Review of Educational Research 25 (December, 1955), p. 77.

[66] Helen Heffernan, "Pressures to Start Formal Instruction
Early", Childhood Education 37 (October, 1960), p. 57.

[67] H.S. Brondy, "New Look at Readiness", School and
Society 91 (December, 1963), p. 424.

unfamiliar with the whole concept of readiness.[68] She
feels that parents need to be re-educated away from
chronological age and developmental considerations. Flex-
ible entrance is freely discussed by many writers who feel
that many educational instructional problems would be
alleviated if children were closer to appropriate instru-
ctional levels.

Flexible school admission received favorable recognition
in a series of articles in the New York Times Education Sup-
plement in April, 1962. Several educators discussed some
of the involvements and procedures of starting school by
stages. Reaction to the articles by way of letters was high-
ly favorable. Flexible school admission was presented in a
forthright manner as an eventual and mandatory practice made
necessary by the importance of early success in school and
the differences among children in terms of their readiness
for school learning experiences.

Appendix Summary. Several authors attempted to gather
additional data which might be helpful in determining the
extent of the problems which result from a rigid chrono-
logical age entrance standard. Lenner and Mitchell reviewed
35 years of age-grade relationships which reflected shifts
not only in entrance age policies but in promotion policy
as well. There has been a 40 percent decrease in age within

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[68] Sister Mary De Loudres, "Importance of Readiness at
the Kindergarten Level", National Catholic Education Assoc-
iation Bulletin 60 (August, 1963), p. 537.

a given grade since 1918. Greater variance in age appeared in the upper elementary grades rather than the primary grades. Kindergarten and first grade had the least age-grade variation. This supports the thesis that individual differences in kindergarten evidently present as much or more of a problem than in later grades. The authors contend that school laws require children to be in school and exclusion is used only as a last resort. There has been a steady decline in average entrance age since 1918 which has diminished only in the last 10 years.[69]

Houle recently summarized school age requirements and concluded that state practices varied more than was desirable. He noted that every conceivable plan and policy was being tried out. There are state laws, laws set by local districts, policies set by groups of districts and school districts without laws. In summary, Houle noted that these variations made a mockery out of the serious attempts of educators to come to grips with the problems involving school readiness of individual children.[70]

In school readiness testing, it has been noted that initially, the concern was in finding an instrument which would give a quantitative indication and decision. This was usually based on mental age and IQ. Various kinds of

[69] Lenner and Mitchell, op. cit. p. 123.

[70] Cyril O. Houle, "Minimum School Age Attendance", Elementary School Journal 47 (1947), p. 427.

factors suspected as having significance for school readiness assessment were tried out and most of them fell short of being sufficiently valid by themselves. However, they were productive in that they added to the battery of measures available for assessing the individual child. Currently, a broad assessment study is widely accepted. Screening instruments have been developed for pre-testing. Individual clinical measures of intelligence are available when indicated. Other areas to be assessed might include an informal measure of maturity, emotional maturity, perception or coordination, and verbal facility. Most school psychologists recognize that these test results represent an indication which is not based on a single quantitative score but rather on an evaluation based on considerable data weighed against the specific kindergarten situation confronting the child.

The early school admission studies have also changed. Initially, mental age and IQ were prime indicators and predictors of schoolsuccess. As a result, children were admitted to school solely on the basis of a high IQ. Interest in these children helped in the focus on reading and curriculum in the early grades. It also underscored the need for flexibility with children and attention to individual differences. Actual programs where early school admissions were encouraged were few. However, several studies involving small numbers of children suggest that when the need was present, that

children were admitted early with considerable success.
Many studies which were done in an attempt to prove that
chronological age was highly predictive of learning readi-
ness and achievement were poorly executed and their results
questionable. Other studies done more carefully indicate
that chronological age received too much emphasis in its
relationship to school readiness and later achievement.

There are still those who still naively believe there
is no "problem" and cite very poor research to prove their
point. Currently, there is good evidence to suggest the
need for early school admissions in an attempt to work
around rigid chronological age barriers. There is good
evidence to show that when children are adequately assessed
as to school readiness, that good results ensue.

The problems of early school admission and readiness
testing are deeply involved in school policies, curriculum
and procedures. The question becomes one of not only
"when" a given child should begin school but also of the
"how and what" of the school experience after getting
there. Actually, of course, the two cannot be completely
and conveniently separated because the extent to which the
involvements of the "how and what" of early school experience
becomes knowledgeable will the "when" become lucid with the
result being a greater educational opportunity for the
child.