

1969

A Study of Personality Factors and Academic Achievement in the Elementary School

Judith P. Kuehn

Eastern Illinois University

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A STUDY OF PERSONALITY FACTORS AND ACADEMIC

ACHIEVEMENT IN THE ELEMENTARY SCHOOL

(TITLE)

BY

Judith P. Kuehn

B. E., Pestalozzi Froebel Teachers College, 1965

THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF

M.S. in Education

IN THE GRADUATE SCHOOL, EASTERN ILLINOIS UNIVERSITY
CHARLESTON, ILLINOIS

1969

YEAR

I HEREBY RECOMMEND THIS THESIS BE ACCEPTED AS FULFILLING
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DEPARTMENT HEAD

ACKNOWLEDGMENTS

The writer wishes to express her appreciation to Community Consolidated School District #59; to Mr. Harold Hoecksema, principal of the Grant Wood School; to Mr. Philip Thornton, principal of the Brentwood School; and to the teachers in both buildings. Their cooperation during the testing and the collecting of the data for this study was essential and highly appreciated.

Appreciation is also due the members of my committee, Dr. William Crane and Dr. Paul Overton, for their comments and suggestions.

Special acknowledgment goes to my adviser Dr. Paul Ward for his encouragement, suggestions, and support.

Sincere appreciation goes also to Miss Sandra Moore for her invaluable editing and for typing this paper.

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*Attending the Brentwood and Grant Wood Schools, Elk Grove Village, Illinois

CHAPTER I

BACKGROUND

Introduction

Around 1960, the publishing of programmed materials about many subjects began to increase. Relatively few programs were published in 1960 and 1961; 122 were published in 1962; and a total of 352 programs were published by September of 1963.¹ Since then, the number has grown by the hundreds. As the number of materials increased, criticisms were presented. Wilbur Schramm in his report, PROGRAMMED INSTRUCTION--TODAY AND TOMORROW, stated three criticisms about programmed instruction and its growth.

1) Although the research gives us little reason to be satisfied with the theories and the standards of today's programming, and every reason to believe that it will be possible some day to make programs vastly more effective than today's programs, nevertheless, programmed instruction shows signs of hardening, partly under commercial pressure, into a fixed and mechanical technology, with theories and procedures taken for granted.

2) Although programmed instruction has within it the potential to turn the attention to education and educational research more intensively and productively than ever before to the process by which humans learn, there is very little sign that it is being used productively to test theories of human learning or theories of cognitive process, or to enlighten the teacher concerning the process by which she teaches.

¹L. F. Hanson, ed., PROGRAMS, '63 (Washington, D.C.: U.S. Office of Education, 1963).

3) Although programed instruction is essentially a revolutionary device, in that it has the potential to help free man from some of his bondage--the waste of human resources where there are no teachers or where people cannot go to school; the waste of time and talent where all students are locked into the same place, and all teachers into the same routine; the tyranny of tradition which permits the study of a certain topic to begin only at a certain age, and expects a student to accomplish only so much as a questionable test of his ability says he can do; and the inadequacy of outmoded and inadequate curricula--despite this, programed instruction is very slow to rise to such a revolutionary potential.²

The point is not to focus on Schramm's pessimism, but to point out the attitude about programed instruction and to spotlight his major concerns in 1962. His first criticism was that programed instruction was being molded by publishers and not by educators. The second criticism was that educators, and particularly teachers, were not investigating in depth the principles of learning. Third, the potential of releasing children to learn was still in the talking stage at that time.

Some of Schramm's concerns might have been relieved in 1964 when an experimental project was undertaken. The Learning Research and Development Center at the University of Pittsburgh began a pilot program at Oakleaf School in a suburb of Pittsburgh. The program, called Individually Prescribed Instruction, was developed by Drs. Glaser, Bolvin, and Lindvall with the cooperation of the University of Pittsburgh and the Baldwin-Whitehall Public Schools.³

²Wilbur Schramm, PROGRAMED INSTRUCTION--TODAY AND TOMORROW (New York: The Fund for the Advancement of Education, 1962), p. 11.

³Dr. John Bolvin, "Planning for the Future at LRDC," THE WORLD OF IPI, I (Washington D.C.: Appleton-Century-Crofts, March, 1969), p. 1.

To the observer, Individually Prescribed Instruction might look like any other programmed material. A student must demonstrate mastery of a skill before he proceeds to the next one. In this sense, he is working in programmed material. However, if a student can perform the skill before working the material, he may skip the material for that skill and proceed immediately to the next skill. In other words, there is sequence in Individually Prescribed Instruction, but it is not a locked sequence.

In another sense, Individually Prescribed Instruction is programmed instruction based upon diagnosis of the individual student's needs through use of placement tests, pre-tests, curriculum-embedded tests, and post-tests. This testing process is used by the teacher as a continuous monitoring of the student's progress.

In addition to the literally expressed major goal of individualizing instruction, Individually Prescribed Instruction is concerned with "developing self-directed, self-evaluative, and self-initiated learners who can assume more responsibility for their own learning."⁴

In 1965, Community Consolidated School District #59 of Elk Grove Village, Illinois, attempted to replicate the Individually Prescribed Instruction (hereafter referred to as IPI) program in the Brentwood Elementary School. As Pittsburgh materials were not used in 1965, the program at Brentwood School could not be called IPI. In 1966, Pittsburgh supplied

⁴Ibid., p. 2.

materials and advice, and the program became IPI. The Grant Wood Elementary School joined in the development and refinement of the program's materials and procedures.

One of the problems or questions encountered by the teachers at the above-mentioned schools was to decide what type of child would profit most from a program which was intended to develop self-directed, self-evaluative, and self-initiated learners?

Purpose of Study

The purpose of this study was to examine certain personality characteristics of fourth and fifth grade students who were, by educational standards, succeeding in Individually Prescribed Instruction and to attempt to determine whether or not there were personality patterns indicated for those students.

Statement of Problem

The problem in this study is to determine whether there is a relationship between six specific personality characteristics and the success of fourth and fifth grade students who are in the IPI reading and the IPI mathematics programs. To define the area to be studied, the following questions were formulated:

- 1) Do fourth and fifth grade students who are considered to be succeeding in IPI reading tend to score above the fiftieth percentile on the specific personality characteristics of self-reliance, sense of personal worth, sense of personal freedom, feeling of belonging, family relations, and school relations? (These titles were

selected to correspond to the titles of the sub-tests of the CALIFORNIA TEST OF PERSONALITY.)

2) Do fourth and fifth grade students who are considered to be succeeding in IPI mathematics tend to score above the fiftieth percentile on the same characteristics?

The fiftieth percentile was selected when formulating the guide questions because, according to the authors of the CALIFORNIA TEST OF PERSONALITY, "... higher percentiles represent adjustment or at least knowledge of acceptable behavior and attitudes."⁵

Definition of Terms

The titles for the personality characteristics which were selected for consideration in this study correspond to the titles of six of the sub-tests of the CALIFORNIA TEST OF PERSONALITY, ELEMENTARY LEVEL which was used in this study. The six personality characteristics considered are defined by the authors as:

Self-reliance--An individual may be said to be self-reliant when his overt actions indicate that he can do things independently of others, depend upon himself in various situations, and direct his own activities. The self-reliant person is also characteristically stable emotionally, and responsible in his behavior.

Sense of Personal Worth--An individual possesses a sense of being worthy when he feels he is well regarded by others, when he feels that others have faith in his future success, and when he believes that he has average or better than average ability. To feel worthy means to feel capable and reasonably attractive.

Sense of Personal Freedom--An individual enjoys a sense of freedom when he is permitted to have a

⁵Louis P. Thorpe, Willis W. Clarke, and Earnest W. Tiegs, MANUAL: CALIFORNIA TEST OF PERSONALITY, 1953 REVISION (California: California Test Bureau, 1953), p. 13.

reasonable share in the determination of his conduct and in setting the general policies that shall govern his life. Desirable freedom includes permission to choose one's own friends and to have at least a little spending money.

Feeling of Belonging--An individual feels that he belongs when he enjoys the love of his family, the well-wishes of good friends, and a cordial relationship with people in general. Such a person will as a rule get along well with his teachers or employers and usually feels proud of his school or place of business.

Family Relations--The individual who exhibits desirable family relationships is the one who feels that he is loved and well-treated at home, and who has a sense of security and self-respect in connection with the various members of his family. Superior family relations also include parental control that is neither too strict nor too lenient.

School Relations--The student who is satisfactorily adjusted to his school is the one who feels that his teachers like him, who enjoys being with other students, and who finds the school work adapted to his level of interest and maturity. Good school relations involve the feeling on the part of the student that he counts for something in the life of the institution.⁶

The concept of students considered to be succeeding in the reading and mathematics programs in IPI needs to be crystallized. Success in reading or in mathematics was determined by the following:

- 1) Those students whose attitudes toward reading and mathematics tend to be positive according to the "Teacher Observation Check List"
- 2) Those students whose "Rate of Achievement" total for reading or mathematics, or both, is on or above the mean for their grade level
- 3) Those students who have a grade equivalent score equal to or above their grade-month placement at the time of testing (THE IOWA TEST OF BASIC SKILLS, subtests "Test R: Reading Comprehension and "Test A:

⁶Ibid., pp. 3-4.

Arithmetic Total" were used to determine the grade equivalent scores.)

In referring to Individually Prescribed Instruction, the term IPI will be used throughout this paper. (A brief description of the IPI program is offered on pages two and three.)

The term "grade-month placement" refers to the year and month of a student's school placement. For example, if it was October of a school year, the grade-month placement of a fourth grade child would be 4-2. The four represents his fourth year in school, and the two represents October, the second month of that school year.

Summary

This study was conducted in two elementary schools which use IPI reading and IPI mathematics. The purpose of the study was to examine the following personality characteristics: self-reliance, sense of personal worth, sense of personal freedom, feeling of belonging, family relations, and school relations. The main goal in conducting the study was to ascertain whether students succeeding in IPI would demonstrate the positive side of these characteristics on the related sub-tests of the CALIFORNIA TEST OF PERSONALITY, ELEMENTARY LEVEL. As the related research in CHAPTER II emphasizes, how a student perceives himself and his surroundings influences his academic performance.

CHAPTER II

RELATED RESEARCH

Studies and Theories Related to Learning

The research picture in the area of learning reflects differences in approaches and differences in theoretical frames of reference used by investigators.

If one is a clinical psychologist, a psychiatrist, or a psychoanalyst, one's frame of reference is related to abnormal subjects. Assuming a favorable setting for the learning situation, these subjects do not learn in the expected manner or at the expected rate. Something is interfering with the inner learning mechanism and is preventing or retarding satisfactory learning.

If one is an experimental psychologist, one's frame of reference is related to normal subjects and how and why they learn. One would collect data regarding satisfactory learning, assuming a favorable learning situation where there is no marked interference with the learning process of these "normal" subjects.

Even though these two approaches seem to be at opposite ends of the question, agreement may be found. Hilgard, in his comprehensive review of learning theories, lists four points upon which, in his opinion, most learning theorists

would agree: (1) Learning, a matter of sensory reorganization, association, and reintegration, is secondarily related to performance; (2) The facts of psychology lend themselves to interpreting the way in which the nervous system acts in the process of learning far more readily than the known facts about the nervous system lend themselves to interpreting what psychological activities should occur during learning; (3) A concept of sudden restructuring of a field leading to problem solution, such as insight or reasoning experiments, does not mean that the utilization of that experience is regulated by contemporary factors which were not previously expressed in the habits of response; and (4) While the empirical law of effect holds as crude approximation, closer experimental study shows an enormous complication by the action of rewards and punishments upon learning.¹

Some of these complications have been dealt with by researchers interested in traits which foster positive motivational factors rather than negative factors. Maslow attempted to assess the personal qualities which separate individuals whose lives had constituted an expression or manifestation of self-realization from those individuals whose lives had appeared to operate on a level of mere adjustment. He found that people who were self-actualizing had developed or were developing their capacities and potentials.² Maslow also

¹Ernest Hilgard, THEORIES OF LEARNING (New York: Appleton-Century-Crofts, Inc., 1948), pp. 320-323.

²Louis P. Thorpe, THE PSYCHOLOGY OF MENTAL HEALTH (New York: Ronald Press Company, 1960), pp. 266-267.

stated that, "So far as motivational status is concerned, healthy people have sufficiently gratified their basic needs for safety, belongingness, love, respect and self esteem so that they are motivated primarily by trends to self-actualize."³

Some theorists conceptualize the self as a striving to achieve a fullness of potentials and development. Horney completely agrees with this statement and feels that this striving is universal.⁴ Allport places the drive for the fulfilling of potential as a responsibility of the ego and/or self. He describes the function of the ego as "... the unifying force or mastic for all the habits, traits, attitudes, sentiments, and tendencies of a human being."⁵ The personality theories of Rogers and of Snygg and Combs suggest that the individual's self-concept is a major factor influencing the individual's behavior. Research by Martire and Steiner has produced corroborative evidence for these views.⁶

Studies Related to Self-Concept

With the personality theories as a frame of reference, many researchers have sought to discover to what extent the

³Ibid., p. 269.

⁴Ledford J. Bischoff, INTERPRETING PERSONALITY THEORIES (New York: Harper and Row, 1964), p. 319.

⁵Ibid., pp. 469-470.

⁶Philip W. Jackson and Henriette M. Lahaderne, "Scholastic Success and Attitudes Toward School in a Population of Sixth Graders," READINGS IN EDUCATIONAL PSYCHOLOGY, Noll and Noll, eds. (New York: The Macmillan Company, 1968), p. 333.

self-concept is related to school achievement. The research included home influences as well as the school. The extent to which a particular family environment will affect the achievement of children was explored by Goldberg and associates. They found that high school students who were high achievers had less disruptive home lives than the under-achievers studied. They concluded that these students had adequate identification with a father figure.⁷ From this study it can be noted that the father may play an important part in whether or not a student will be a high achiever in high school.

Bowman summarizes his results in this way: "Evidence seems to be accumulating that the personal and social factors as well as intelligence, are inextricably involved in the teaching-learning process, and that the most critical of these is probably the self-concept." He goes on to say "... that the strongest influence on the self-concept is that of the parents."⁸

Since it is generally agreed that the home is the first place where the self-concept is formed, then what role does the school play in helping children develop into fully functioning beings? Gilham suggests a possible position when he

⁷Miriam Goldberg and Associates, "A Three Year Experimental Program at De Witt Clinton High School to Help Bright Under-Achievers," TEACHING GIFTED STUDENTS: A BOOK OF READINGS, James J. Gallagher, ed. (Boston: Allyn and Bacon, Inc., 1965), p. 245.

⁸Paul H. Bowman, "Family Role in the Mental Health of School Children," MENTAL HEALTH AND ACHIEVEMENT INCREASING POTENTIAL AND REDUCING SCHOOL DROPOUTS, E. Paul Torrance and Robert D. Strom, ed. (New York: John Wiley and Sons, Inc., 1965), p. 9.

notes, "... the individual who has learned to see himself as stupid and insignificant is enslaved by this self-concept until some significant person or persons in his life help him see himself as capable and worthwhile."⁹ The school, then, must help the child succeed by helping him sense a feeling of personal worth, which in turn helps to foster a positive self-concept.

Several research studies support the hypothesis that there is a relationship between how students perceive themselves and how well they achieve in school. Reeder, in his "Study of Some Relationships Between Level of Self Concept, Academic Achievement, and Classroom Adjustment," found that positive feeling toward self is associated with good academic achievement.¹⁰ Brookover found that junior high school students possess both concepts of over-all abilities and concepts of abilities in specific school subjects. Furthermore, he found that a student who thinks he has high abilities tends to achieve better than one who thinks he has less ability, whether or not such estimates are realistic in terms of actual ability.¹¹

⁹Isabel Gilham, "Self-Concept and Reading," THE READING TEACHER (Delaware: International Reading Association, 21:3, December, 1967), pp. 270-273.

¹⁰T. A. Reeder, "A Study of Some Relationships Between Level of Self Concept, Academic Achievement, and Classroom Adjustment," DISSERTATION ABSTRACTS, 15: 2472 (1955).

¹¹W. B. Brookover, A. Patterson, and S. Thomas, THE RELATIONSHIP OF SELF-IMAGES TO ACHIEVEMENT IN JUNIOR HIGH SCHOOL SUBJECTS (Cooperative Research Project 845, East Lansing: Michigan State University, 1962).

Frymier in his investigation found four personality characteristics which offer some general criteria that schools may use to evaluate their students in terms of motivation. Students who were highly motivated were conscious of the present, past, and future; tended to value the abstract, aesthetic, or general; were more open to experience and less threatened; were more curious and seeking in behavior; and tended to have a positive self-concept.¹²

In summary of the preceding research, one might state that if a student or individual is influenced to develop a positive view of himself, he tends to achieve more success in the school situation than a student who has not developed a positive view of himself.

Studies Related to Programed and to Individualized Instruction

The last two studies which will be cited refer specifically to programed and to individualized instruction. The first study was conducted by Bijou and associates. They used programed instruction as an approach to teaching reading, writing, and arithmetic to retarded children. The study cited many of the usual problems of designing materials for the needs of specific children and of the types of decisions which had to be made in regard to the level of performance the teachers would accept as standard in the learning situation. Although the findings were not conclusive, one aspect of the findings is

¹²Jack R. Frymier, "Motivating Students to Learn," NEA JOURNAL (Washington, D.C.: National Education Association, V. 57, February, 1968), p. 38.

significant to this study and can be applied to the regular classroom situation. In the area of academic behavior, one-third of the children studied reached a level of independence which was defined in terms of behavior: getting his own folder of work, setting a watch, entering the date and time he started, choosing his first task, completing it, choosing and completing a second task, entering his finishing time, and taking his completed work to the teacher where, together, they would mark the work.¹³ The implication, as this writer sees it, is not the mechanical procedure which a student follows in performing the task, but the effort to foster the practice of the student being responsible for his own work and the support being given by the teacher.

The last study cited was conducted by the Community Consolidated School District #59 in order to determine whether gifted children in IPI demonstrate more incidences of independent behavior than gifted children who are not exposed to IPI, and whether there were differences between attitudes of IPI students and attitudes of non-IPI students toward reading and mathematics. The findings of the study confirmed that the gifted students in IPI demonstrated more incidences of independent behavior. The differences were statistically significant at a level of less than one per cent chance of error.

¹³Sidney W. Bijou, Jay S. Birnbrauer, John D. Kidder, and Cecilia Tague, "Programmed Instruction as an Approach to Teaching of Reading, Writing, and Arithmetic to Retarded Children," CHILD DEVELOPMENT: READINGS IN EXPERIMENTAL ANALYSIS, Bijou and Baer, eds. (New York: Appleton-Century-Crofts, 1967), pp. 309-329.

The attitudes toward reading and mathematics tended to remain more positive in the IPI schools. An interesting finding in reference to the gifted children's attitude toward mathematics was discovered. "It appears that as IPI students grow older, their attitude toward math improves. The opposite appears to be true in the control schools."¹⁴

The study conducted by Scanlon and Janove suggests that the factors which foster positive attitudes toward IPI should be investigated in order to help both teachers and students to progress positively in IPI.

Summary

Since the research picture illuminated the fact that most studies are conducted in the theoretical frame of reference used by the investigator, it would seem appropriate to summarize the theoretical frame of reference demonstrated by the researchers cited. The "self" of an individual, however it is visualized, constitutes a force, movement, or propulsion, which, when it is in harmony with the physical being, permits the potentials which are defensively locked within the individual to become unshackled and available for action. The exploration for complete internal-external harmony is as timeless as the possibility that an individual will ever use his total potential being.

¹⁴Dr. Robert Scanlon and Ethan Janove, INDIVIDUALLY PRESCRIBED INSTRUCTION: A STUDY OF INDEPENDENT BEHAVIOR (Elk Grove Village: Community Consolidated School District #59, 1968), pp. 105-110. (Mimeographed.)

The theories and related studies also point out that the "self" and how an individual perceives this "self" are monumentally influenced by all manner of stimuli. Highly ranked among these stimuli are parents and school personnel. Many of the studies capsulized what happens to children whose encounters with people, places, and things did not foster a positive perception of the "self." They illustrate the individual as a crippled person who is externally directed and internally defeated. Therefore, a heavy responsibility rests upon the shoulders of educators to see that the individuals who are products of the educational programs are assembled, useful products, not parts to be assembled at some later time in some unknown manner.

CHAPTER III

DESIGN OF THE STUDY

Description of Sample

A total of 273 students of the fourth and fifth grades at the Brentwood and Grant Wood Elementary Schools in the Elk Grove Village, Illinois, School District #59 were used in this study. At Brentwood School there were seventy-three fifth graders and eighty-five fourth graders. At the Grant Wood School there were forty-nine fifth graders and sixty-six fourth graders. The total by grade for the two schools was 122 fifth graders and 151 fourth graders.

The fourth and fifth grade students were selected for this study because, as a group, these students had been in the Individually Prescribed Instruction (IPI) programs for at least sixty per cent of their school years. The fourth and fifth graders at Brentwood had been in the programs four years; the fourth graders beginning in first grade and the fifth graders beginning in second grade. At Grant Wood, the fourth and fifth graders had been in the programs for three years; the fourth graders beginning in second grade and the fifth graders beginning in third grade.

Students who had transferred into the program were not excluded because their numbers were few and their teachers

felt that these students had adjusted to the program. Also, it was believed that their inclusion would not distort any general patterns which might be detected.

Procedure Used

The principals and teachers of the Brentwood and Grant Wood Schools were contacted for permission to conduct this study in the two schools.

During the week of March 3, 1969, the process of data collecting was begun. The CALIFORNIA TEST OF PERSONALITY, 1953 REVISION, ELEMENTARY LEVEL was administered by the writer, first at the Grant Wood School and then at the Brentwood School. The test was given during the first period of the morning to all but sixteen fourth graders. One group of thirteen fourth graders at the Grant Wood School was identified as having reading problems. The test setting was altered so that instead of one teacher and the writer to answer questions for approximately thirty students (as in the morning test settings), there were a teacher, a teacher-intern, and the writer to answer the questions of these thirteen fourth graders. There were three students from the two schools to whom the test was read by teachers because the students would have been unable to read it for themselves. All tests were scored by the writer.

Also during that week, the "Teacher Observation Check List" was distributed to and completed by all fourth and fifth grade teachers. These were then returned to the writer.

During the week of May 26, 1969, the "Rate of Achievement" figures were collected and tabulated by the writer.

The grade equivalent scores for the IOWA TEST OF BASIC SKILLS sub-tests for reading and mathematics were recorded from the print-out sheets which the publisher sent to the schools.

After all data had been collected, it was sorted and recorded in a manner which would allow efficient application of the definition of succeeding students. Students were listed in the order of their scores or grade equivalents. Names of students scoring above the mean were easily separated from the group.

The attitudes which had been marked on the "Teacher Observation Check List" were given a value on a five-point scale with the most positive statements having a value of one and the most negative statements having a value of five. Students who scored one, two, or three were considered to be succeeding and were separated from the others. The number of answers for each of the CALIFORNIA TEST OF PERSONALITY sub-tests was twelve. This twelve-point scale was reduced to a five-point scale to correspond to the five-point scale of the "Teacher Observation Check List." Then the calculation of a Product-Moment Coefficient was attempted. However, the CALIFORNIA TEST OF PERSONALITY data had been reduced to such a degree that the results of the calculation proved to be meaningless. For this reason, further calculations with the "Teacher Observation Check List" results were abandoned, and the instrument was eliminated from this study.

The "Rate of Achievement" means for the following were calculated: (1) fourth grade IPI reading, (2) fourth grade

IPI mathematics, (3) fifth grade IPI reading, and (4) fifth grade IPI mathematics.

The date of the administering of the IOWA TEST OF BASIC SKILLS was used to determine the grade-month placement for the fourth grade and for the fifth grade. Next, the correlation tables were constructed according to the example given in Tate's STATISTICS IN EDUCATION AND PSYCHOLOGY.¹

Finally, the tabulation and calculations were substituted into the formula² for Pearson's Product-Moment coefficient of correlation to determine whether there was a relationship between the six personality characteristics considered in this study and the achieving of, or excelling, the mean for the "Rate of Achievement." The formula was used again to determine whether there was a relationship between the six personality characteristics and achieving grade equivalent scores equal to or above grade-month placement. The grade equivalent scores considered were for the reading and mathematics sub-tests of the IOWA TEST OF BASIC SKILLS.

Instruments Used

(One example of each instrument described--except the IOWA TEST--is included in Appendix I.)

¹Merle W. Tate, STATISTICS IN EDUCATION AND PSYCHOLOGY: A FIRST COURSE (New York: The Macmillan Company, 1965), pp. 135-139.

2

$$r_{xy} = \frac{N\sum(dydx) - (\sum fxdx)(\sum fdydy)}{\sqrt{N\sum fxdx^2 - (\sum fxdx)^2} \sqrt{N\sum fdydy^2 - (\sum fdydy)^2}}$$

"Teacher Observation Check List."--The "Teacher

Observation Check List" used in this study was designed by the writer. The check list described two styles of behavior which might be observed by the teacher. The major portion of the instrument was made up of statements which were descriptive of the manner in which a student generally approached his IPI reading and his IPI mathematics assignments. There were five basic statements. They were the following: (1) Works without teacher help, (2) Tries without teacher help, (3) Asks for help with directions, (4) Asks for teacher support with work (other than directions), (5) Requires teacher encouragement with work. Preceding each of the five statements were the words "Always" and "Usually." This gave the teachers ten possible statements to check in order to describe how a student generally approached his IPI reading and his IPI mathematics assignments.

The last column of the instrument was designed for the teacher to note the student's general attitude toward IPI reading and toward IPI mathematics by selecting one of five attitude descriptions for each subject area. The attitude descriptions were: (1) I will, (2) I can, (3) I will try, (4) I need help while I try, and (5) I can't.

"Rate of Achievement Chart."--The "Rate of Achievement Chart" was a sheet on which was recorded the student's name, the number of units mastered in IPI reading and the number mastered in IPI mathematics during the period from October 1, 1968, to April 30, 1969. The months of September, May, and

June were not included as the picture might be distorted by the data for those months. In September, students often progress more rapidly, as a review of some units mastered the previous school year is usually required. In May and June, the standard for mastery may be different from that required during the other months; due to the brief time remaining in the school year.

IOWA TEST OF BASIC SKILLS.--The IOWA TEST OF BASIC SKILLS was a third instrument used in this study. A standardized measure of achievement was desirable for the study. One advantage in using the IOWA TEST was pointed out by Thorndike and Hagen in the following description of the test: "The battery emphasizes the appraisal of functional skills needed by the child if he is to make progress in school. Reliabilities of the subtests are adequate and, of total tests, are high. Procedures for scoring the test were excellent."³ An additional advantage was that since the IOWA TEST is administered yearly in all schools in School District #59, the results were readily available.

Two specific scores from the IOWA TEST were used for this study. These were "Test R: Reading Comprehension" and "Test A: Arithmetic Skills Total." These were chosen because of their direct relationship to the subject areas selected for the study.

"Test R: Reading Comprehension" tested four reading skills. These were comprehension of details, understanding

³Robert L. Thorndike and Elizabeth Hagen, MEASUREMENT AND EVALUATION IN PSYCHOLOGY AND EDUCATION (New York: John Wiley and Sons, Inc., 1969), p. 677.

of purpose, organization, and evaluation. "Because of the close correlation between test performance on items of these four types, it is not considered worthwhile to derive a separate score for each type."⁴

The "Test A: Arithmetic Skills" total score was used, as the writer felt that neither the "Arithmetic Skills Concepts" score nor the "Arithmetic Skills Problem-Solving" score would be adequate for determining the general mathematics achievement of a student.

The grade equivalent score was used because it was a standardized means of expressing whether a student was achieving at or above his chronological grade-month placement.

CALIFORNIA TEST OF PERSONALITY.--The fourth instrument used in this study was the CALIFORNIA TEST OF PERSONALITY, 1953 REVISION, ELEMENTARY LEVEL. The lack of personality inventories which would be considered appropriate for the study of fourth and fifth graders influenced the choice of instruments for this part of the study. The low reliability and validity of all such instruments was also considered. The problems involved are summarized in Thorndike's review of the CALIFORNIA TEST OF PERSONALITY.

This is one of the few personality inventories that have sic forms for use in the elementary school. Evidence on the validity of the scales is scanty. Reliability data indicate that only the total score and its two components, social and personal, are stable enough to use. At the elementary

⁴E. F. Lindquist and A. N. Hieronymus, TEACHER'S MANUAL: IOWA TEST OF BASIC SKILLS (Boston: Houghton Mifflin Co., 1964), p. 28.

levels, the inventories require at least an average reading ability, limiting its usefulness with the low-achieving child.⁵

In spite of the above criticisms, the CALIFORNIA TEST OF PERSONALITY, ELEMENTARY LEVEL was selected from the available testing material because, "All in all, in spite of criticism, as personality inventories go, the CALIFORNIA TEST would appear to be among the better ones available."⁶

Though the scores of the components "Social Adjustment" and "Personal Adjustment" are more stable, the six specific sub-tests were used because of the descriptive personality characteristics measured by each. The following sub-tests were the ones used for this study: 1A) Self-reliance; 1B) Sense of Personal Worth; 1C) Sense of Personal Freedom; 1D) Feeling of Belonging; 2D) Family Relations; and 2E) School Relations. The writer considered these more pertinent to the study than the following six sub-tests: 1E) Withdrawing Tendencies; 1F) Nervous Symptoms; 2A) Social Standards; 2B) Social Skills; 2C) Anti-Social Tendencies; and 2F) Community Relations.

Limitations of the Study

The students included in the study were fourth and fifth graders at two IPI schools, Brentwood and Grant Wood, in the

⁵Thorndike, MEASUREMENT AND EVALUATION, p. 687.

⁶Verner M. Sims, "California Test of Personality, 1953 Revision," THE FIFTH MENTAL MEASUREMENTS YEARBOOK, Oscar Krisen Buros, ed. (New Jersey: The Gryphon Press, 1959), p. 103.

Elk Grove Village, Illinois, School District #59. One limitation to the study was that children at this age may not have matured to a point that could be measured on a standardized personality instrument. The scores on the personality test for elementary level were only for that moment in time when the young people were answering the questions. The scores did not indicate future behavior of the students who took the test. Therefore, the results of the study must be examined with the idea that these fourth and fifth grade students were in the oscillation of development.

The use of the two schools was a limitation because any conclusions reached for these students have to be considered as conclusions for a suburban, mid-west sample of IPI students and could not be generalized to the larger population of fourth and fifth grade elementary students.

Since there was not attempt made to compare a non-IPI school group of children with the children from the two IPI schools, the results of the study were limited to students who were thought to be succeeding in IPI and did not include students in other programs in other schools.

When students who were considered to be succeeding were separated from the others, they constituted a small number. For example, fifth graders who were considered to be succeeding in IPI mathematics numbered 43, and fourth graders succeeding in IPI mathematics numbered 74. Therefore, the sample is small and may not be representative of the larger population of succeeding IPI students.

Only fourth and fifth grade students who were found to be succeeding were included. Conclusions reached through this study do not, therefore, apply to IPI students in general but only to IPI students who are considered to be succeeding.

The discussion of the limitations of the CALIFORNIA TEST OF PERSONALITY, ELEMENTARY LEVEL and of the "Teacher Observation Check List" was given in the section titled "Instruments Used."

Summary

The design for this study, as specified in this chapter, included fourth and fifth graders who had spent at least sixty per cent of their school life in the IPI programs, thus being in the programs longer than any other group available to the writer for study.

The measuring instruments used were the CALIFORNIA TEST OF PERSONALITY, 1953 REVISION, ELEMENTARY LEVEL, form AA; a "Teacher Observation Check List; a "Rate of Achievement Chart," and the sub-tests "Test R: Reading Comprehension" and "Test A: Arithmetic Total" of the IOWA TEST OF BASIC SKILLS.

After using the instruments to collect the data, calculations were begun. The first calculations were of the means for fourth and fifth grade reading and mathematics "Rates of Achievement" and of the grade-month placements for the fourth and fifth graders on the date of the administering of the IOWA TEST OF BASIC SKILLS. These figures were necessary for the separating of the students considered to be succeeding in IPI reading or in IPI mathematics or in both.

The next calculations were of coefficients of correlation between each of the selected six sub-tests of the CALIFORNIA TEST OF PERSONALITY and each of the other measures. The "Teacher Observation Check List" could not be meaningfully correlated with the CALIFORNIA TEST sub-tests and was eliminated from the study. Correlations were completed between each of six CALIFORNIA TEST sub-tests and the following: reading "Rate of Achievement" scores, mathematics "Rate of Achievement" scores, IOWA TEST "Test R" grade equivalents, and IOWA TEST "Test A" grade equivalents. Each of the correlations were made for the fourth graders and for the fifth graders.

Basically, the limitations of the study centered around the sample and how to test accurately personality characteristics, fully realizing the limitations of personality inventories and the fact that personality characteristics for fourth and fifth graders would change.

CHAPTER IV will discuss in detail the results of the attempt to determine whether there is a relationship between success in IPI and any of certain sub-tests of the CALIFORNIA TEST OF PERSONALITY, ELEMENTARY LEVEL.

CHAPTER IV

TREATMENT OF DATA

Results of Correlations

The general results of this study indicated that there were very low or negligible correlations between any of the six sub-test scores of the CALIFORNIA TEST OF PERSONALITY, ELEMENTARY LEVEL and either of the two "Rate of Achievement" scores or either of the two considered sub-tests of the IOWA TEST OF BASIC SKILLS. For succeeding Individually Prescribed Instruction (IPI) fourth graders, more relationships having levels of significance were found than were found for succeeding IPI fifth graders. More positive coefficients of correlation than negative ones were found for all measures.

The relationships between the fourth grade IPI reading "Rate of Achievement" scores and each of six sub-tests of the CALIFORNIA TEST OF PERSONALITY are shown in Table 1, page 29. There was a total of 131 fourth graders in the two schools, and 65, or 50 per cent, of them were at or above the mean for "Rate of Achievement" in IPI reading.

The results in Table 1 show a very low negative correlation between fourth grade IPI reading "Rate of Achievement" and the "Self-reliance" sub-test. The results also show negligible relationships between IPI reading "Rate of

TABLE 1

RELATIONSHIPS BETWEEN SIX CALIFORNIA TEST OF PERSONALITY
SUB-TESTS AND IPI READING RATE OF ACHIEVEMENT
FOR SUCCEEDING FOURTH GRADERS*

Sub-Tests of the CALIFORNIA TEST OF PERSONALITY	Coefficients of Correlation	Level of Confidence
Self-reliance	-.10	Not Significant
Sense of Personal Worth	-.01	Not Significant
Sense of Personal Freedom	-.04	Not Significant
Feeling of Belonging	-.01	Not Significant
Family Relations	+.15	Not Significant
School Relations	+.02	Not Significant

N = 65 (N representing the number of succeeding students)
N = 50% of total fourth grade population

*Attending the Brentwood and Grant Wood Schools, Elk Grove
Village, Illinois

Achievement" and each of the following sub-tests: "Sense of Personal Worth," "Sense of Personal Freedom," "Feeling of Belonging," and "School Relations." Results show a very low positive relationship between IPI reading "Rate of Achievement" and the "Family Relations" sub-test.

Table 2, page 31, shows the relationships between fifth grade IPI reading "Rate of Achievement" scores and each of six sub-tests of the CALIFORNIA TEST OF PERSONALITY. There was a total of 106 fifth grade students in both schools. Sixty-one, or 58 per cent, of the fifth graders were at or above the mean for "Rate of Achievement" in IPI reading.

The results in Table 2 show that no coefficient of correlation reached a level of significance. They show very low positive correlations between IPI reading "Rate of Achievement" and each of the following CALIFORNIA TEST sub-tests: "Self-reliance," "Sense of Personal Freedom," and "School Relations." The results show that the relationships between IPI reading "Rate of Achievement" and each sub-test--"Sense of Personal Worth," "Feeling of Belonging," and "Family Relations"--were positive but of negligible significance.

The relationships between fourth grade IPI mathematics "Rate of Achievement" scores and each of six sub-tests of the CALIFORNIA TEST OF PERSONALITY are shown in Table 3, page 32. Data were collected for a total of 140 fourth grade students in both schools. Seventy-four students, or 53 per cent of the fourth graders, were at or above the mean for "Rate of Achievement" in IPI mathematics.

TABLE 2

RELATIONSHIPS BETWEEN SIX CALIFORNIA TEST OF PERSONALITY
SUB-TESTS AND IPI READING RATE OF ACHIEVEMENT
FOR SUCCEEDING FIFTH GRADERS*

Sub-Tests of the CALIFORNIA TEST OF PERSONALITY	Coefficients of Correlation	Level of Confidence
Self-reliance	+.20	Not Significant
Sense of Personal Worth	+.06	Not Significant
Sense of Personal Freedom	+.14	Not Significant
Feeling of Belonging	+.02	Not Significant
Family Relations	+.05	Not Significant
School Relations	+.10	Not Significant

N = 61 (N representing the number of succeeding students)
N = 58% of total fifth grade population

*Attending the Brentwood and Grant Wood Schools, Elk Grove
Village, Illinois

TABLE 3

RELATIONSHIPS BETWEEN SIX CALIFORNIA TEST OF PERSONALITY
SUB-TESTS AND IPI MATHEMATICS RATE OF ACHIEVEMENT
FOR SUCCEEDING FOURTH GRADERS*

Sub-Tests of the CALIFORNIA TEST OF PERSONALITY	Coefficients of Correlation	Level of Confidence
Self-reliance	+.02	Not Significant
Sense of Personal Worth	+.17	Not Significant
Sense of Personal Freedom	+.14	Not Significant
Feeling of Belonging	+.20	.05
Family Relations	+.07	Not Significant
School Relations	+.05	Not Significant

N = 74 (N representing the number of succeeding students)
N = 53% of total fourth grade population

*Attending the Brentwood and Grant Wood Schools, Elk Grove
Village, Illinois

The results in Table 3 show that "Rate of Achievement" in IPI mathematics and the sub-test "Feeling of Belonging" were positively correlated. However, the correlation was low and at the .05 level of confidence. The results also show that the "Rate of Achievement" scores and each sub-test "Sense of Personal Worth" and "Sense of Personal Freedom" had positive, though very low, correlations which reached no level of significance. Only negligible relationships were found between fourth grade "Rate of Achievement" in IPI mathematics and each of the following: "Self-reliance," "Family Relations," and "School Relations."

The relationships between fifth grade IPI mathematics "Rate of Achievement" scores and each of six sub-tests of the CALIFORNIA TEST OF PERSONALITY are shown in Table 4, page 34. There was a total, from both schools, of 109 fifth grade students for whom data were collected. Forty-three students, or 39 per cent of the fifth graders, were at or above the mean for "Rate of Achievement" in IPI mathematics.

The results in Table 4 show that none of the coefficients of correlation reached a level of confidence. It also was indicated that all correlations, though low or negligible, were positive. The relationship between "Rate of Achievement" and "Sense of Personal Freedom" was low. Very low relationships were found between "Rate of Achievement" and each of the following: "Feeling of Belonging," "School Relations," and "Sense of Personal Worth." The relationships between "Rate of Achievement" and each of the sub-tests "Family Relations" and "Self-reliance" were negligible.

TABLE 4

RELATIONSHIPS BETWEEN SIX CALIFORNIA TEST OF PERSONALITY
SUB-TESTS AND IPI MATHEMATICS RATE OF ACHIEVEMENT
FOR SUCCEEDING FIFTH GRADERS*

Sub-Tests of the CALIFORNIA TEST OF PERSONALITY	Coefficients of Correlation	Level of Confidence
Self-reliance	+ .08	Not Significant
Sense of Personal Worth	+ .12	Not Significant
Sense of Personal Freedom	+ .23	Not Significant
Feeling of Belonging	+ .20	Not Significant
Family Relations	+ .10	Not Significant
School Relations	+ .18	Not Significant

R = 43 (N representing the number of succeeding students)
N = 39% of total fifth grade population

*Attending the Brentwood and Grant Wood Schools, Elk Grove
Village, Illinois

The relationships between fourth grade IOWA TEST OF BASIC SKILLS "Test R: Reading Comprehension" grade equivalents and each of six sub-tests of the CALIFORNIA TEST OF PERSONALITY are shown in Table 5, page 36. Data were collected for a total of 131 fourth graders in the two schools, and 70, or 53 per cent, of them were at or above the grade-month placement at the date of testing.

The results in Table 5 show that two coefficients of correlation reached a level of significance. One was the relationship between "Test R" grade equivalents and "Self-reliance." It was at the .01 level of confidence. The other significant relationship was between "Test R" and the sub-test "Feeling of Belonging" which were correlated at the .025 level of confidence. The table also shows the relationships between the "Test R" grade equivalents and "School Relations" and between "Test R" and "Family Relations" to be positive, though low. It shows negligible relationships between the fourth grade "Test R" grade equivalents and each of the following sub-tests: "Self-reliance" and "Sense of Personal Freedom."

Table 6, page 37, shows the relationships between the grade equivalents for fifth graders on the IOWA TEST OF BASIC SKILLS "Test R: Reading Comprehension" and each of six CALIFORNIA TEST OF PERSONALITY sub-tests. There was a total, in the two schools, of 106 fifth grade students for whom data were collected. Fifty-nine students, or 56 per cent, scored at or above the appropriate grade-month placement.

TABLE 5

RELATIONSHIPS BETWEEN SIX CALIFORNIA TEST OF PERSONALITY
SUB-TESTS AND THE IOWA TEST OF BASIC SKILLS
"TEST R: READING COMPREHENSION"
FOR SUCCEEDING FOURTH GRADERS*

Sub-Tests of the CALIFORNIA TEST OF PERSONALITY	Coefficients of Correlation	Level of Confidence
Self-reliance	+.08	Not Significant
Sense of Personal Worth	+.30	.01
Sense of Personal Freedom	+.02	Not Significant
Feeling of Belonging	+.25	.025
Family Relations	+.10	Not Significant
School Relations	+.17	Not Significant

N = 70 (N representing the number of succeeding students)
N = 53% of total fourth grade population

*Attending the Brentwood and Grant Wood Schools, Elk Grove
Village, Illinois

TABLE 6

RELATIONSHIPS BETWEEN SIX CALIFORNIA TEST OF PERSONALITY
SUB-TESTS AND THE IOWA TEST OF BASIC SKILIS
"TEST R: READING COMPREHENSION"
FOR SUCCEEDING FIFTH GRADERS*

Sub-Tests of the CALIFORNIA TEST OF PERSONALITY	Coefficients of Correlation	Level of Confidence
Self-reliance	+ .04	Not Significant
Sense of Personal Worth	+ .22	.05
Sense of Personal Freedom	- .07	Not Significant
Feeling of Belonging	- .15	Not Significant
Family Relations	+ .03	Not Significant
School Relations	- .01	Not Significant

N = 59 (N representing the number of succeeding students)
N = 56% of total fifth grade population

*Attending the Brentwood and Grant Wood Schools, Elk Grove
Village, Illinois

The results shown in Table 6 indicate that only one coefficient of correlation reached a level of confidence. This was the relationship between the fifth grade "Test R" and the "Sense of Personal Worth" sub-test. The relationship was positive at the .05 level of confidence. The table shows that three of the correlations were positive and three were negative. The relationship between "Test R" and "Feeling of Belonging" was negative but very low. Between "Test R" grade equivalents and each of the following sub-tests: "Sense of Personal Freedom," "Self-reliance," "Family Relations," and "School Relations," the relationships were negligible.

The relationships between fourth grade IOWA TEST OF BASIC SKILLS "Test A: Arithmetic Total," grade equivalents and each of six sub-tests of the CALIFORNIA TEST OF PERSONALITY, ELEMENTARY LEVEL are shown in Table 7, page 39. Of 140 fourth grade students in the two schools, 71 students, or 51 per cent, scored at or above the grade-month placement of the date of testing.

Table 7 shows that the relationship between "Test A" grade equivalents and "Sense of Personal Worth" was positive at the .01 level of confidence and that the relationship of these grade equivalents with "School Relations" was positive at the .05 level of confidence. Very low positive relationships were found between "Test A" grade equivalents and each of the following: "Self-reliance" and "Feeling of Belonging." The relationships were negligible between "Test A" and either of the sub-tests "Sense of Personal Freedom" and "Family Relations."

TABLE 7

RELATIONSHIPS BETWEEN SIX CALIFORNIA TEST OF PERSONALITY
SUB-TESTS AND THE IOWA TEST OF BASIC SKILLS
"TEST A: ARITHMETIC TOTAL" FOR
SUCCEEDING FOURTH GRADERS*

Sub-Tests of the CALIFORNIA TEST OF PERSONALITY	Coefficients of Correlation	Level of Confidence
Self-reliance	+ .17	Not Significant
Sense of Personal Worth	+ .27	.01
Sense of Personal Freedom	+ .09	Not Significant
Feeling of Belonging	+ .17	Not Significant
Family Relations	+ .08	Not Significant
School Relations	+ .20	.05

N = 71 (N representing the number of succeeding students)

N = 51% of the total fourth grade population

*Attending the Brentwood and Grant Wood Schools, Elk Grove
Village, Illinois

Table 8, page 41, shows the relationships between fifth grade IOWA TEST OF BASIC SKILLS "Test A: Arithmetic Total" grade equivalents and each of six CALIFORNIA TEST OF PERSONALITY sub-tests. From the two schools, there were 109 fifth grade students for whom data were collected. Fifty-three students, or 49 per cent, scored at or above the grade-month placement of the date of testing.

Table 3 shows that none of the coefficients of correlation reached a level of significance. It shows that the relationship between the grade equivalents of "Test A" and "Sense of Personal Worth" was positive, though low. The relationships of either "Self-reliance" or "School Relations" to "Test A" were positive though very low. Negligible relationships were found between "Test A" and each of the following sub-tests: "Feeling of Belonging," "Family Relations," and "Sense of Personal Freedom."

Other Findings

The purpose of Tables 9 and 10 was to answer the guide questions formulated at the beginning of this study. These questions were related in CHAPTER I, pages 4 and 5.

The first question--"Did fourth and fifth grade students who were considered to be succeeding in IFI reading tend to score above the fiftieth percentile on six sub-tests of the CALIFORNIA TEST OF PERSONALITY, ELEMENTARY LEVEL?"--is answered by Table 9, page 42. This table shows the number of fourth and fifth grade students defined in this study as

TABLE 8

RELATIONSHIPS BETWEEN SIX CALIFORNIA TEST OF PERSONALITY
SUB-TESTS AND THE IOWA TEST OF BASIC SKILLS
"TEST A: ARITHMETIC TOTAL" FOR
SUCCEEDING FIFTH GRADERS*

Sub-Tests of the CALIFORNIA TEST OF PERSONALITY	Coefficients of Correlation	Level of Confidence
Self-reliance	+ .18	Not Significant
Sense of Personal Worth	+ .21	Not Significant
Sense of Personal Freedom	- .06	Not Significant
Feeling of Belonging	+ .06	Not Significant
Family Relations	- .01	Not Significant
School Relations	+ .11	Not Significant

N = 53 (N representing the number of succeeding students)
N = 49% of total fifth grade population

*Attending the Brentwood and Grant Wood Schools, Elk Grove
Village, Illinois

TABLE 9

FOURTH AND FIFTH GRADE STUDENTS: AT OR ABOVE THE MEAN FOR
RATE OF ACHIEVEMENT IN IPI READING AND THEIR
PLACEMENT ON SIX SUB-TESTS OF THE
CALIFORNIA TEST OF PERSONALITY

Sub-Tests of the CALIFORNIA TEST OF PERSONALITY	Fourth Graders		Fifth Graders	
	Above Fiftieth Percentile	Below Fiftieth Percentile	Above Fiftieth Percentile	Below Fiftieth Percentile
Self-reliance	29	36	30	31
Sense of Personal Worth	42	23	47	14
Sense of Personal Freedom	37	28	36	25
Feeling of Belonging	23	42	18	43
Family Relations	26	39	31	30
School Relations	36	29	38	23
	N = 65		N = 61	

*Attending the Brentwood and Grant Wood Schools, Elk Grove
Village, Illinois

succeeding in IPI reading and their placement above or below the fiftieth percentile for each of six sub-tests of the CALIFORNIA TEST OF PERSONALITY, 1953 REVISION, ELEMENTARY LEVEL. The table shows that fourth and fifth grade students succeeding in IPI reading tend to score above the fiftieth percentile on the following sub-tests: "Sense of Personal Worth," "Sense of Personal Freedom," and "School Relations."

The purpose of Table 10, page 44, is to answer the question, "Did fourth and fifth grade students who were considered to be succeeding in IPI mathematics tend to score above the fiftieth percentile on the six sub-tests of the CALIFORNIA TEST OF PERSONALITY, ELEMENTARY LEVEL?" The number of fourth and fifth grade students defined in this study as succeeding in IPI mathematics who placed above or below the fiftieth percentile for each of six sub-tests of the CALIFORNIA TEST are shown in this table. It shows that fourth grade students succeeding in IPI mathematics tend to score above the fiftieth percentile on the sub-test "Sense of Personal Worth." Fifth grade students succeeding in IPI mathematics tend to score above the fiftieth percentile on the following sub-tests: "Sense of Personal Worth," "Sense of Personal Freedom," and "School Relations." It is interesting to note that fifth graders tended to score above the fiftieth percentile on three sub-tests, and yet none of the coefficients of the correlations reached a level of confidence. A possible explanation of this might be that the fiftieth percentile was not the same number of correct answers for each of the

TABLE 10

FOURTH AND FIFTH GRADE STUDENTS* AT OR ABOVE THE MEAN FOR
 RATE OF ACHIEVEMENT IN IPI MATHEMATICS AND THEIR
 PLACEMENT ON SIX SUB-TESTS OF THE
 CALIFORNIA TEST OF PERSONALITY

Sub-Tests of the CALIFORNIA TEST OF PERSONALITY	Fourth Graders		Fifth Graders	
	<u>Above</u> Fiftieth Percentile	<u>Below</u>	<u>Above</u> Fiftieth Percentile	<u>Below</u>
Self-reliance	32	42	24	19
Sense of Personal Worth	48	26	35	8
Sense of Personal Freedom	35	39	28	15
Feeling of Belonging	27	47	15	28
Family Relations	28	46	20	23
School Relations	39	35	26	17
	N = 74		N = 43	

*Attending the Brentwood and Grant Wood Schools, Elk Grove
 Village, Illinois

sub-tests. For example, on the sub-test "Sense of Personal Worth," the fiftieth percentile was any score at or above eight correct answers, but on the sub-test "Sense of Personal Freedom," the fiftieth percentile was any score at or above ten correct answers. Therefore, the fact that over fifty per cent of the students scored above the fiftieth percentile would not influence a correlation made with the number of correct answers rather than with the number of students scoring above the fiftieth percentile.

Summary

The relationships which reached .01, .025, and .05 levels of confidence between each of six sub-tests of the CALIFORNIA TEST OF PERSONALITY, 1953 REVISION, ELEMENTARY LEVEL and each of the following: "Rate of Achievement" scores in IPI reading, "Rate of Achievement" scores in IPI mathematics, grade equivalents for "Test R: Reading Comprehension" of the IOWA TEST OF BASIC SKILLS, and grade equivalents for "Test A: Arithmetic Total" of the IOWA TEST OF BASIC SKILLS are shown in Table 11, page 46, which was compiled from Tables 1-8.

The table shows that all the relationships which reached a level of confidence were positive. It also shows the following specific positive relationships:¹

¹Henry E. Garrett, ELEMENTARY STATISTICS (New York: Longmans, Green and Company, 1956), p. 116.

WRITER'S NOTE: Dr. Garrett provides the following "rules" as a general guide for determining the meaning of a coefficient of a correlation:

TABLE 11

SUMMARY OF .01, .025, AND .05 LEVEL OF CONFIDENCE
RELATIONSHIPS, TAKEN FROM TABLES 1-8

IPI Reading "Rate of Achievement"

FourthFifth

No relationship reached
a level of confidence

No relationship reached
a level of confidence

IPI Mathematics "Rate of Achievement"

FourthFifth

"Sense of Personal Worth"
*r = +.20 **L. of C. = .05

No relationship reached
a level of confidence

"Test R: Reading Comprehension," IOWA TEST OF BASIC SKILLS

FourthFifth

"Sense of Personal Worth"
r = +.30 L. of C. = .01

"Sense of Personal Worth"
r = +.22 L. of C. = .05

"Feeling of Belonging"
r = +.25 L. of C. = .025

"Test A: Arithmetic Total," IOWA TEST OF BASIC SKILLS

FourthFifth

"Sense of Personal Worth"
r = +.27 L. of C. = .01

No relationship reached
a level of confidence

"School Relations"
r = +.20 L. of C. = .05

*r refers to the coefficient of correlation
**L. of C. refers to the Level of Confidence

- (1) Relationship which was slight
- (a) Between fourth grade "Test R: Reading Comprehension" grade equivalents and "Sense of Personal Worth" (+.30)
- (2) Relationships which were low
- (a) Between fourth grade "Test A: Arithmetic Total" grade equivalents and "Sense of Personal Worth" (+.27)
- (b) Between fourth grade "Test R" grade equivalents and "Feeling of Belonging" (+.25)
- (c) Between fifth grade "Test R" grade equivalents and "Sense of Personal Worth" (+.22)
- (3) Relationships which were very low
- (a) Between fourth grade "Test A" grade equivalents and "School Relations" (+.20)
- (b) Between fourth grade IPI mathematics "Rate of Achievement" and "Sense of Personal Worth" (+.20)

Possible significance of these relationships will be discussed in CHAPTER V.

r from .00 to \pm .20	very low or negligible
r from \pm .20 to \pm .40	low; present but slight
r from \pm .40 to \pm .70	substantial or marked
r from \pm .70 to \pm 1.00	high to very high

CHAPTER V

CONCLUSIONS AND SUMMARY

Conclusions

The general results of the study show low to negligible coefficients of correlation for all relationships between six sub-tests of the CALIFORNIA TEST OF PERSONALITY, 1953 REVISION, ELEMENTARY LEVEL, "Rate of Achievement" scores in IPI reading and in IPI mathematics, and two sub-tests of the IOWA TEST OF BASIC SKILLS--"Test R: Reading Comprehension" and "Test A: Arithmetic Total." Of the forty-eight correlations which were calculated, only six reached levels of confidence. These, shown in Table 11, page 46, were the following: (1) Between fourth graders "Rate of Achievement" in IPI mathematics and the sub-test "Sense of Personal Worth" which was at the .05 level of confidence; (2) Between fourth grade "Test R: Reading Comprehension" grade equivalents and each of the following sub-tests: "Sense of Personal Worth"--at the .01 level of confidence--and "Feeling of Belonging"--at the .025 level of confidence; (3) Between fifth grade "Test R: Reading Comprehension" grade equivalents and the sub-test "Sense of Personal Worth"--at the .05 level of confidence; and (4) Between fourth grade "Test A: Arithmetic Total" grade equivalents and each of the following

sub-tests: "Sense of Personal Worth"--at the .01 level of confidence--and "School Relations"--at the .05 level of confidence.

None of the coefficients of the correlations in the study can be considered as highly significant, as the highest correlation was .30. However, there seems to be indication of a pattern for the fourth graders considered to be succeeding. It would seem that they either felt a sense of personal worth or, at least, had knowledge of the acceptable behavior and attitudes of personal worth and had reflected this on the CALIFORNIA TEST OF PERSONALITY sub-test "Sense of Personal Worth." As Table 11 indicates, a level of confidence of .05 was reached when "Sense of Personal Worth" was compared with the IPI mathematics "Rate of Achievement" of succeeding fourth graders. A level of confidence of .01 was reached for succeeding fourth grade students when "Sense of Personal Worth" was compared with each of the IOWA TEST OF BASIC SKILLS sub-tests, "Test B: Reading Comprehension" and "Test A: Arithmetic Total."

Support for this pattern is also found in Tables 9 and 10, pages 42 and 44, respectively. In interpreting these tables, caution must be used, as no defined patterns can be noted. However, the numbers and their relative placement to each other seem to indicate that both fourth and fifth grade students succeeding in IPI reading would tend to score above the fiftieth percentile on the sub-test "Sense of Personal Worth," and also on the sub-tests "Sense of Personal Freedom"

and "School Relations." There seems to be indication, also, that fourth and fifth grade students succeeding in IPI mathematics would tend to score above the fiftieth percentile on the sub-test of "Sense of Personal Worth." It seems that, in addition, fifth graders succeeding in IPI mathematics would tend to score above the fiftieth percentile on the sub-tests of "Sense of Personal Freedom" and "School Relations."

The following speculations are without conclusive statistical support from the evidence obtained.

Fourth grade students who were succeeding in IPI reading seem to feel a cordial relationship with peers and teachers, to have a sense of being part of the school, and to feel secure in their home relationships. These beliefs are based upon the low correlations between IPI reading "Rate of Achievement" and the following sub-tests of the CALIFORNIA TEST OF PERSONALITY, ELEMENTARY LEVEL: "Feeling of Belonging," "Family Relations," and "School Relations." Also, fourth graders who are succeeding in IPI reading apparently do not seem to feel that they direct their actions. This observation is based upon the negative coefficient of correlation between IPI reading "Rate of Achievement" and the CALIFORNIA TEST "Self-reliance" sub-test. Could this mean that they do not feel that they have a part in the decisions involving their IPI reading assignments?

Fourth grade students who were succeeding in IPI mathematics might be pictured as students who feel that they get along well with peers and teachers. This inference was

indicated by the low relationships of succeeding fourth graders academic performances and the sub-test "Sense of Personal Worth." These fourth graders seem to feel that they are allowed a reasonable share in deciding their conduct and that they are to some degree directly responsible for their actions. The implications for this conclusion are seen in the low relationships between the academic performances of the succeeding fourth graders and the CALIFORNIA TEST OF PERSONALITY sub-tests of "School Relations" and "Feeling of Belonging."

Fifth grade students who were succeeding in IPI reading seem to be well regarded by their peers and can depend upon themselves. The basis for this statement is the low relationships between the reading achievements of succeeding fifth graders and the CALIFORNIA TEST sub-tests "Sense of Personal Worth" and "Self-reliance." These fifth graders seem to feel that they have a share in determining their conduct. This is indicated by the very low relationship of succeeding fifth graders in reading scores and the "Sense of Personal Freedom" sub-test of the CALIFORNIA TEST OF PERSONALITY. It was interesting to note that fifth grade students succeeding in reading do not necessarily evidence a feeling of having a cordial relationship with people. This was noted from the very low negative correlation between fifth grade reading success and the "Feeling of Belonging" sub-test of the CALIFORNIA TEST. From this, one might ask the question, "Do successful fifth grade readers perceive themselves as "loners"?"

Fifth grade students who were succeeding in IPI mathematics showed an interesting pattern. Those who were succeeding according to the IOWA TEST OF BASIC SKILLS seemed to feel well regarded by others and to have a sense of directing their own activities. This pattern is inferred from the low relationships of fifth graders succeeding in mathematics according to IOWA TEST "Test A" and the following sub-tests of the CALIFORNIA TEST: "Sense of Personal Worth" and "Self-reliance." Fifth graders who were succeeding according to IPI mathematics "Rate of Achievement" scores indicated that they felt they were permitted to determine their actions and that they felt a cordial relationship with people in general. The basis for this conclusion is the very low relationships between fifth graders mathematics "Rate of Achievement" scores and the CALIFORNIA TEST sub-tests of "Sense of Personal Freedom" and "Feeling of Belonging." Fifth graders successful in IPI mathematics indicated that they felt they had good relations with the school and that they had a feeling of being well regarded by others. The implications for these conclusions are seen in the very low correlations between fifth graders "Rate of Achievement" scores in mathematics and the sub-tests "School Relations" and "Sense of Personal Worth" of the CALIFORNIA TEST OF PERSONALITY.

Summary of Study

The central focus of the study was to determine whether certain personality patterns can be detected for fourth and

fifth grade students who were defined as succeeding in either IPI reading or IPI mathematics or both. To determine this, the CALIFORNIA TEST OF PERSONALITY, 1953 REVISION, ELEMENTARY LEVEL was administered to 273 fourth and fifth graders. These students were attending the Brentwood and Grant Wood Elementary Schools in the Elk Grove Village, Illinois, School District #59.

As a supplement to the CALIFORNIA TEST OF PERSONALITY, a "Teacher Observation Check List" was administered to the teachers of the students tested. The teacher ranked each student as to his usual attitude toward IPI reading and as to his usual attitude toward IPI mathematics. After collecting the data, the writer attempted to calculate a coefficient of correlation, but the result proved to be statistically meaningless.

A "Rate of Achievement" score was calculated for each fourth and fifth grade student for both IPI reading and IPI mathematics. Then a mean was calculated for each grade in each of the two subjects. Students whose "Rate of Achievement" score was at or above the mean for their grade were used in the study.

In addition to the "Rate of Achievement" score as an indication of academic success, the IOWA TEST OF BASIC SKILLS sub-tests "Test R: Reading Comprehension" and "Test A: Arithmetic Total" were also used in determining which students were succeeding in either or both of IPI reading and IPI mathematics. Fourth and fifth grade students whose grade

equivalent was at or above their grade-month placement for the date of testing were included in the study.

After collecting the data for both the "Rate of Achievement" scores and the IOWA TEST OF BASIC SKILLS sub-tests, it was found that approximately 132 fourth and fifth graders, or 48 per cent of the students tested, were considered to be succeeding in IPI reading or IPI mathematics or both.

From the results of the calculations of the study, the writer reached the following conclusions:

- 1) Fourth graders succeeding in IPI reading and IPI mathematics seemed either to feel a sense of personal worth or to have knowledge of the acceptable behavior and attitudes concerning personal worth.
- 2) Fourth grade students succeeding in IPI mathematics tended to score above the fiftieth percentile on the sub-test "Sense of Personal Worth."
- 3) Fifth grade students succeeding in IPI reading and in IPI mathematics tended to score above the fiftieth percentile on the following sub-tests of the CALIFORNIA TEST OF PERSONALITY, ELEMENTARY LEVEL: "Sense of Personal Worth," "Sense of Personal Freedom," and "School Relations."

The following speculations are not conclusively supported by the evidence obtained:

- 1) Fourth grade students who were succeeding in IPI reading seemed to feel a cordial relationship with their peers and teachers, to have a sense of being part of the school, and to feel that their home relationship was secure. These students did not seem to evidence feelings of self-reliance.
- 2) Fourth grade students who were succeeding in IPI mathematics seemed to feel that they generally got along well with peers and teachers and that the school situation permitted them to have a share in making decisions.
- 3) Fifth grade students who were succeeding in IPI reading seemed to feel worthy and self-reliant, and

to feel that they had a share in determining their conduct. They do not necessarily evidence a feeling of having a cordial relationship with people.

4) Fifth grade students who were succeeding in IPI mathematics seemed to feel well regarded by others, to feel capable, to have a sense of directing their own activities, to feel that they had a cordial relationship with people, and to feel that they had good school relations.

APPENDIX

Instruments Used

"Teacher Observation Check List".....	57-58
"Rate of Achievement Chart".....	59
CALIFORNIA TEST OF PERSONALITY, 1953 REVISION, ELEMENTARY LEVEL	60

DIRECTIONS FOR FILLING IN TEACHER'S OBSERVATION SHEETS

1. Fill in today's date.
2. Fill in whether this is a Reading class or a Math class.
3. Fill in your room number.
4. Write the names of all the students in your Reading class on one set of sheets.
5. Write the names of all the students in your Math class on the other set of sheets.
6. Mark the appropriate box for each child with an "X". Consider how he attacks or backs off from a problem or an assignment for that class. Always indicates 80% of behavior and usually indicates 50%.
7. Any additional comments on a specific child will be welcomed.
8. When the observation sheets have been completed, please return them to the office.

Thank you for your time and your professional opinions.

Judith Kuehn



Elementary • GRADES 4-5-6-7-8 • form AA

California Test of Personality

1953 Revision

Devised by

LOUIS P. THORPE, WILLIS W. CLARK, AND ERNEST W. TIEGS

Do not write or mark on this booklet unless told to do so by the examiner.

Name.....Grade.....(CIRCLE ONE)
Last First Middle Boy Girl
 School.....City.....Date of Test.....
Month Day Year
 Examiner.....(.....) Pupil's Age.....Date of Birth.....
Month Day Year



INSTRUCTIONS TO PUPILS:

This booklet contains some questions which can be answered YES or NO. Your answers will show what you usually think, how you usually feel, or what you usually do about things. Work as fast as you can without making mistakes.

DO NOT TURN THIS PAGE UNTIL TOLD TO DO SO.

INSTRUCTIONS TO PUPILS

DO NOT WRITE OR MARK ON THIS TEST BOOKLET UNLESS TOLD TO DO SO BY THE EXAMINER.

You are to decide for each question whether the answer is YES or NO and mark it as you are told. The following are two sample questions:

SAMPLES

- A. Do you have a dog at home? YES NO
B. Can you ride a bicycle? YES NO

DIRECTIONS FOR MARKING ANSWERS

ON ANSWER SHEETS

Make a heavy black mark under the word YES or NO to show your answer. If you have a dog at home, you would mark under the YES for question A as shown below. If you cannot ride a bicycle, you would mark under the NO for question B as shown below.

	YES	NO
A		⋮
B	⋮	

Remember, you mark under the word that shows your answer. Now find Samples A and B on your answer sheet and show your answer for each by marking YES or NO. Do it now. Find answer row number 1 on your answer sheet. Now wait until the examiner tells you to begin.

ON TEST BOOKLETS

Draw a circle around the word YES or NO, whichever shows your answer. If you have a dog at home, draw a circle around the word YES in Sample A above; if not, draw a circle around the word NO. Do it now.

If you can ride a bicycle, draw a circle around the word YES in Sample B above; if not, draw a circle around the word NO. Do it now.

Now wait until the examiner tells you to begin.

After the examiner tells you to begin, go right on from one page to another until you have finished the test or are told to stop. Work as fast as you can without making mistakes. Now look at item 1 on page 3. Ready, begin.

SECTION 1 A

1. Do you usually keep at your work until it is done? YES NO
2. Do you usually apologize when you are wrong? YES NO
3. Do you help other boys and girls have a good time at parties? YES NO
4. Do you usually believe what other boys or girls tell you? YES NO
5. Is it easy for you to recite or talk in class? YES NO
6. When you have some free time, do you usually ask your parents or teacher what to do? YES NO
7. Do you usually go to bed on time, even when you wish to stay up? YES NO
8. Is it hard to do your work when someone blames you for something? YES NO
9. Can you often get boys and girls to do what you want them to? YES NO
10. Do your parents or teachers usually need to tell you to do your work? YES NO
11. If you are a boy, do you talk to new girls? If you are a girl, do you talk to new boys? YES NO
12. Would you rather plan your own work than to have someone else plan it for you? YES NO

GO RIGHT ON TO THE NEXT COLUMN

Section 1 A
(number right)

SECTION 1 B

13. Do your friends generally think that your ideas are good? YES NO
14. Do people often do nice things for you? YES NO
15. Do you wish that your father (or mother) had a better job? YES NO
16. Are your friends and classmates usually interested in the things you do? YES NO
17. Do your classmates seem to think that you are not a good friend? YES NO
18. Do your friends and classmates often want to help you? YES NO
19. Are you sometimes cheated when you trade things? YES NO
20. Do your classmates and friends usually feel that they know more than you do? YES NO
21. Do your folks seem to think that you are doing well? YES NO
22. Can you do most of the things you try? YES NO
23. Do people often think that you cannot do things very well? YES NO
24. Do most of your friends and classmates think you are bright? YES NO

GO RIGHT ON TO THE NEXT PAGE

Section 1 B
(number right)

SECTION 1 C

SECTION 1 D

- 25. Do you feel that your folks boss you too much? YES NO
- 26. Are you allowed enough time to play? YES NO
- 27. May you usually bring your friends home when you want to? YES NO
- 28. Do others usually decide to which parties you may go? YES NO
- 29. May you usually do what you want to during your spare time? YES NO
- 30. Are you prevented from doing most of the things you want to? YES NO
- 31. Do your folks often stop you from going around with your friends? YES NO
- 32. Do you have a chance to see many new things? YES NO
- 33. Are you given some spending money? YES NO
- 34. Do your folks stop you from taking short walks with your friends? YES NO
- 35. Are you punished for lots of little things? YES NO
- 36. Do some people try to rule you so much that you don't like it? YES NO

- 37. Do pets and animals make friends with you easily? YES NO
- 38. Are you proud of your school? YES NO
- 39. Do your classmates think you cannot do well in school? YES NO
- 40. Are you as well and strong as most boys and girls? YES NO
- 41. Are your cousins, aunts, uncles, or grandparents as nice as those of most of your friends? YES NO
- 42. Are the members of your family usually good to you? YES NO
- 43. Do you often think that nobody likes you? YES NO
- 44. Do you feel that most of your classmates are glad that you are a member of the class? YES NO
- 45. Do you have just a few friends? YES NO
- 46. Do you often wish you had some other parents? YES NO
- 47. Is it hard to find friends who will keep your secrets? YES NO
- 48. Do the boys and girls usually invite you to their parties? YES NO

GO RIGHT ON TO THE NEXT COLUMN

Section 1 C (number right)

GO RIGHT ON TO THE NEXT PAGE

Section 1 D (number right)

SECTION 1 E

49. Have people often been so unfair that you gave up? YES NO
50. Would you rather stay away from most parties? YES NO
51. Does it make you shy to have everyone look at you when you enter a room? YES NO
52. Are you often greatly discouraged about many things that are important to you? YES NO
53. Do your friends or your work often make you worry? YES NO
54. Is your work often so hard that you stop trying? YES NO
55. Are people often so unkind or unfair that it makes you feel bad? YES NO
56. Do your friends or classmates often say or do things that hurt your feelings? YES NO
57. Do people often try to cheat you or do mean things to you? YES NO
58. Are you often with people who have so little interest in you that you feel lonesome? YES NO
59. Are your studies or your life so dull that you often think about many other things? YES NO
60. Are people often mean or unfair to you? YES NO

SECTION 1 F

61. Do you often have dizzy spells? YES NO
62. Do you often have bad dreams? YES NO
63. Do you often bite your fingernails? YES NO
64. Do you seem to have more headaches than most children? YES NO
65. Is it hard for you to keep from being restless much of the time? YES NO
66. Do you often find you are not hungry at meal time? YES NO
67. Do you catch cold easily? YES NO
68. Do you often feel tired before noon? YES NO
69. Do you believe that you have more bad dreams than most of the boys and girls? YES NO
70. Do you often feel sick to your stomach? YES NO
71. Do you often have sneezing spells? YES NO
72. Do your eyes hurt often? YES NO

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Section 1 E
(number right)

GO RIGHT ON TO THE NEXT PAGE

Section 1 F
(number right)

SECTION 2 A**SECTION 2 B**

73. Is it all right to cheat in a game when the umpire is not looking? YES NO
74. Is it all right to disobey teachers if you think they are not fair to you? YES NO
75. Should one return things to people who won't return things they borrow? YES NO
76. Is it all right to take things you need if you have no money? YES NO
77. Is it necessary to thank those who have helped you? YES NO
78. Do children need to obey their fathers or mothers even when their friends tell them not to? YES NO
79. If a person finds something, does he have a right to keep it or sell it? YES NO
80. Do boys and girls need to do what their teachers say is right? YES NO
81. Should boys and girls ask their parents for permission to do things? YES NO
82. Should children be nice to people they don't like? YES NO
83. Is it all right for children to cry or whine when their parents keep them home from a show? YES NO
84. When people get sick or are in trouble, is it usually their own fault? YES NO

85. Do you let people know you are right no matter what they say? YES NO
86. Do you try games at parties even if you haven't played them before? YES NO
87. Do you help new pupils to talk to other children? YES NO
88. Does it make you feel angry when you lose in games at parties? YES NO
89. Do you usually help other boys and girls have a good time? YES NO
90. Is it hard for you to talk to people as soon as you meet them? YES NO
91. Do you usually act friendly to people you do not like? YES NO
92. Do you often change your plans in order to help people? YES NO
93. Do you usually forget the names of people you meet? YES NO
94. Do the boys and girls seem to think you are nice to them? YES NO
95. Do you usually keep from showing your temper when you are angry? YES NO
96. Do you talk to new children at school? YES NO

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THE NEXT COLUMN

Section 2 A
(number right)

GO RIGHT ON TO
THE NEXT PAGE

Section 2 B
(number right)

SECTION 2 C

97. Do you like to scare or push smaller boys and girls? **YES NO**
98. Have unfair people often said that you made trouble for them? **YES NO**
99. Do you often make friends or classmates do things they don't want to? **YES NO**
100. Is it hard to make people remember how well you can do things? **YES NO**
101. Do people often act so mean that you have to be nasty to them? **YES NO**
102. Do you often have to make a "fuss" or "act up" to get what you deserve? **YES NO**
103. Is anyone at school so mean that you tear, or cut, or break things? **YES NO**
104. Are people often so unfair that you lose your temper? **YES NO**
105. Is someone at home so mean that you often have to quarrel? **YES NO**
106. Do you sometimes need something so much that it is all right to take it? **YES NO**
107. Do classmates often quarrel with you? **YES NO**
108. Do people often ask you to do such hard or foolish things that you won't do them? **YES NO**

SECTION 2 D

109. Do your folks seem to think that you are just as good as they are? **YES NO**
110. Do you have a hard time because it seems that your folks hardly ever have enough money? **YES NO**
111. Are you unhappy because your folks do not care about the things you like? **YES NO**
112. When your folks make you mind are they usually nice to you about it? **YES NO**
113. Do your folks often claim that you are not as nice to them as you should be? **YES NO**
114. Do you like both of your parents about the same? **YES NO**
115. Do you feel that your folks fuss at you instead of helping you? **YES NO**
116. Do you sometimes feel like running away from home? **YES NO**
117. Do you try to keep boys and girls away from your home because it isn't as nice as theirs? **YES NO**
118. Does it seem to you that your folks at home often treat you mean? **YES NO**
119. Do you feel that no one at home loves you? **YES NO**
120. Do you feel that too many people at home try to boss you? **YES NO**

GO RIGHT ON TO THE NEXT COLUMN

Section 2 C
(number right)

GO RIGHT ON TO THE NEXT PAGE

Section 2 D
(number right)

SECTION 2 E

121. Do you think that the boys and girls at school like you as well as they should? **YES NO**
122. Do you think that the children would be happier if the teacher were not so strict? **YES NO**
123. Is it fun to do nice things for some of the other boys or girls? **YES NO**
124. Is school work so hard that you are afraid you will fail? **YES NO**
125. Do your schoolmates seem to think that you are nice to them? **YES NO**
126. Does it seem to you that some of the teachers "have it in for" pupils? **YES NO**
127. Do many of the children get along with the teacher much better than you do? **YES NO**
128. Would you like to stay home from school a lot if it were right to do so? **YES NO**
129. Are most of the boys and girls at school so bad that you try to stay away from them? **YES NO**
130. Have you found that some of the teachers do not like to be with the boys and girls? **YES NO**
131. Do many of the other boys or girls claim that they play games more fairly than you do? **YES NO**
132. Are the boys and girls at school usually nice to you? **YES NO**

SECTION 2 F

133. Do you visit many of the interesting places near where you live? **YES NO**
134. Do you think there are too few interesting places near your home? **YES NO**
135. Do you sometimes do things to make the place in which you live look nicer? **YES NO**
136. Do you ever help clean up things near your home? **YES NO**
137. Do you take good care of your own pets or help with other people's pets? **YES NO**
138. Do you sometimes help other people? **YES NO**
139. Do you try to get your friends to obey the laws? **YES NO**
140. Do you help children keep away from places where they might get sick? **YES NO**
141. Do you dislike many of the people who live near your home? **YES NO**
142. Is it all right to do what you please if the police are not around? **YES NO**
143. Does it make you glad to see the people living near you get along fine? **YES NO**
144. Would you like to have things look better around your home? **YES NO**

GO RIGHT ON TO THE NEXT COLUMN

Section 2 E
(number right)

STOP NOW WAIT FOR FURTHER INSTRUCTIONS

Section 2 F
(number right)

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