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A Study Showing The Interrelation Between Social Acceptance, Personality Adjustment, Mental Ability, And Achievement For Elementary School Children

Freda M. Woodworth

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<i>Jerry N. Wesner</i>	<i>Nov., 1966</i>

A STUDY SHOWING THE INTERRELATION BETWEEN SOCIAL ACCEPTANCE,
PERSONALITY ADJUSTMENT, MENTAL ABILITY, AND ACHIEVEMENT
FOR ELEMENTARY SCHOOL CHILDREN

A Thesis
Presented to
the Faculty of the College of Education
The University of New Mexico

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts in Education

by
Freda M. Woodworth

August 1952

A COURT ORDERING THE JURY TO RETURN A VERDICT
IN FAVOR OF THE PLAINTIFFS, AND
FOR THE REASON THEREOF.



IN TESTIMONY WHEREOF, the Clerk of the Court
has hereunto set his hand and the seal of the Court
at New York, this 1st day of January, 1901.

CLERK OF THE COURT
COUNTY OF NEW YORK

IN WITNESS WHEREOF, the Clerk of the Court
has hereunto set his hand and the seal of the Court
at New York, this 1st day of January, 1901.

BY
CLERK OF THE COURT
COUNTY OF NEW YORK

This thesis, directed and approved by the candidate's committee, has been accepted by the Graduate Committee of the University of New Mexico in partial fulfillment of the requirements for the degree of

MASTER OF ARTS

Ed Castetter

DEAN

8/11/52

DATE

Thesis committee

Karlton Mc Conn

CHAIRMAN

Martha L. Addy

Charles Garner.

This thesis directed and supervised by the candidate's com-
mitted has been accepted by the Graduate Committee of the
University of Iowa in partial fulfillment of the require-
ments for the degree of

MASTERS OF ARTS

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EFFICIENCY
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1. Introduction
2. Purpose of the Study
3. Methodology
4. Results and Discussion

CHAPTER I

INTRODUCTION

It was the purpose of this investigation to measure the extent of the elementary school child's growth in certain fields, and to determine the relation of various factors to this growth. Every child has his own potentialities. It is the responsibility of the school to furnish him the best possible opportunity to develop these potentialities to the utmost, for the child, himself, as an individual, and for society.

I. THE PROBLEM

Statement of the problem. This study was made to determine: (1) to what extent the scholastic achievement of elementary school pupils is commensurate with their mental ability; (2) how measured mental ability compares with teachers' ratings; (3) how pupils' ratings on two different achievement tests compare; (4) how rankings on personality tests are related to achievement and mental ability; (5) whether social acceptance is related to personality adjustment, mental ability, and scholastic achievement.

Delimitations of the problem. This study was limited to pupils in the third, fourth, fifth, and sixth grades of

Mountain View school in Albuquerque, New Mexico. One sociogram was made for each grade. One mental test, one personality test, and two achievement tests were administered in each grade.

Importance of the problem. Many children who seem to have enough mental ability are not able to work at the level of the grade in which they are placed. It seems necessary to do remedial work with larger numbers of children every year. It is difficult to find sufficient suitable material at the child's level of accomplishment to enable him to work independently. Many children can not spell the most common words which they wish to use in their own manuscripts. Many reach intermediate grades with no mastery of fundamentals and even without meaningful concepts in arithmetic.

If teachers are to improve the effectiveness of their teaching, they must learn the causes of the child's failure to achieve. It is extremely doubtful if lack of success can be attributed in all cases to a single factor. A multiplicity of causes which combine to retard the child's scholastic growth will often be found. The child's attitudes and emotional problems may be related more closely to his accomplishment than his mental ability is. It is necessary to determine the contributing causes of disabilities before they can be eliminated, or at least diminished.

Scientific View of the Human Mind. The human mind is a complex system of organs and functions. It is not a single entity, but a collection of many parts, each with its own specific function. The mind is a product of the body, and it is subject to the same laws of nature as the body. It is a material organ, and it is subject to the same physical laws as the body. It is a part of the natural world, and it is subject to the same natural laws as the natural world.

Importance of the Mind. The mind is the most important part of the human being. It is the source of all our thoughts, feelings, and actions. It is the seat of our intelligence, and it is the center of our life. Without the mind, we would be mere automatons, devoid of any consciousness or self-awareness. The mind is what makes us human, and it is what gives us the ability to think, feel, and act. It is the most precious part of us, and it is the part that we must protect and nurture. The mind is the key to our happiness and well-being, and it is the key to our success in life.

The mind is a complex system of organs and functions. It is not a single entity, but a collection of many parts, each with its own specific function. The mind is a product of the body, and it is subject to the same laws of nature as the body. It is a material organ, and it is subject to the same physical laws as the body. It is a part of the natural world, and it is subject to the same natural laws as the natural world. The mind is the most important part of the human being. It is the source of all our thoughts, feelings, and actions. It is the seat of our intelligence, and it is the center of our life. Without the mind, we would be mere automatons, devoid of any consciousness or self-awareness. The mind is what makes us human, and it is what gives us the ability to think, feel, and act. It is the most precious part of us, and it is the part that we must protect and nurture. The mind is the key to our happiness and well-being, and it is the key to our success in life.

II. ORGANIZATION OF REMAINDER OF THE THESIS

In Chapter II a review of related literature is given. The method of conducting the study is reported in Chapter III. The analysis of data is presented in Chapter IV. Chapter V consists of the conclusions and the recommendations growing out of the study.

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CHAPTER II

REVIEW OF RELATED LITERATURE

Kornegay¹ found that pupils in the Malaga School, Malaga, New Mexico, were low (1) in intelligence as measured by the Otis Test of Mental Ability (2) in personality adjustment as measured by the California Test of Personality (3) in achievement as measured by the Stanford Achievement Tests. He pointed out that the factors found to be low may have represented a language handicap rather than the true measure of what the test instruments purport to measure. He suggested that the low score on personality adjustment of pupils may have been due to the fact that the test was not adapted to the culture of the pupils.

Most of the pupils in the Malaga School were Spanish-speaking children. At Mountain View School, there is a slight majority of English-speaking children. The Spanish-speaking and English-speaking homes are intermingled so that there is no Spanish-speaking section as such. However, some children speak only Spanish at home.

In Kornegay's² school, irregularity of attendance was

¹ Raymond C. Kornegay, "An Evaluation of the Malaga Rural Elementary School," (unpublished Master's thesis, The University of New Mexico, Albuquerque, 1949), pp. 1-67.

² Ibid.

STUDY OF SPANISH LITERATURE

Kornegay found that pupils in the Spanish School

Malaga, New Mexico, were low in the

measured by the test of (1) in Spanish
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Most of the pupils in the Spanish School were Spanish-

speaking children. At Montevideo, Spain, there is a

slight majority of English-speaking children. The Spanish-

speaking and English-speaking homes are intermingled so

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some children speak only Spanish at home.

In Kornegay's school, frequency of attendance was

¹ Raymond C. Kornegay, "An Analysis of the Spanish
Mural Elementary School," (Unpublished Master's thesis, the
University of New Mexico, Albuquerque, 1941), pp. 1-67.

a major factor in pupil retardation. At Mountain View School, this was a problem considered significant in too few cases to be of value in the present study.

In the Malaga community, the socio-economic level was generally low. This fact may have a bearing on school achievement. In the Mountain View district, the majority of homes may be considered middle class, or lower middle class. In general, fathers of pupils are engaged in skilled or semi-skilled labor.

In his study of reading grade levels, Pfeleiger³ considered whether the reading ability of pupils depended, at least in part, upon the particular test which was used for measuring reading ability. He suggested that, if this were true, it was possible to make the reading grade level go up or down by choosing the appropriate test. High correlation on the results of the two tests indicated that they apparently measured the same thing. However, the scales on one test were considerably lower than those on the other. While the two tests ranked pupils about the same, the difference in reading levels was significant.

In the present investigation, scores of two achievement tests have been compared and similar results found. In

³ Elmer F. Pfeleiger, "A Study of Reading Grade Levels," Journal of Educational Research, 42:541-6, March, 1949.

3
A major factor in pupil retention. At Mountain View School, this was a problem considered significant in two cases to be of value in the present study.

In the future community, the socio-economic level was generally low. This fact may have a bearing on school achievement. In the Mountain View district, the majority of homes may be considered middle class, or lower middle class. In general, fathers of pupils who engaged in skilled or semi-skilled labor.

In this study of reading grade levels, Ellinger³ considered whether the reading ability of pupils depended, at least in part, upon the partitioning time which was used for measuring reading ability. He suggested that, at this time, it was possible to make the reading grade level go up or down by choosing the appropriate test. High correlation on the results of the two tests indicated that they represented the same thing. However, the results on one test were considerably lower than those of the other. While the two tests ranked pupils about the same, the difference in reading levels was significant.

In the present investigation, scores of two different tests have been compared and similar results found. In

³ Elmer W. Ellinger, "A Study of Reading Grade Levels," Journal of Educational Research, 41 (1934), March, 194.

Pfleiger's⁴ study, the Stanford Test was found to be the easier of the two tests. In this study, the Stanford Test seemed to be the more difficult.

Hinkelman⁵ made a study of intellectual level and personality adjustment in which he found that mentally handicapped children often remain undetected until they have progressed some distance in school. The present investigator found this to be true of a few children. This would seem to be a reason to try to determine, by objective and other methods, the pupil's mental ability.

Although there is evidence that the IQ is not so nearly constant as was previously supposed, it gives some basis other than personal opinion for formulating a judgment as to what a child can reasonably be expected to accomplish. In an article dealing with wise use of the IQ, Havighurst⁶ stated that the ordinary IQ gives a general notion of what level of learning ability to expect of a child.

Often children who are mentally handicapped have acquired feelings of inadequacy which further decrease their

⁴ Ibid.

⁵ Emmet Arthur Hinkelman, "Intellectual Level and Personal Adjustment," The Elementary School Journal, 52:31-5, September, 1951.

⁶ Robert J. Havighurst, "Using the IQ Wisely," The Journal of the National Education Association, 40:540-1, November, 1951.

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Other children who are mentally handicapped have acquired feelings of inadequacy which further decrease their

⁴ Ibid.

⁵ Ernest Arthur Hinkelmann, "Intellectual Level and Personal Adjustment," The Elementary School Journal, 52:3-5, September, 1951.

⁶ Robert J. Havelburg, "Using the IQ Wisely," The Journal of the National Education Association, 40:10-11, November, 1951.

accomplishment. Hinkelman⁷ stated:

Feelings of inferiority well may have begun at home, especially if siblings and parents have greater ability. When these feelings are reinforced at school, it becomes virtually impossible for the individual to develop a satisfactory level of self-esteem.

In the same study, it was brought out that superior intelligence is an aid to adjustment, but that intelligence alone does not guarantee success. This success depends not only on mental ability but also on a favorable pattern of motives. Hinkelman⁸ also found that intellectual differences did not seem to affect scores on social skills, anti-social tendencies, and community relations. Perhaps abstract intelligence is not highly related to these areas.

Saucier⁹ wrote that failure tends to vanish, if through regard for individual differences, it is made possible for all children to succeed. He felt that it is unreasonable and unjust for the elementary school to set up uniform standards of attainment, since compulsory education laws force all kinds of children into elementary schools. Flexible standards therefore are essential.

It is, of course, desirable for all children to

⁷ Hinkelman, op. cit., pp. 31-32.

⁸ Ibid., p. 35.

⁹ W. A. Saucier, Theory and Practice in the Elementary School, (New York: Macmillan Company, 1951), pp. 468-9.

accomplishment. Hinkelman stated:

Feelings of inferiority well may have been as strong as feelings of superiority in the past, but now that these feelings are being removed by the removal of the inferiority level of the individual, the feeling of inferiority is being removed.

In the same manner, it was possible that the feeling of inferiority is being removed.

Intelligence is an aid to adjustment, but it is not an end in itself.

Intelligence does not guarantee success. It is a necessary condition, but it is not sufficient.

Only one mental ability has been found to be necessary for success in life.

Motivation. Hinkelman also found that intelligence and motivation are necessary for success.

It is not enough to have intelligence and motivation. One must also have the right kind of motivation.

Intelligence is not highly related to success in life. It is only a necessary condition.

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7 Hinkelman, op. cit., p. 31-32.

8 Ibid., p. 33.

9 F. A. Schuler, Intelligence and Success in Life, (New York: Macmillan Company, 1931), pp. 100-2.

succeed. However, it is problematical whether all children reach standards set by their own capabilities and limitations.

In his study to determine the effect of age entrance into school upon performance, Garner¹⁰ stated that even within the age range of a first grade group, the native ability and quality of experiences seem to be a much more potent force than age differences. He suggested that mental age and social maturity have a significant relationship. He felt that social maturity was a factor of mental age and corresponding social adjustment.

An investigation of theses presented at The University of New Mexico shows no recent study on the relation of mental ability and scholastic achievement other than that of Kornegay.¹¹

In 1925, Freeman¹² made a study of the relation between intelligence and achievement in a small urban school. Her purpose was to show some definite facts in regard to

¹⁰ Charles E. Garner, "A Study to Determine the Effect of Age Entrance into School upon Performance in School," (Publication of School District of Webster Groves, Missouri, 1947), pp. 1-23.

¹¹ Kornegay, op. cit., pp. 1-67.

¹² Cora Nelle Freeman, "A Study of the Relation between Intelligence and Accomplishment as Shown by Use of Standardized Tests in a 'Main Street' School," (unpublished Master's thesis, The University of New Mexico, Albuquerque, 1925), pp. 1-30.

However, it is probable that the research standards set by these organizations are not too high.

In his study to determine the effect of age on ability and quality of experience, he found that within the age range of 11 to 15 years, the relationship between age and social maturity was a significant relationship. He felt that social maturity was a factor of social age and corresponding social adjustment.

An investigation of these problems at the University of New Mexico shows no real study on the relation of social maturity and scholastic achievement other than that of Kornegay, II.

In 1925, Freeman made a study of the relation between intelligence and achievement in a small group of children. Her purpose was to show some relation between the two.

10. Charles H. Garner, "A Study of the Relation of Age Entrance into School to Achievement in School," (Publication of School District of Western Groves, Illinois, 1947), pp. 1-23.

11. Kornegay, II, pp. 1-14.

12. Cora Nellie Freeman, "A Study of the Relation between Intelligence and Achievement in School," (Publication of School District of Western Groves, Illinois, 1925), pp. 1-30.

relation between intelligence and accomplishment in school work. She used group intelligence scales and accomplishment tests. She found that pupils with an IQ of 90-120 were doing as well as could be expected. At the upper and lower extremes of the scale, less was being accomplished.

In 1927, Nathan¹³ made a survey of a suburban school in which she showed intelligence and educational ratings. She found a high correlation between intelligence and educational achievement.

The intelligence test is considered by some educators to be in actuality an achievement test, rather than a test of native ability. Tilton¹⁴ said that there is no fundamental difference between the "intelligence" test and the "achievement" test. He thought that there was a practical difference, in that the "achievement" test was made to correspond to school effort.

In the present investigation, the mental tests in the third and fourth grades were non-reading tests. But in Grades V and VI, the mental tests used required reading and other acquired knowledge, and so may have involved a certain amount of achievement along with native ability.

¹³ Verna Ruth Nathan, "An Intelligence and Educational Survey of a Suburban School," (unpublished Master's thesis, The University of New Mexico, Albuquerque, 1927), pp. 1-35.

¹⁴ J. W. Tilton, An Educational Psychology of Learning, (New York: Macmillan Company, 1951), p. 192.

relation between intelligence and achievement in school

work. The next group investigated school and achievement

tests. The third group dealt with the relation between

doing as well as could be expected. The fourth group

examined the nature of the tests, tests and achievement

In 1937, Nathan ¹³ and his colleagues reported

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¹³ Vera Ruth Nathan, "An Intelligence and Achievement

Survey of a Suburban School," unpublished paper, Chicago,

The University of Chicago, Chicago, Illinois, 1937.

¹⁴ J. H. Tilton, "The Intelligence and Achievement

Learning," (New York: Macmillan Company, 1937), p. 133.

CHAPTER III

METHOD OF CONDUCTING THE INVESTIGATION

Sociograms were made for each grade. Each child was given a sheet of paper. Upon this paper he was asked to write his own name. Under his name he was asked to write names of three children with whom he liked best to play. The paper was then folded so that no child could see the names another child had written. The investigator collected the papers. The names were tabulated and the sociogram was plotted.

IQs and mental ages for each child were computed from scores on mental tests. The Otis Quick-Scoring Mental Test, Alpha, Form A, was given in Grades III and IV. The test was administered in both verbal and non-verbal forms. Scores were interpreted by means of the manual of directions. In the fifth grade, the Otis Quick-Scoring Mental Test, Beta, Form A, was used. The manual of directions was again utilized for interpreting scores. The sixth grade teacher administered this test to his group. The data obtained were made available to the investigator.

The California Test of Personality, Elementary Form A, was given by the investigator in each of the grades participating in the study. In the third and fourth grades, questions were read aloud to children so that lack of ability

CHAPTER III

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Sociograms were made for each grade. Each child was given a sheet of paper. Upon this paper he was asked to write his own name. Under his name he was asked to write names of three children with whom he liked best to play. The paper was then folded so that no child could see the names another child had written. The investigator collected the papers. The names were tabulated and the sociogram was plotted.

Ips and mental ages for each child were computed from scores on mental tests. The Otis Quick-Scoring Mental Test, Alpha, Form A, was given in Grades III and IV. The test was administered in both verbal and non-verbal forms. Scores were interpreted by means of the manual of directions. In the fifth grade, the Otis Quick-Scoring Mental Test, Beta, Form A, was used. This manual of directions was again utilized for interpreting scores. The sixth grade teacher administered this test to his group. The data obtained were made available to the investigator.

The California Test of Personality, Elementary Form A, was given by the investigator in each of the grades participating in the study. In the third and fourth grades, questions were read aloud to children so that lack of ability

to read might not interfere with true answering of them. Pupils in all grades were allowed to ask meanings of words or of questions which they did not understand. The actual meaning was stated as clearly as possible, with no information volunteered by the investigator that might influence the child's answer. It was hoped that an unbiased manner would encourage the child to express true feelings in his answers. All tests were checked and scored by the investigator.

Ratings were determined in percentages by use of the manual of directions. Percentiles were found for Self Adjustment, Social Adjustment, and for Total Adjustment. Under Self Adjustment subheadings were: Self-reliance, Sense of Personal Worth, Sense of Personal Freedom, Feeling of Belonging, Withdrawing Tendencies, and Nervous Symptoms. Social Adjustment consisted of: Social Standards, Social Skills, Anti-social Tendencies, Family Relations, School Relations, and Community Relations. Percentile ranks for Total Adjustment were used in correlations with other data.

Pupils were rated in school achievement by means of two different tests. With two exceptions these tests were administered and scored by the investigator. In the third grade, the reading section of the Progressive Test was given by the investigator but checked by the teacher. The sixth grade teacher administered and scored the Stanford Test

to read might not interfere with the understanding of them.
Pupils in all grades were allowed to take advantage of words
or of questions which they did not understand. The actual
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attention volunteered by the investigator that might influence
the child's answers. It was noted that an unbiased manner
would encourage the child to express true feelings in his
answers. All tests were checked and scored by the
investigator.
Results were determined in percentages by use of the
manual of directions. Percentages were found for all
Adjustment, Social Adjustment, and Total Adjustment.
Under Self Adjustment subtests were Self-reliance,
Sense of Personal Worth, Sense of Personal Freedom, Feeling
of Belonging, Withdrawing Tendencies, and Nervous System.
Social Adjustment consisted of Social Desires, Social
Skills, Anti-social Tendencies, Family Relations, School
Relations, and Community Relations. Percentages were found for
Total Adjustment which was based in comparison with normal data.
Pupils were rated in school adjustment by means of
two different tests. With two exceptions these tests were
administered and scored by the investigator. In the third
grade, the reading section of the Inconsistency Test was given
by the investigator but checked by the teacher. The sixth
grade teacher administered and scored the Adjustment Test.

given in his room and made the data available to the investigator. The tests used in Grade III were the Progressive Achievement Test, Form A, Primary Battery, and the Stanford Achievement Test, Primary Battery, Form G.

In Grades IV and V, Form H of the Stanford Achievement Test, Intermediate Battery, Partial, was given. Grade VI used Form G, Intermediate Battery, Partial, of the Stanford Achievement Test. The Progressive Achievement Test, Elementary Battery, Form A, was utilized in Grades IV, V, and VI. Grade point scores and educational age scores were found for all pupils.

Teachers in each grade made estimates of their pupils' IQs. Four intervals were used: 69 and below, 70-89, 90-110, and 111 and above. These estimates were compared with the IQs derived from the mental tests.

In tabulating results of tests, children were designated individually by numbers. Each child kept his same number throughout the analysis of the data.

All norms used were national norms obtained from the manuals for each test.

given in his room and made the test available to the
investigator. The tests used in this study were the
Progressive Achievement Test, Form A, Stanford-Binet, and
the Stanford Achievement Test, Elementary Battery, Form 3.
In Grades IV and V, Form B of the Stanford-Binet
Achievement Test, Intermediate Battery, Form 3, and
Grade VI used Form D, Intermediate Battery, Form 3, of the
Stanford Achievement Test. The Progressive Achievement
Test, Elementary Battery, Form 3, was utilized in Grades IV,
V, and VI. Grade point scores and educational age scores
were found for all pupils.
Teachers in each grade were notified of their pupils
194. Four interviews were made in the fall, 1944, 1945, 1946,
and 1947. These interviews were conducted with the
194 derived from the mental tests.
In tabulating results of tests, individual results were
rated individually by number. Each child's name was
number throughout the analysis of the data.
All items used were as found in the manuals for each test.

CHAPTER IV

ANALYSIS OF DATA

When the sociograms were plotted, girls were represented by circles and boys by squares. Each child was given a number and his number put on the circle or square representing him. Straight lines connected the figures, with an arrow point indicating the one chosen. Mutual choices were shown by arrow points at each end of the connecting straight lines. From the resulting diagram the number of times each boy or girl was chosen and who chose him could be readily ascertained. Names of children in each grade were listed. Beside his name was placed the number of times each child was chosen. The resulting tabulation was used in subsequent correlations. (See pages 14, 15, 16, and 17.)

A study of these sociograms showed that in general boys chose boys and girls chose girls for preferred playmates. But in Grade IV six boys indicated the same girl for one of their choices. Two of the other girls were more popular among girls. In Grades III, IV and V, a few children were much more popular than the others. Choices were more evenly distributed in Grade VI. Here the highest number of choices for any child was five. The two children in this group who were not chosen were pupils who had attended this

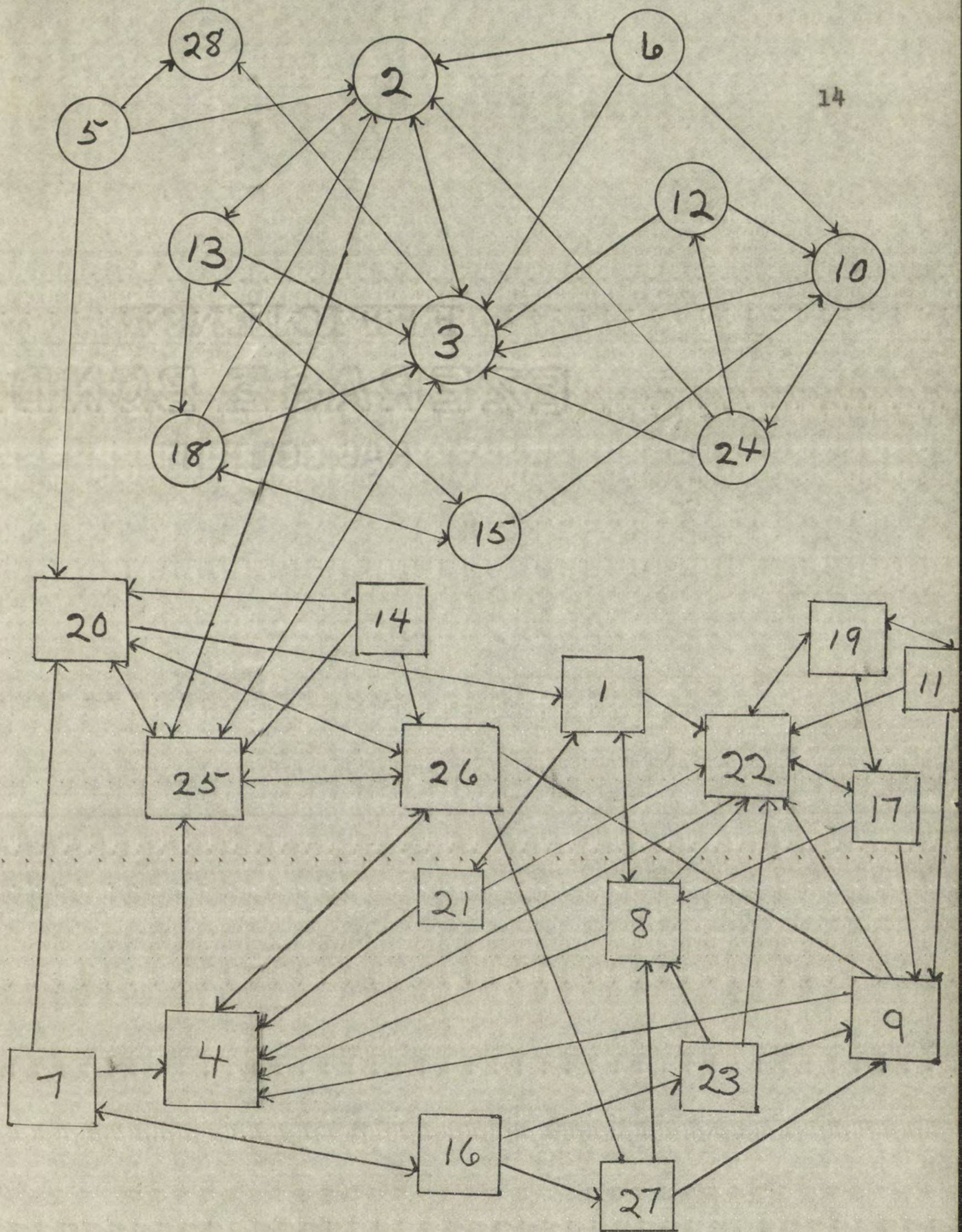


FIGURE 1
SOCIOGRAM FOR GRADE III

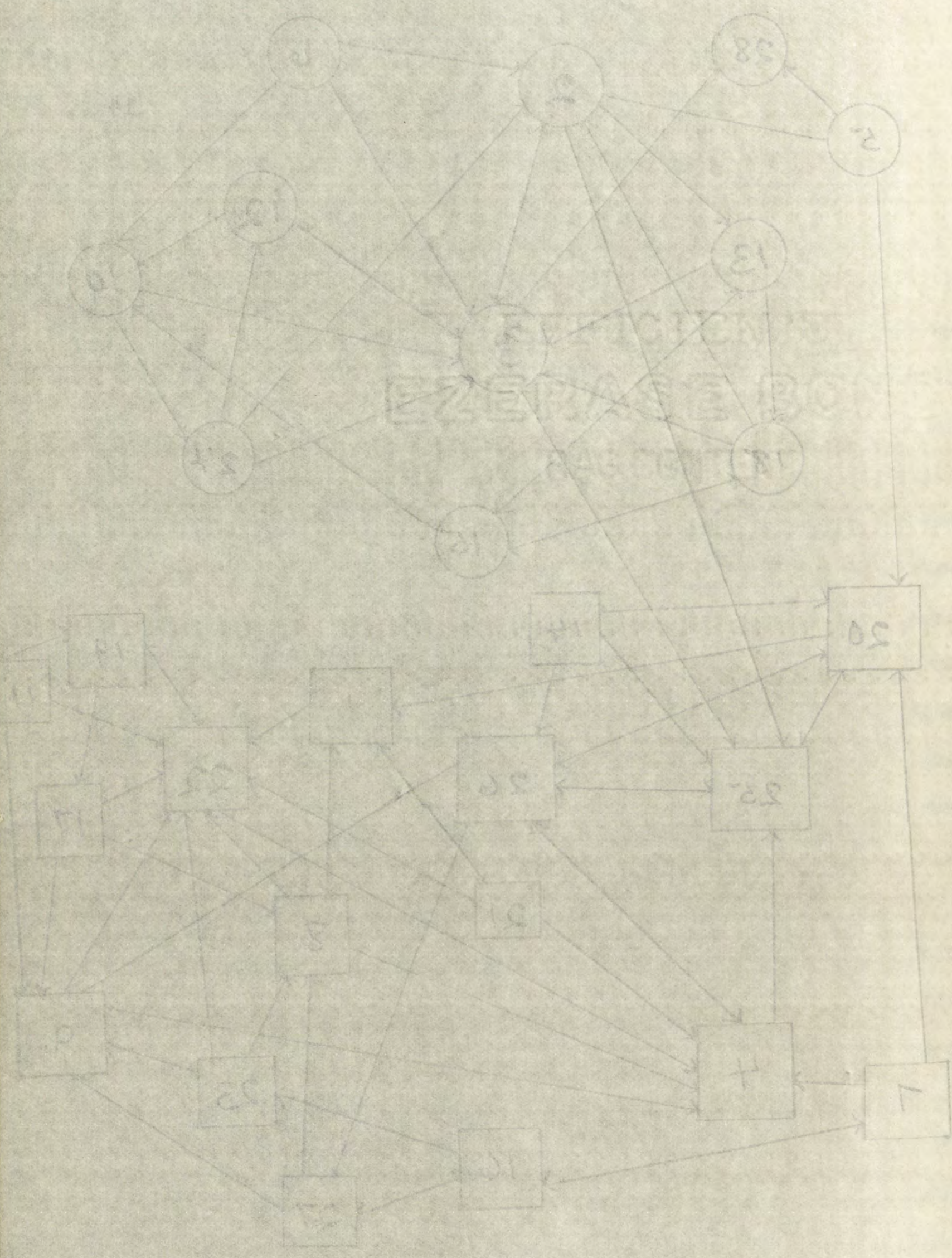


FIGURE 1
A NETWORK OF RELATIONS

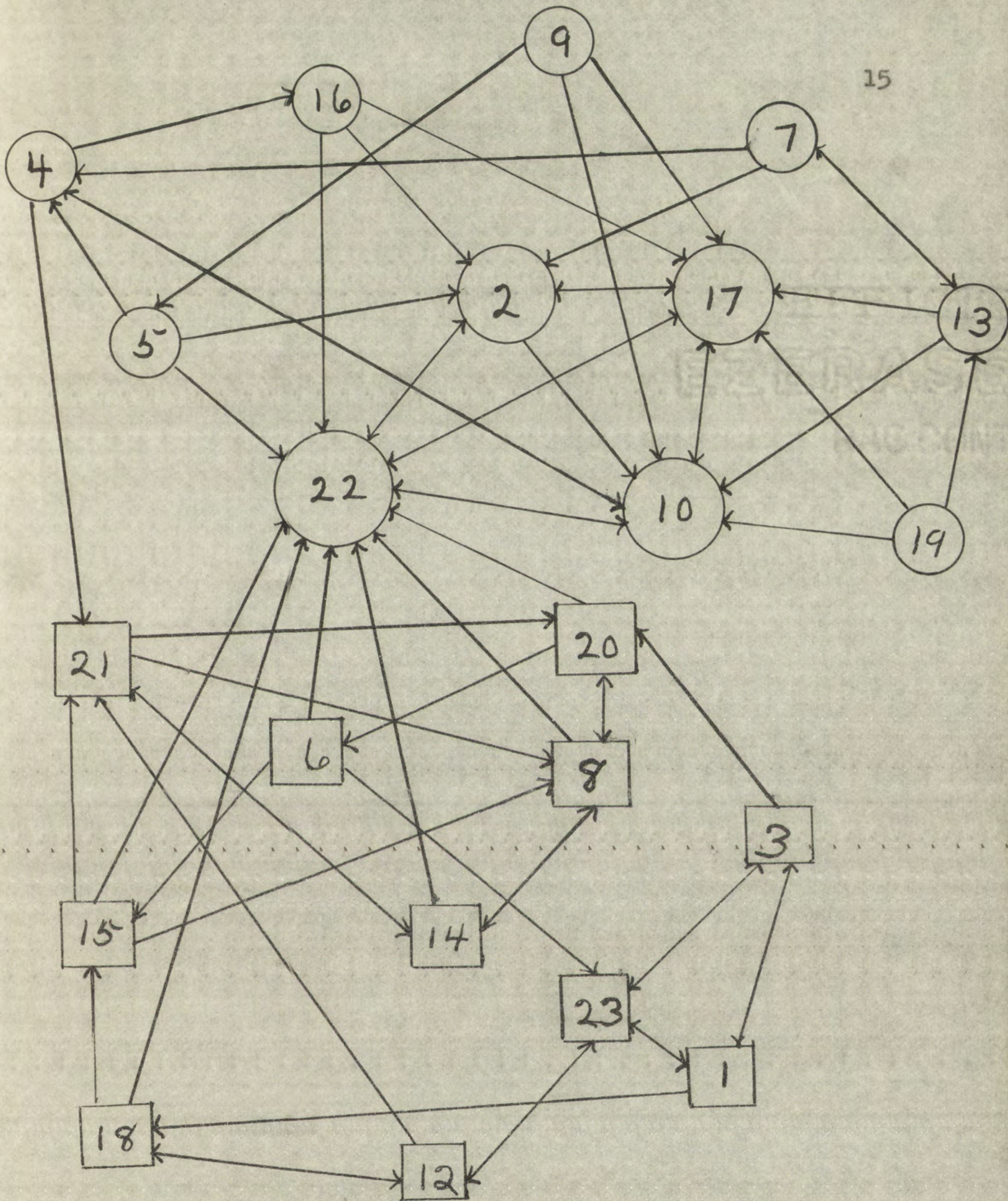
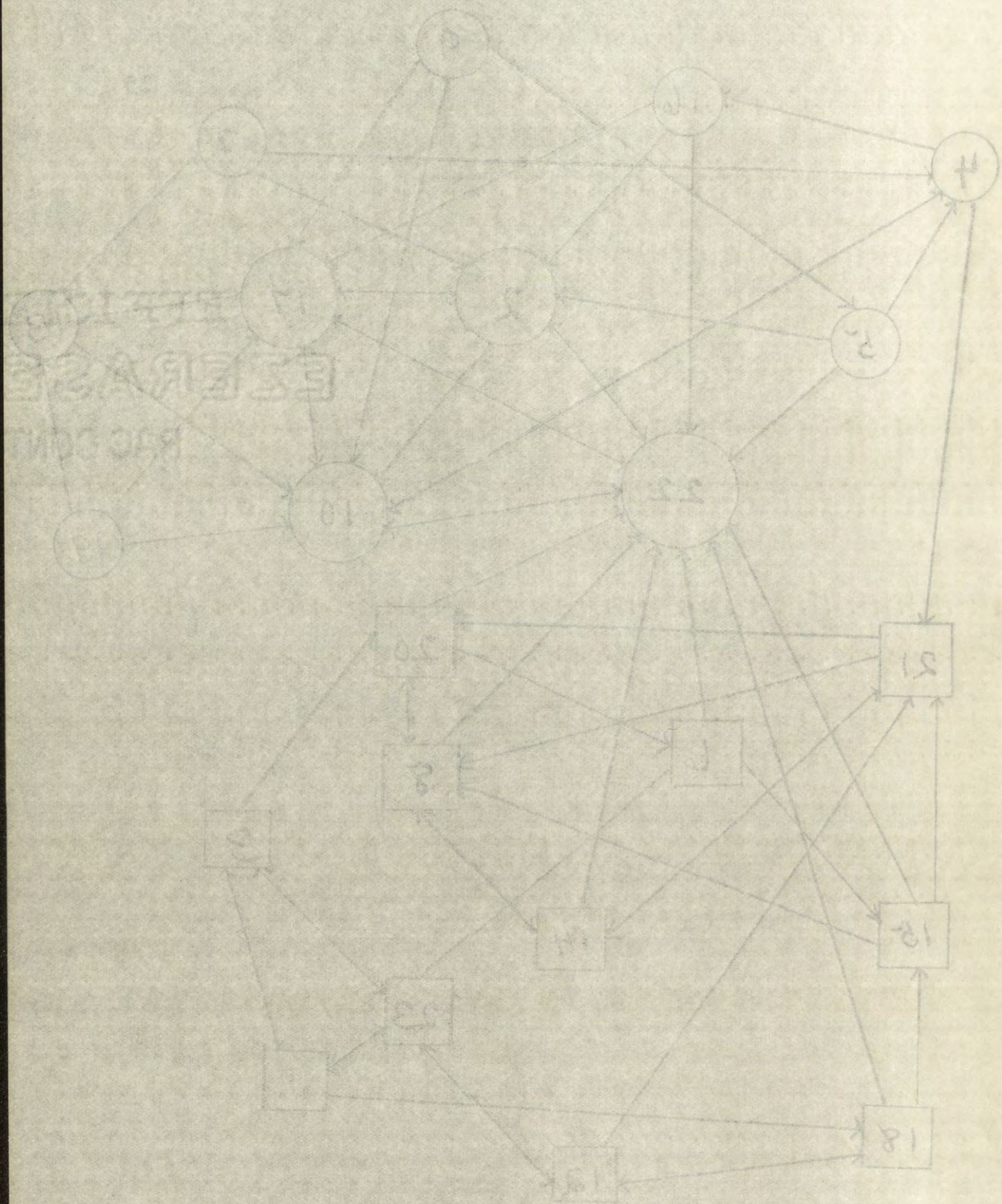
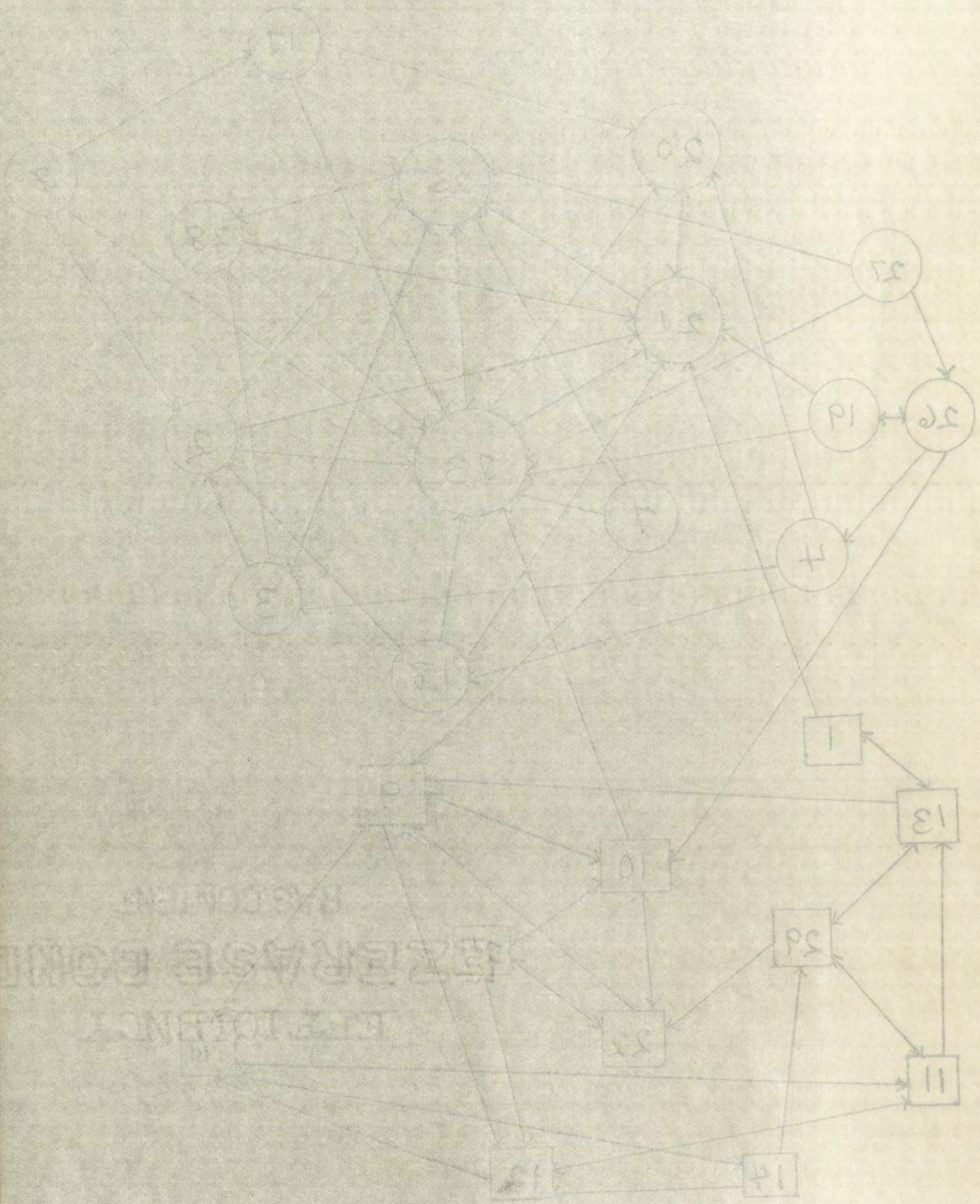


FIGURE 2

SOCIOGRAM FOR GRADE IV





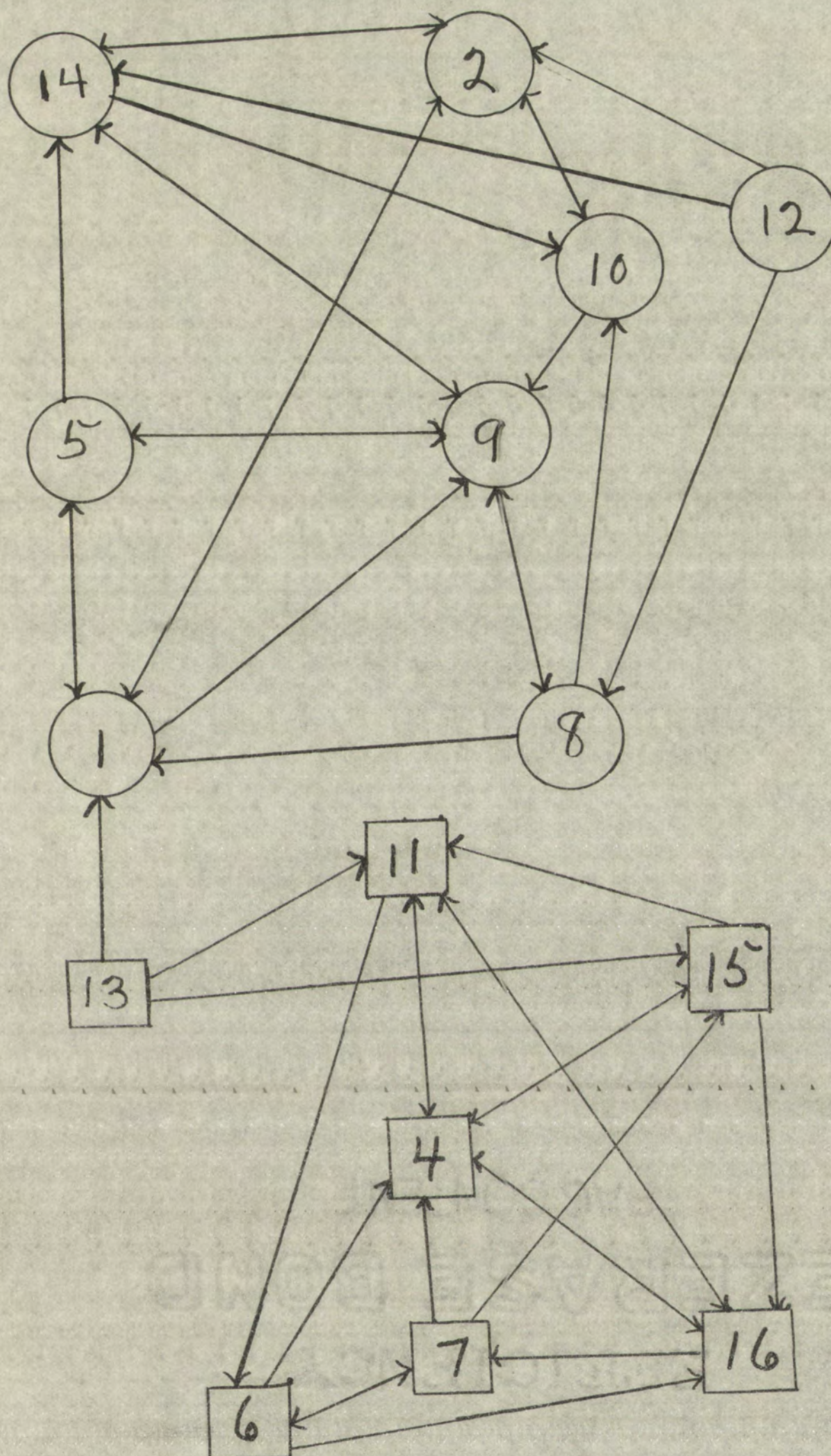


FIGURE 4
SOCIOGRAM FOR GRADE VI

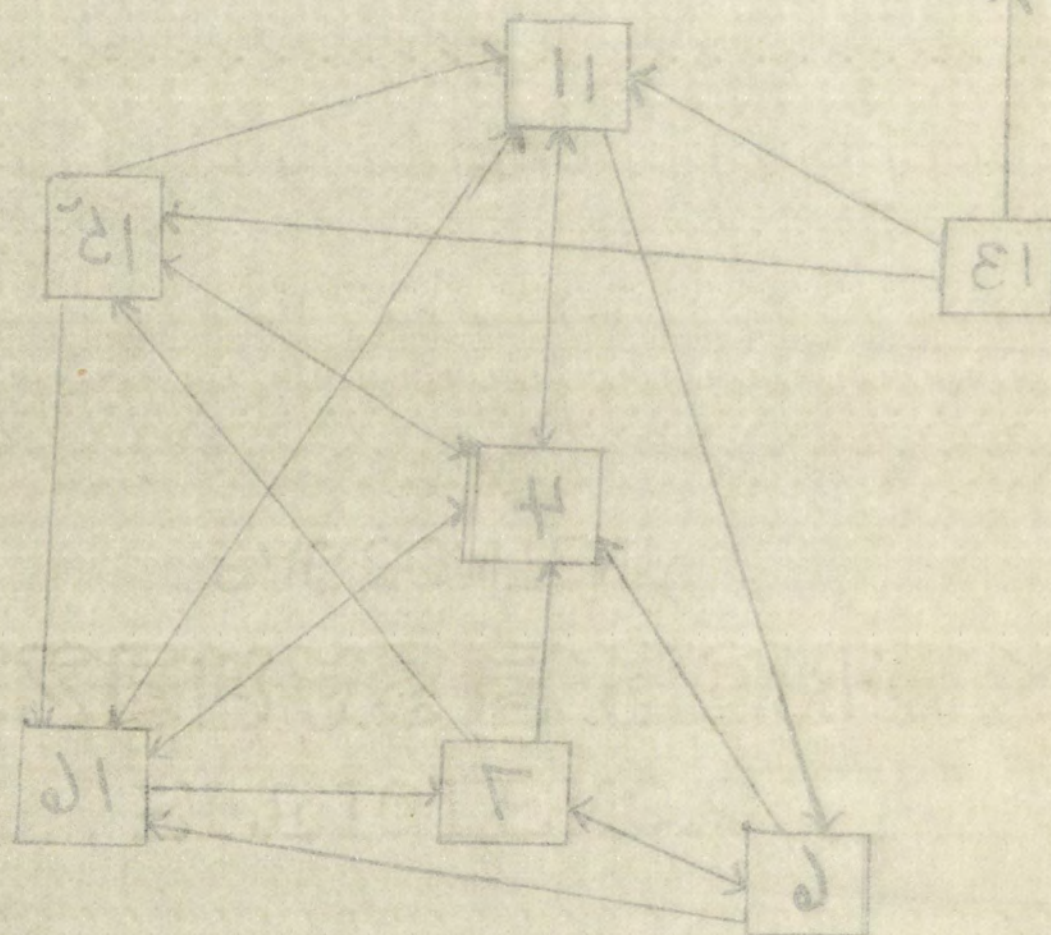
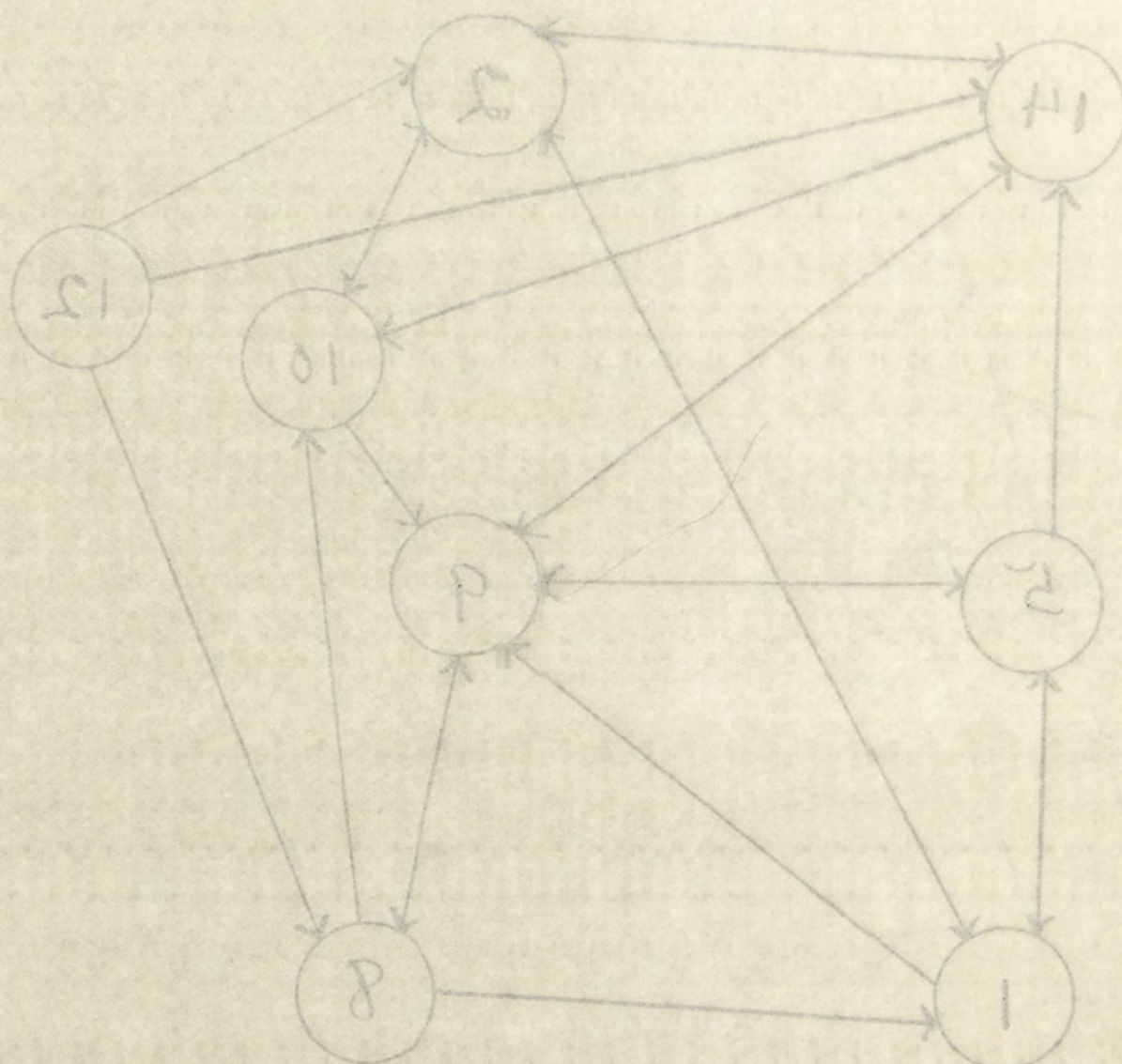


FIGURE 4
SOCIOGRAM FOR GRADE VI

school for only a short time.

The degree of social acceptance of each child seems to have very little relation to his ratings in IQ, personality adjustment, or school achievement. Correlation between social acceptance and measured IQ was found to be $.31 \pm .07$. When personality adjustment was correlated with the number of times a child was chosen the result was $r = .16 \pm .07$.

Correlations between amount of social acceptance and ratings on the Progressive Achievement Tests were made separately for each grade. In Grade III, $r = .12 \pm .13$. The correlation in Grade IV was $.32 \pm .13$. The figure was lower for Grade V, r being $.15 \pm .15$. Surprisingly enough, in Grade VI the correlation was $.82 \pm .04$.

Nine children were not chosen at all. The largest number of times one child was selected was nine in Grade III, eleven in Grade IV, twelve in Grade V, and five in Grade VI.

Table I shows the high, low, and median mental ages,

TABLE I

HIGH, LOW, AND MEDIAN MENTAL AGES AND
HIGH, LOW, AND MEDIAN IQS FOR ALL GRADES

	III			IV			V			VI	
	M.A.	IQ		M.A.	IQ		M.A.	IQ		M.A.	IQ
High	12-2	116		113-3	116		113-4	119		116-0	123
Low	6-8	64		6-11	75		7-4	73		8-7	68
Median	9-3	95		9-11	97		10-8	98		12-0	104
Norm	9-3	100		10-4	100		11-6	100		12-4	100

school for only a few years. The degree of social adjustment have very little relation to the adjustment, on which the social acceptance and rejection is based. When personality adjustment is considered with the child, times a child has shown the social acceptance and rejection. Correlations between the social acceptance and rejection ratings on the Projective Test and the social acceptance and rejection ratings on the Projective Test are shown separately for each grade. In Grade IV, the Projective Test correlation between the social acceptance and rejection ratings for Grade V, showing the social acceptance and rejection ratings on the Projective Test and the social acceptance and rejection ratings on the Projective Test are shown separately for each grade. In Grade VI, the correlation between the social acceptance and rejection ratings on the Projective Test and the social acceptance and rejection ratings on the Projective Test are shown separately for each grade. In Grade VII, the correlation between the social acceptance and rejection ratings on the Projective Test and the social acceptance and rejection ratings on the Projective Test are shown separately for each grade. In Grade VIII, the correlation between the social acceptance and rejection ratings on the Projective Test and the social acceptance and rejection ratings on the Projective Test are shown separately for each grade. In Grade IX, the correlation between the social acceptance and rejection ratings on the Projective Test and the social acceptance and rejection ratings on the Projective Test are shown separately for each grade. In Grade X, the correlation between the social acceptance and rejection ratings on the Projective Test and the social acceptance and rejection ratings on the Projective Test are shown separately for each grade. In Grade XI, the correlation between the social acceptance and rejection ratings on the Projective Test and the social acceptance and rejection ratings on the Projective Test are shown separately for each grade. In Grade XII, the correlation between the social acceptance and rejection ratings on the Projective Test and the social acceptance and rejection ratings on the Projective Test are shown separately for each grade.

Table 1. Social acceptance and rejection ratings on the Projective Test and the social acceptance and rejection ratings on the Projective Test for each grade.

Grade	High	Low	Median	Mean
IV	15.2	8.5	9.3	9.3
V	15.2	8.5	9.3	9.3
VI	15.2	8.5	9.3	9.3
VII	15.2	8.5	9.3	9.3
VIII	15.2	8.5	9.3	9.3
IX	15.2	8.5	9.3	9.3
X	15.2	8.5	9.3	9.3
XI	15.2	8.5	9.3	9.3
XII	15.2	8.5	9.3	9.3

and also high, low, and median IQs for all grades. Table II gives the mental ages and IQs for all pupils. These were obtained by means of the mental test.

In Grade III, the range of mental ages was from six years eight months to twelve years two months, or a difference of five years six months. The median mental age at time of testing was nine years three months, which is the age norm given by the Progressive Achievement Test for that time. The median IQ for the group was 95, with a range from 64 to 116.

The children in Grade IV were found to have mental ages from six years eleven months to thirteen years three months, a range of six years four months. Their median mental age was nine years eleven months, as compared to a norm of ten years four months. The range of IQs in this group was from 75 to 116, with a median of 97.

Pupils of Grade V had a range of mental ages from seven years four months to thirteen years four months, a difference of seven years. The median mental age was ten years eight months, which was ten months below the norm of eleven years six months. The median IQ for this group was 98.

In Grade VI an even wider range was found. The low mental age was seven years five months with a high of sixteen years making the range eight years seven months. The

and also high, low, and median IQs for all grades. Table II

gives the mental ages and IQs for all pupils. These were

obtained by means of the mental test.

In Grade III, the range of mental ages was from six

years eight months to twelve years two months, or a

difference of five years six months. The median mental age

at time of testing was nine years three months, which is the

age now given by the Progressive Achievement Test for that

time. The median IQ for the group was 95, with a range from

64 to 116.

The children in Grade IV were found to have mental

ages from six years eleven months to thirteen years three

months, a range of six years four months. Their median

mental age was nine years eleven months, as compared to a

norm of ten years four months. The range of IQs in this

group was from 75 to 116, with a median of 97.

Pupils of Grade V had a range of mental ages from

seven years four months to thirteen years four months, a

difference of seven years. The median mental age was ten

years eight months, which was ten months below the norm of

eleven years six months. The median IQ for this group was

98.

In Grade VI an even wider range was found. The low

mental age was seven years five months with a high of six-

teen years making the range eight years seven months. The

TABLE II
MENTAL AGES AND IQS FOR ALL PUPILS

Pupil No.	III		IV		V		VI	
	M.A.	IQ	M.A.	IQ	M.A.	IQ	M.A.	IQ
1	10-3	114	8-2	84	7-4	73	12-5	104
2	8-9	90	9-5	97	11-4	105	11-8	101
3	10-3	105	7-7	82	11-8	108	8-2	68
4	8-2	85	12-6	116	9-2	90	14-9	107
5	8-9	96	12-1	113	8-5	71	15-10	123
6	11-3	112	9-5	95	8-3	78	14-4	108
7	6-8	64	9-1	88	10-7	90	14-9	112
8	8-2	90	10-5	95	12-5	111	11-8	103
9	10-9	116	7-11	75	13-3	115	14-9	109
10	8-10	99	10-0	95	14-6	119	14-4	109
11	8-9	106	9-4	81	11-10	99	11-2	96
12	8-1	94	9-11	100	10-0	91	11-0	93
13	9-5	96	11-9	105	8-2	76	7-5	68
14	7-9	87	8-7	86	11-2	98	10-8	92
15	7-2	74	9-8	94	10-0	92	10-7	92
16	7-8	81	10-3	106	11-8	103	16-0	123
17	9-4	111	12-0	111	9-5	89		
18	7-2	79	11-7	112	10-7	97		
19	8-10	92	8-4	85	11-4	106		
20	12-2	115	11-7	106	11-4	103		
21	8-1	88	13-3	114	10-10	99		
22	9-3	107			10-5	97		
23	8-7	78			10-8	99		
24	8-3	95						
25	8-7	96						
26	9-10	113						
27	8-5	84						

GENERAL ACCOUNT - 1910

Page 12		No.		M.A.		M.A.		M.A.		M.A.	
1	10-3	11	10-3	11	10-3	11	10-3	11	10-3	11	10-3
2	8-9	12	8-9	12	8-9	12	8-9	12	8-9	12	8-9
3	10-3	13	10-3	13	10-3	13	10-3	13	10-3	13	10-3
4	8-9	14	8-9	14	8-9	14	8-9	14	8-9	14	8-9
5	8-9	15	8-9	15	8-9	15	8-9	15	8-9	15	8-9
6	11-3	16	11-3	16	11-3	16	11-3	16	11-3	16	11-3
7	8-9	17	8-9	17	8-9	17	8-9	17	8-9	17	8-9
8	8-9	18	8-9	18	8-9	18	8-9	18	8-9	18	8-9
9	10-9	19	10-9	19	10-9	19	10-9	19	10-9	19	10-9
10	8-10	20	8-10	20	8-10	20	8-10	20	8-10	20	8-10
11	8-9	21	8-9	21	8-9	21	8-9	21	8-9	21	8-9
12	8-1	22	8-1	22	8-1	22	8-1	22	8-1	22	8-1
13	8-9	23	8-9	23	8-9	23	8-9	23	8-9	23	8-9
14	8-9	24	8-9	24	8-9	24	8-9	24	8-9	24	8-9
15	1-9	25	1-9	25	1-9	25	1-9	25	1-9	25	1-9
16	1-9	26	1-9	26	1-9	26	1-9	26	1-9	26	1-9
17	1-9	27	1-9	27	1-9	27	1-9	27	1-9	27	1-9
18	1-9	28	1-9	28	1-9	28	1-9	28	1-9	28	1-9
19	8-10	29	8-10	29	8-10	29	8-10	29	8-10	29	8-10
20	10-9	30	10-9	30	10-9	30	10-9	30	10-9	30	10-9
21	8-1	31	8-1	31	8-1	31	8-1	31	8-1	31	8-1
22	8-9	32	8-9	32	8-9	32	8-9	32	8-9	32	8-9
23	8-9	33	8-9	33	8-9	33	8-9	33	8-9	33	8-9
24	8-9	34	8-9	34	8-9	34	8-9	34	8-9	34	8-9
25	8-9	35	8-9	35	8-9	35	8-9	35	8-9	35	8-9
26	9-10	36	9-10	36	9-10	36	9-10	36	9-10	36	9-10
27	8-9	37	8-9	37	8-9	37	8-9	37	8-9	37	8-9

median mental age was twelve years one month, three months below the norm. The median IQ, 104, was the only median IQ in any grade that was above 100.

Table III shows the pupils of all grades listed by number both in the interval in which they were placed by the teachers' estimates, and in the interval in which they fell according to the results of the mental test.

In Grade III, the teacher listed seven names in the top interval, 111 and above, and twenty names in the interval comprising 90-110. According to the test results, there were six pupils in the 111 and above interval, twelve children in the 90-110 interval, eight in the 70-89 group, and one in the 69 and below classification. Comparing the two lists, the investigator found that the teacher correctly classified ten children, missed fifteen by one group rating, and missed two by two group ratings.

The teacher in Grade IV correctly classified thirteen children, missed nine by one rating. There were five children in the 111 and above group, ten in the 90-110 interval and six in the 70-89 group.

Eleven of the pupils in Grade V were classified correctly by their teacher, nine were missed by one rating, and three were not classified. The test results showed that three pupils had IQs above 111, that fifteen were in the group ranging from 90-110, and five children had IQs between

median mental age was 10.5 years, and the range was from 8.5 to 12.5 years. The median age was 10.5 years, and the range was from 8.5 to 12.5 years. The median age was 10.5 years, and the range was from 8.5 to 12.5 years.

Table III shows the results of all the tests. The number both in the interval in which they were placed in the test, and the interval in which they were placed in the test, according to the results of the test.

In Grade III, the teacher listed seven names in the top interval, 11 and above, and seven names in the interval comprising 9-10. According to the results, there were six pupils in the 11 and above interval, two children in the 9-10 interval, and one in the 8-9 interval. The investigation showed that the teacher correctly classified ten children, missed two by one group, and missed two by two groups.

The teacher in Grade IV correctly classified children, missed nine by one group, and missed nine by two groups. The teacher in Grade V correctly classified children in the 11 and above interval, and all in the 9-10 interval. Eleven of the pupils in Grade V were classified correctly by their teacher, nine were missed by one group, and three were not classified. The teacher missed three pupils in the 11 and above interval, and missed three pupils in the 9-10 interval.

Group ranging from 9-10, and the median age was 10.5 years. The median age was 10.5 years, and the range was from 8.5 to 12.5 years. The median age was 10.5 years, and the range was from 8.5 to 12.5 years.

TABLE III
TEACHERS' ESTIMATES OF IQS
AND THE ACTUAL TEST RESULTS

	69 and Below	70-89	90-110	111 and Above
III			2,4,5,6,7,8 9,10,14,15 16,17,18,19 22,23,24,25 26,27	1,3,11,12 13,20,21
Teacher's Estimates				
Test Results	7	4,14,15 16,18,21 23,27	2,3,5,8,10 11,12,13, 19,22,24, 25	1,6,9,17 20,26
IV				
Teacher's Estimates		1,3,7,9 11,15	2,5,6,8,10 12,14,17 18,19	4,13,16 20,21
Test Results		1,3,7,9 11,14,19	2,6,8,10,12 13,15,16,20 22	4,5,17,18 21
V				
Teacher's Estimates	1,5,6	7,13,17	3,4,9,12,14 18,20	2,8,10,11 15,23
Test Results		1,5,6,13 17	2,3,4,7,11 12,14,15,16 18,19,20,21 22,23	8,9,10
VI				
Teacher's Estimates		13	1,2,6,10,11 12,14,15	4,5,7,8,9 16
Test Results	3,13		1,2,4,6,8,9 10,11,12,14 15	5,7,16

TABLE 1
TEACHER'S ESTIMATES OF THE
AND THE ACTUAL TIME OF DAY

Teacher's Estimates		Actual Time of Day	
30-40		30-40	
40-50		40-50	
50-60		50-60	
60-70		60-70	
70-80		70-80	
80-90		80-90	
90-100		90-100	
100-110		100-110	
110-120		110-120	
120-130		120-130	
130-140		130-140	
140-150		140-150	
150-160		150-160	
160-170		160-170	
170-180		170-180	
180-190		180-190	
190-200		190-200	
200-210		200-210	
210-220		210-220	
220-230		220-230	
230-240		230-240	
240-250		240-250	
250-260		250-260	
260-270		260-270	
270-280		270-280	
280-290		280-290	
290-300		290-300	
300-310		300-310	
310-320		310-320	
320-330		320-330	
330-340		330-340	
340-350		340-350	
350-360		350-360	
360-370		360-370	
370-380		370-380	
380-390		380-390	
390-400		390-400	
400-410		400-410	
410-420		410-420	
420-430		420-430	
430-440		430-440	
440-450		440-450	
450-460		450-460	
460-470		460-470	
470-480		470-480	
480-490		480-490	
490-500		490-500	
500-510		500-510	
510-520		510-520	
520-530		520-530	
530-540		530-540	
540-550		540-550	
550-560		550-560	
560-570		560-570	
570-580		570-580	
580-590		580-590	
590-600		590-600	
600-610		600-610	
610-620		610-620	
620-630		620-630	
630-640		630-640	
640-650		640-650	
650-660		650-660	
660-670		660-670	
670-680		670-680	
680-690		680-690	
690-700		690-700	
700-710		700-710	
710-720		710-720	
720-730		720-730	
730-740		730-740	
740-750		740-750	
750-760		750-760	
760-770		760-770	
770-780		770-780	
780-790		780-790	
790-800		790-800	
800-810		800-810	
810-820		810-820	
820-830		820-830	
830-840		830-840	
840-850		840-850	
850-860		850-860	
860-870		860-870	
870-880		870-880	
880-890		880-890	
890-900		890-900	
900-910		900-910	
910-920		910-920	
920-930		920-930	
930-940		930-940	
940-950		940-950	
950-960		950-960	
960-970		960-970	
970-980		970-980	
980-990		980-990	
990-1000		990-1000	

70 and 89.

In Grade VI, three pupils were in the 111 and above group, eleven were in the 90-110 classification, and two were in the group that ranged downward from 69. The teacher in this grade estimated eleven IQs correctly, missed four by one rating, and did not classify one pupil who enrolled after the estimates had been made.

In Table IV will be found individual percentile rankings on Total Adjustment obtained from scores on the California Test of Personality. In Table V, the results are summarized, showing the number of pupils in each grade at the different percentile rankings, and the total number of pupils in each ranking.

In Grade III, the highest adjustment score was 75 per cent. The lowest ranking in the same group was 15 per cent. The median here was 40 per cent, which was 10 per cent below the norm established for the test.

In Grade IV 75 per cent was the highest score. In this group the lowest rating was 20 per cent. The median score was 42.5 per cent.

Grade V had a high score of 80 per cent, with a low of 10 per cent. The median percentile ranking was 40 per cent. The highest score in Grade VI was 85 per cent. The lowest rating was 10 per cent. The median was 45 per cent for this group.

TABLE IV
PERCENTILE RANKINGS OF ALL PUPILS
ON TOTAL ADJUSTMENT

Pupil No.	III	IV	V	VI
1	35	30	10	30
2	75	35	40	45
3	45	60	40	30
4	60	75	20	75
5	45	20	20	45
6	65	50	20	55
7	20	20	45	10
8	30	45	80	85
9	25	25	40	40
10	45	40	70	45
11	70	50	45	60
12	45	55	40	45
13	45	40	35	15
14	30	35	35	45
15	25	35	65	55
16	50	45	35	60
17	25	40	20	
18	25	45	60	
19	25	45	55	
20	70	50	60	
21	30	70	50	
22	55	25	50	
23	40		65	
24	75			
25	15			
26	30			
27	35			

TABLE IV
PERCENTILE RANKINGS OF ALL PUPILS
ON TOTAL ADJUSTMENT

Pupil No.	III	IV	V	VI
1	40	30	10	20
2	45	35	15	25
3	50	40	20	30
4	55	45	25	35
5	60	50	30	40
6	65	55	35	45
7	70	60	40	50
8	75	65	45	55
9	80	70	50	60
10	85	75	55	65
11	90	80	60	70
12	95	85	65	75
13	100	90	70	80
14	105	95	75	85
15	110	100	80	90
16	115	105	85	95
17	120	110	90	100
18	125	115	95	105
19	130	120	100	110
20	135	125	105	115
21	140	130	110	120
22	145	135	115	125
23	150	140	120	130
24	155	145	125	135
25	160	150	130	140
26	165	155	135	145
27	170	160	140	150
28	175	165	145	155
29	180	170	150	160
30	185	175	155	165
31	190	180	160	170
32	195	185	165	175
33	200	190	170	180
34	205	195	175	185
35	210	200	180	190
36	215	205	185	195
37	220	210	190	200
38	225	215	195	205
39	230	220	200	210
40	235	225	205	215
41	240	230	210	220
42	245	235	215	225
43	250	240	220	230
44	255	245	225	235
45	260	250	230	240
46	265	255	235	245
47	270	260	240	250
48	275	265	245	255
49	280	270	250	260
50	285	275	255	265
51	290	280	260	270
52	295	285	265	275
53	300	290	270	280
54	305	295	275	285
55	310	300	280	290
56	315	305	285	295
57	320	310	290	300
58	325	315	295	305
59	330	320	300	310
60	335	325	305	315
61	340	330	310	320
62	345	335	315	325
63	350	340	320	330
64	355	345	325	335
65	360	350	330	340
66	365	355	335	345
67	370	360	340	350
68	375	365	345	355
69	380	370	350	360
70	385	375	355	365
71	390	380	360	370
72	395	385	365	375
73	400	390	370	380
74	405	395	375	385
75	410	400	380	390
76	415	405	385	395
77	420	410	390	400
78	425	415	395	405
79	430	420	400	410
80	435	425	405	415
81	440	430	410	420
82	445	435	415	425
83	450	440	420	430
84	455	445	425	435
85	460	450	430	440
86	465	455	435	445
87	470	460	440	450
88	475	465	445	455
89	480	470	450	460
90	485	475	455	465
91	490	480	460	470
92	495	485	465	475
93	500	490	470	480
94	505	495	475	485
95	510	500	480	490
96	515	505	485	495
97	520	510	490	500
98	525	515	495	505
99	530	520	500	510
100	535	525	505	515

TABLE V
NUMBER OF PUPILS IN EACH
PERCENTILE RANKING ON TOTAL ADJUSTMENT

Percentile	III	IV	V	VI	Total
85				1	1
80			1		1
75	2	1		1	4
70	2	1	1		4
65	1		2		3
60	1	1	2	2	6
55	1	1	1	2	5
50	1	3	2		6
45	5	4	2	5	16
40	1	3	4	1	9
35	2	3	3		8
30	4	1		2	7
25	5	2			7
20	1	2	4		7
15	1			1	2
10			1	1	2

TABLE V

PERCENTAGE REMAINING ON TOTAL ADJUSTMENT
NUMBER OF PUPPIES IN EACH

Percentile	III	IV	V	VI	Total
85					1
80			1		1
75	2	1		1	4
70	2	1	1		4
65	1		2		3
60	1	1	2		4
55	1	1	1		3
50	1	2	2		5
45	2	4	2		8
40	1	3	4	1	9
35	2	3	3		8
30	4	1		2	7
25	2	2			4
20	1	2	4		7
15	1			1	2
10			1	1	2

As has been stated previously, the correlation between personality adjustment scores and degree of social acceptance was found to be $.16 \pm .07$. When personality test rankings and IQs were correlated scores of all groups were included. This correlation was computed to be $.53 \pm .05$. While this correlation is not highly significant, it does seem to indicate that personal and social adjustment has a closer relation to intelligence than to social acceptance by the group.

Table VI shows high, low, and median educational and

TABLE VI

HIGH, LOW, AND MEDIAN EDUCATIONAL AND
CHRONOLOGICAL AGES FOR ALL GRADES

	III		IV		V		VI	
	E.A.	C.A.	E.A.	C.A.	E.A.	C.A.	E.A.	C.A.
High	9-10	11-7	12-8	12-3	13-1	13-1	13-4	13-4
Low	8-1	8-5	8-1	9-3	8-3	10-5	9-11	11-2
Median	9-0	9-2	10-6	10-5	11-6	11-0	12-7	11-10
Norm	9-3	9-3	10-4	10-4	11-6	11-6	12-4	12-4

chronological ages for each grade, with norms for each. In Table VII, individual educational and chronological ages are given for all pupils.

The educational ages given in Tables VI and VII were derived from scores on the Progressive Achievement Test, with the exception of ages for two children in Grade V, who were

As has been stated previously, the correlation between personality adjustment scores and scores of general intelligence was found to be .11, .04. When personality adjustment scores and IQs were correlated scores of .11 and .04 were obtained. This correlation is not significantly different from zero. It indicates that personality adjustment and general intelligence are in no relation to intelligence. (Table VI shows high, low, and median personality adjustment scores.)

Table VI shows high, low, and median personality adjustment scores.

TABLE VI

HIGH, LOW, AND MEDIAN PERSONALITY ADJUSTMENT SCORES FOR ALL SUBJECTS

III			
E.A. C.A. S.A. I.Q.			
High	9-10	11-12	13-14
Low	8-9	10-11	12-13
Median	7-8	9-10	11-12
Norm	6-7	8-9	10-11

chronological ages for each grade, which would be given in Table VII, individual adjustment and chronological ages are given for all pupils. The educational ages for the grades II and III were derived from scores on the Stanford-Binet Intelligence Test. The exception of age for grade I is shown in Table V, and was

TABLE VII
EDUCATIONAL AND CHRONOLOGICAL AGES
FOR ALL PUPILS

Pupil No.	III		IV		V		VI	
	E.A.	C.A.	E.A.	C.A.	E.A.	C.A.	E.A.	C.A.
1	9-7	8-8	8-1	10-11	9-2	11-2	12-10	11-8
2	8-10	10-1	9-9	10-0	12-1	10-7	12-3	11-7
3	9-9	9-5	9-11	9-6	11-6	10-5	9-11	13-4
4	8-9	10-3	12-0	9-10	11-0	10-7	13-2	12-4
5	9-1	9-2	10-0	9-11	8-3	13-1	13-4	11-8
6	9-1	9-1	9-5	10-5	8-7	11-5	12-9	11-7
7	8-3	9-5	10-5	11-6	11-3	12-3	12-4	11-5
8	8-9	9-2	11-0	10-11	12-9	10-6	12-9	11-2
9	9-8	8-9	8-2	9-10	11-11	10-6	13-2	11-11
10	8-1	8-11	11-10	11-0	13-1	10-10	12-8	11-6
11	9-8	8-5	9-9	12-3	12-1	12-0	12-0	11-10
12	9-10	9-7	11-3	9-11	11-3	11-4	10-11	12-3
13	9-9	10-0	11-6	10-5	10-10	11-8	8-11	12-3
14	8-6	10-5	10-6	11-0	11-7	11-5	10-6	12-0
15	8-5	10-7	10-1	12-0	10-8	11-2	12-5	11-11
16	8-11	10-1	12-8	9-4	12-5	11-1	13-3	11-9
17	9-1	8-5	10-10	9-6	10-9	11-0		
18	9-1	9-3	10-2	9-3	11-6	11-0		
19	8-6	8-5	10-10	10-11	11-4	10-5		
20	9-9	9-3	11-7	10-1	11-11	10-9		
21	9-5	9-2	11-10	10-8	11-6	11-0		
22	9-0	8-6			11-1	10-10		
23	9-0	10-4			11-6	10-9		
24	9-1	8-7						
25	8-10	9-0						
26	8-11	8-5						
27	8-4	11-7						

absent at the time this was given. These were taken from the results of the Stanford Achievement Test.

An examination of the data given for Grade III shows a range in educational ages of one year nine months, extending from eight years one month to nine years ten months. The median educational age was nine years, which was three months below the norm. Since the median mental age was also nine years three months, this shows an apparent under-achievement of three months.

In Grade IV educational ages range from eight years one month to twelve years eight months, a difference of four years seven months. The median for the group was ten years six months. This educational age was two months higher than the norm for the grade, and seven months higher than the median mental age.

The highest educational age in Grade V was thirteen years one month. The lowest was eight years three months. The range was four years ten months. The median age of eleven years six months is the same as the norm given for the time of testing. It is ten months above the median mental age for that group, showing an apparent over-achievement, in the light of mental ability as measured by the mental tests.

Pupils in Grade VI ranged in educational age from eight years eleven months to thirteen years four months, a

absent at the time this was done. The results of the examination of the children in the first group were as follows:

The results of the examination of the children in the second group were as follows:

An examination of the children in the third group was made at the same time as the examination of the children in the second group.

A range in educational attainment was found in the children in the third group, ranging from eight years to eleven years.

The median educational attainment of the children in the third group was nine years and six months.

The median educational attainment of the children in the third group was nine years and six months.

months below the norm. This is the median mental age and was also

nine years three months, which is an equivalent of the

achievement of three months.

In Grade IV educational attainment was found to range from eight years

one month to twelve years, eight months, a difference of eleven years and seven months.

The median for the group was nine years and six months.

six months. This educational attainment was found to be

the norm for the grade, and was also found to be the

the median mental age.

The highest educational attainment was found in Grade V was thirteen

years one month. The lowest was eight years three months.

The range was four years, eight months, a difference of

eleven years, six months, and was also found to be the

the time of testing. It is the median mental age for the

mental age for that grade, and was also found to be the

achievement. In the light of mental age, an achievement of

the mental test.

Pupils in Grade VI ranged in educational attainment from

eight years, eleven months to thirteen years, six months, a

difference of four years five months. Their median educational age was twelve years seven months. This is three months above the norm at time of testing, and eleven months above the median mental age of the group, showing a seeming over-achievement.

In general, chronological ages showed a smaller range than did educational ages. However, in Grade III the range of chronological ages is three years two months, extending from eight years five months to eleven years seven months. The median was nine years two months and was only slightly below the norm for the group.

In Grade IV chronological ages were from nine years three months to twelve years three months with a range of three years. The median here was ten years five months, one month above the norm.

Grade V had a median chronological age of eleven years. This was six months below the norm. Their range was from ten years five months to thirteen years one month. In Grade VI the range was from eleven years two months to thirteen years four months. The median of eleven years ten months was six months below the norm.

Educational ages were correlated both with chronological and with mental ages. The correlation between educational ages and chronological ages was found to be $.55\frac{1}{2}$.05. The correlation between educational ages and mental

difference of four years five months. Their median educational age was twelve years seven months. This is three months above the norm at time of testing, and eleven months above the median mental age of the group, showing a seeming over-achievement.

In general, chronological ages showed a similar range than did educational ages. However, in Grade III the range of chronological ages is three years two months, extending from eight years five months to eleven years seven months. The median was nine years two months and was only slightly below the norm for the group.

In Grade IV chronological ages were from nine years three months to twelve years three months with a range of three years. The median here was ten years five months, one month above the norm.

Grade V had a median chronological age of eleven years. This was six months below the norm. Their range was from ten years five months to thirteen years one month. In Grade VI the range was from eleven years two months to thirteen years four months. The median of eleven years ten months was six months below the norm.

Educational ages were correlated both with chronological and with mental ages. The correlation between educational ages and chronological ages was found to be .554. The correlation between educational ages and mental

ages was $.82\frac{1}{2}$. The implication here seems to be that if pupils were grouped according to mental age rather than chronological age, a narrower range of scholastic achievement within each group would follow.

Table VIII shows high, low, and median grade point

TABLE VIII

HIGH, LOW, AND MEDIAN GRADE POINT SCORES
FROM THE PROGRESSIVE ACHIEVEMENT TEST

	III	IV	V	VI
High	4.4	7.0	7.5	7.9
Low	2.7	2.7	3.8	3.5
Median	3.6	5.0	5.9	6.9
Norm	3.8	4.8	5.9	6.7

scores derived from the Progressive Achievement Test and the norm for each grade.

Table IX shows grade point scores on the Progressive Achievement Test. These are for all pupils included in the study.

Grade III had a range of grade point scores from 2.7 to 4.4, or a difference of 1.7. The median score was 3.6 which was .2 below the norm for this grade. In Grade IV scores ranged from 2.7 to 7.0, with a difference of 4.3. The median grade point score was 5.0, .2 above the norm.

ages was .82. The implication here seems to be that if pupils were grouped according to mental age rather than chronological age, a narrower range of scholastic achievement within each group would follow.

Table VIII shows high, low, and median grade point

TABLE VIII
HIGH, LOW, AND MEDIAN GRADE POINT SCORES
FROM THE PROGRESSIVE ACHIEVEMENT TEST

VI	V	IV	III	
7.9	7.5	7.0	4.4	High
3.5	3.8	2.7	2.7	Low
6.9	5.9	5.0	3.6	Median
6.7	5.9	4.8	3.8	Norm

scores derived from the Progressive Achievement Test and the norm for each grade.

Table IX shows grade point scores on the Progressive Achievement Test. These are for all pupils included in the study.

Grade III had a range of grade point scores from 2.7 to 4.4, or a difference of 1.7. The median score was 3.6 which was .2 below the norm for this grade. In Grade IV scores ranged from 2.7 to 7.0, with a difference of 4.3. The median grade point score was 5.0, .2 above the norm.

TABLE IX

PROGRESSIVE ACHIEVEMENT TEST
GRADE POINT SCORES IN ALL GRADES

Pupil No.	III	IV	V	VI
1	4.2	2.7	3.8	7.2
2	3.4	4.3	6.5	6.6
3	4.3	4.5	5.9	4.5
4	3.3	6.4	5.5	7.6
5	3.7	4.6		7.9
6	3.7	4.0		7.0
7	2.8	4.9	5.7	6.7
8	3.3	5.5	7.1	7.1
9	4.2	2.8	6.3	7.6
10	2.7	5.7	7.5	7.0
11	4.2	4.3	6.5	6.4
12	4.4	5.7	5.7	5.4
13	4.3	5.9	5.3	3.5
14	3.1	5.0	6.0	5.0
15	3.0	4.6	5.2	6.8
16	3.5	7.0	6.8	7.7
17	3.7	5.3	5.2	
18	3.7	4.7	5.9	
19	3.1	5.3	5.8	
20	4.3	6.0	6.3	
21	4.0	6.2	5.9	
22	3.6		5.6	
23	3.6		5.9	
24	3.7			
25	3.4			
26	3.5			
27	2.9			

TABLE IX
PROGRESSIVE ACHIEVEMENT TEST
GRADE POINT SCORES IN ALL GRADES

No.				
I				
1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25
26	27	28	29	30
31	32	33	34	35
36	37	38	39	40
41	42	43	44	45
46	47	48	49	50
51	52	53	54	55
56	57	58	59	60
61	62	63	64	65
66	67	68	69	70
71	72	73	74	75
76	77	78	79	80
81	82	83	84	85
86	87	88	89	90
91	92	93	94	95
96	97	98	99	100

Scores in Grade V were from 3.8 to 7.5 with a range of 3.7. The median, 5.9, was also the norm for the group. The median in Grade VI was 6.9, which was .2 above the norm. The range was 4.4, extending from 3.5 to 7.9.

The Progressive Achievement Test grade point scores for each group were correlated with percentile rankings on the California Test of Personality. In Grade III this correlation was $.20 \pm .12$. In Grade IV r was $.47 \pm .11$. Grade V showed the highest correlation with r equalling $.60 \pm .09$. In Grade VI r was $.47 \pm .13$.

A study of grade point scores on the Stanford Achievement Test reveals that in general they were lower than scores derived from the Progressive Test. Table X gives the high, low, and median grade point scores and

TABLE X

HIGH, LOW, AND MEDIAN GRADE POINT SCORES
FROM THE STANFORD ACHIEVEMENT TEST

	III	IV	V	VI
High	4.3	6.2	7.8	9.3
Low	2.2	3.0	3.1	3.4
Median	2.9	4.4	4.8	6.0
Norm	3.8	4.8	5.9	6.7

norms from the Stanford Achievement Test. Table XI presents

TABLE XI
STANFORD ACHIEVEMENT TEST
GRADE POINT SCORES IN ALL GRADES

Pupil No.	III	IV	V	VI
1	3.9	3.0	3.1	7.4
2	2.8	3.4	4.9	6.2
3	4.1	3.9	5.1	3.7
4	2.6	5.9	4.6	
5	2.9	4.2	3.2	9.3
6	2.9	3.4	3.6	6.4
7	2.2	3.6	4.6	5.9
8	2.3	5.0	6.4	6.0
9	3.3	3.0	5.0	8.8
10	2.2	4.7	7.8	6.0
11	3.8	3.7	6.4	5.4
12	3.6	4.9	5.0	4.7
13	3.4	5.5	4.1	3.4
14	2.4	4.4	5.0	3.9
15	3.0	3.9	6.0	5.9
16	2.7	6.2	4.2	9.3
17	2.9	4.4	4.2	
18	3.0	4.2	4.8	
19	2.5	5.1	4.4	
20	4.3	5.2	5.2	
21	3.5	5.5	4.7	
22	2.7			
23	2.9			
24	3.2			
25	2.8			
26	2.6			
27	2.4			

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9	9	9	9	9
10	10	10	10	10
11	11	11	11	11
12	12	12	12	12
13	13	13	13	13
14	14	14	14	14
15	15	15	15	15
16	16	16	16	16
17	17	17	17	17
18	18	18	18	18
19	19	19	19	19
20	20	20	20	20
21	21	21	21	21
22	22	22	22	22
23	23	23	23	23
24	24	24	24	24
25	25	25	25	25
26	26	26	26	26
27	27	27	27	27
28	28	28	28	28
29	29	29	29	29
30	30	30	30	30
31	31	31	31	31
32	32	32	32	32

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the scores from the Stanford Achievement for all pupils individually.

The range of scores in the third grade was found to be 2.2-4.3 as compared to 2.7-4.4 on the Progressive Test. The median on the Stanford Test was 2.9. This is .7 below that of the other test, and .9 below the norm for the group. In the fourth grade the Stanford Test range was 3.0-6.2. The low of 3.0 is .3 higher than the low of 2.7 on the Progressive Test, but the high of 6.2 is .8 lower than the high of 7.0 on the Progressive Test. The median 4.4 is .6 below the median for the Progressive Test and .4 below the norm.

Stanford Test scores for Grade V yielded a range from 3.1-7.8 as compared to 3.8-7.5 from the Progressive Test. The low on the former test was .7 below that on the latter. The median 4.8 was 1.1 below that of the Progressive Test and also 1.1 below the norm. The high score was .3 higher on the Stanford than on the Progressive Test.

Pupils in Grade VI who made below norm scores on the Progressive Test tended to make lower scores on the Stanford Test. On the other hand, pupils who ranked above the norm on the first test made higher scores on the second one. The range on the Stanford Test was 3.4-9.3 compared to 3.5-7.9 on the Progressive Test. The Stanford median was 6.0, which was .9 below the median for the other test,

the scores of the Stanford-Binet test were significantly lower than the scores of the Progressive Test.

The range of scores on the Stanford-Binet test was 2.5-4.3 as compared to 1.1-4.1 on the Progressive Test. The median on the Stanford-Binet test was 3.4, which is higher than that of the other tests. The range of scores on the Stanford-Binet test was 2.5-4.3, which is higher than the range of scores on the Progressive Test. The low of 2.5 is higher than the low of 1.1 on the Progressive Test, and the high of 4.3 is higher than the high of 4.1 on the Progressive Test. The median of 3.4 is higher than the median of 3.0 on the Progressive Test. The range of scores on the Stanford-Binet test was 2.5-4.3, which is higher than the range of scores on the Progressive Test. The low of 2.5 is higher than the low of 1.1 on the Progressive Test, and the high of 4.3 is higher than the high of 4.1 on the Progressive Test. The median of 3.4 is higher than the median of 3.0 on the Progressive Test.

Stanford-Binet test scores for the two groups were significantly higher than the scores of the Progressive Test. The range of scores on the Stanford-Binet test was 2.5-4.3, which is higher than the range of scores on the Progressive Test. The low of 2.5 is higher than the low of 1.1 on the Progressive Test, and the high of 4.3 is higher than the high of 4.1 on the Progressive Test. The median of 3.4 is higher than the median of 3.0 on the Progressive Test. The range of scores on the Stanford-Binet test was 2.5-4.3, which is higher than the range of scores on the Progressive Test. The low of 2.5 is higher than the low of 1.1 on the Progressive Test, and the high of 4.3 is higher than the high of 4.1 on the Progressive Test. The median of 3.4 is higher than the median of 3.0 on the Progressive Test.

Results on Grade VI test. The range of scores on the Stanford-Binet test was 2.5-4.3, which is higher than the range of scores on the Progressive Test. The low of 2.5 is higher than the low of 1.1 on the Progressive Test, and the high of 4.3 is higher than the high of 4.1 on the Progressive Test. The median of 3.4 is higher than the median of 3.0 on the Progressive Test. The range of scores on the Stanford-Binet test was 2.5-4.3, which is higher than the range of scores on the Progressive Test. The low of 2.5 is higher than the low of 1.1 on the Progressive Test, and the high of 4.3 is higher than the high of 4.1 on the Progressive Test. The median of 3.4 is higher than the median of 3.0 on the Progressive Test.

and .7 below the norm for the group.

In Table XII the number of pupils in each grade making a score in a certain interval is listed for each test. The total number of pupils in each interval is also shown for each test. Intervals used are three grade points.

The Stanford Achievement Test scores for all grades were correlated with the test scores for the Progressive Achievement Test. The correlation was found to be $.84 \pm .02$. The high correlation indicated that the two tests measured the same things. When Stanford Achievement Test scores were correlated with measured IQs, separately for each grade, the correlation in Grade III was $.52 \pm .10$. For the fourth grade group r was $.63 \pm .09$. Fifth grade scores showed a correlation of $.78 \pm .09$ for the two tests. The correlation was even higher for the group in Grade VI. Here r equalled $.87 \pm .06$. When correlations for the four groups are placed in proximity, the increase from grade to grade can be easily noted.

For Grade III,	$r = .52 \pm .10$
For Grade IV,	$r = .63 \pm .09$
For Grade V,	$r = .78 \pm .09$
For Grade VI,	$r = .87 \pm .06$

The implication is that with each succeeding grade children are working more nearly at the level of their capacity.

A summary of correlations between Progressive

and .7 below the norm for the group.

In Table XII the number of pupils in each grade making a score in a certain interval is listed for each test. The total number of pupils in each interval is also shown for each test. Intervals used are three grade points.

The Stanford Achievement Test scores for all grades were correlated with the test scores for the Progressive Achievement Test. The correlation was found to be .84.09. The high correlation indicated that the two tests measured the same thing. When Stanford Achievement Test scores were correlated with measured IQs, separately for each grade, the correlation in Grade III was .524.30. For the fourth grade group r was .634.09. Fifth grade scores showed a correlation of .784.09 for the two tests. The correlation was even higher for the group in Grade VI. Here r equaled .874.06. When correlations for the four groups are placed in proximity, the increase from grade to grade can be easily noted.

For Grade III, $r =$.524.10
For Grade IV, $r =$.634.09
For Grade V, $r =$.784.09
For Grade VI, $r =$.874.06

The implication is that with each succeeding grade

children are working more nearly at the level of their

capacity.

A summary of correlations between Progressive

TABLE XII
NUMBER OF PUPILS
AT EACH GRADE POINT INTERVAL
ON PROGRESSIVE AND STANFORD ACHIEVEMENT TESTS

Interval	Progressive Achievement Test				Total	Stanford Achievement Test				Total
	III	IV	V	VI		III	IV	V	VI	
9.1-9.3									2	2
8.8-9.0									1	1
8.5-8.7										
8.2-8.4										
7.9-8.1				1	1					
7.6-7.8				3	3			1		1
7.3-7.5			1		1				1	1
7.0-7.2		1	1	4	6					
6.7-6.9			1	2	3					
6.4-6.6		1	2	2	5			2	1	3
6.1-6.3		1	2		3		1		1	2
5.8-6.0		2	6		8		1	1	4	6
5.5-5.7		3	4		7		2			2
5.2-5.4		2	3	1	6		1	1	1	3
4.9-5.1		2		1	3		3	6		9
4.6-4.8		3			3		1	4	1	6
4.3-4.5	4	3		1	8	1	2	2		5
4.0-4.2	4	1			5	1	2	3		6
3.7-3.9	5		1		6	2	3		2	7
3.4-3.6	6			1	7	3	3	1	1	8
3.1-3.4	4				4	2		2		4
2.8-3.0	3	1			4	8	2			10
2.5-2.7	1	1			2	5				5
2.2-2.4						5				5

Achievement scores and Personality Adjustment showed:

For Grade III, $r = .12/.13$
 For Grade IV, $r = .47/.11$
 For Grade V, $r = .60/.09$
 For Grade VI, $r = .46/.13$

While there is no consistent pattern here, correlations in intermediate grades are higher than in Grade III. This seemed to indicate a closer relationship between adjustment and achievement in these three grades than in Grade III.

The correlations between social acceptance and scores on the Progressive Achievement Test seemed to follow no pattern.

For Grade III, $r = .20/.13$
 For Grade IV, $r = .32/.13$
 For Grade V, $r = .15/.15$
 For Grade VI, $r = .82/.06$

Correlations in Grades III, IV, and V were too low to be considered significant. In Grade VI, however, the correlation of $.82/.06$ seemed highly significant. It is not known whether social acceptance is more closely related to achievement in Grade VI, or whether this high correlation is accidental. The latter may be true because the group is made up of only sixteen children with a median IQ of 104.

When other correlations were listed in order with lowest correlation first, the highest correlation found was between the two Achievement Tests.

Achievement score and reading ability score

For Grade III, $r = 0.41$
For Grade IV, $r = 0.38$
For Grade V, $r = 0.35$
For Grade VI, $r = 0.32$

While there is no consistent pattern in the

intermediate grades are higher than in Grade III. This

seems to indicate a closer relationship between achievement

and achievement in these three grades than in Grade III.

The correlation between reading ability and achievement

on the Progressive Reading Test seems to follow the

pattern.

For Grade III, $r = 0.41$
For Grade IV, $r = 0.38$
For Grade V, $r = 0.35$
For Grade VI, $r = 0.32$

Correlation in Grades III, IV, and V seems to be

be considered significant. In Grade VI, however, the

correlation of .32 is not significant. It is

known whether these scores are significantly related

achievement in Grade VI, or whether there is a correlation

is accidental. The latter may be true because

made up of only sixteen children with a mean of 10.5

When other correlations were tested in other

lowest correlation of .17, and highest correlation of .41

between the two achievement tests.

Social Acceptance and Personality Adjustment...	r = .16	.07
Social Acceptance and IQ.....	r = .31	.07
Personality Adjustment and IQ.....	r = .53	.05
Educational Age and Chronological Age.....	r = .55	.05
Educational Age and Mental Age.....	r = .82	.04
Progressive Achievement Test and Stanford Achievement Test.....	r = .84	.02

Correlation between educational age and mental age was .82/.04, which showed a greater consistency between educational age and mental age than between achievement scores and IQs.

The low correlation between social acceptance and other factors might be due to the method of determining social acceptance. A method involving more choices, and indication of first, second, third, and fourth choices might have produced different results.

The correlation for personality adjustment and IQ was .55/.05. This showed at least a tendency toward better adjustment for pupils with higher IQs.

Social Acceptance and ...
Social Acceptance and ...
Personality Adjustment ...
Educational Age and ...
Procedural ...
Activities ...

was 0.57 ...
ERASE

educational ...
scores and ...

The ...
other factors ...
social acceptance ...
indication of ...
have produced ...

The correlation ...
was .55 ...
adjustment for ...

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

I. CONCLUSIONS

1. From a study of teachers' estimates of intelligence and from measured IQs of pupils, it would seem that teachers were correct on from approximately three-eighths to three-fourths of their estimates. In the third grade the pupils who made a better than norm score on the Progressive Achievement Test were those whom the teacher had placed in the 111 and above group. In the fourth grade all pupils placed in the top group made above norm scores. Fifth and sixth grade teachers' estimates compared similarly. This might indicate that teachers often confuse achievement and capabilities.

2. Apparently scholastic achievement is not always in direct relation to abstract intelligence as measured by mental tests. However, it may be noted that the correlation between Stanford Achievement Test scores and measured IQs, while only $.52 \pm .10$ in the third grade, rises in each successive grade until it reaches $.87 \pm .06$ in the sixth grade. This seems to indicate that the longer a pupil attends school, the more nearly his achievement will approximate his native ability.

CONSTITUTIONAL AND LEGISLATIVE

IN JOURNALISM

I. FROM A STUDY OF THE CONSTITUTION

Intelligence and firmness are the qualities of a good journalist. That teachers were called on to do a great deal of work in the schools to three-fourths of their students. In the first grade the pupils who were a better than average class. Progressive Achievement Test was given to the pupils. The pupils placed in the first and second grades were given a test. Fifth and sixth grade teachers. This might indicate that the pupils were given a test. and capabilities.

2. APPROPRIATE CONSTITUTIONAL DEVELOPMENT IN THE SCHOOLS

In direct relation to the development of the pupils in the schools. mental tests. However, it is not an exact science. between Standard Achievement Test. While only 25% of the pupils were given a test. successive grade until it reaches 75% of the pupils. This seems to indicate that the pupils were given a test. school, the more nearly the pupils were given a test. his native ability.

3. Correlation between mental ages derived from the mental tests and educational ages derived from the Progressive Achievement Test showed an r of $.82\frac{1}{2}.04$ for all grades when taken together. A child who is overage for his grade level with a low IQ may have the same mental age as a younger child with an average or high IQ. Perhaps mental age is a better focal point for the study of children's ability to learn than is an intelligence quotient.

4. Mental tests indicate that more pupils were working above their capacities than below them, as shown by educational and mental ages in Table II on page 20, and in Table VII on page 27. According to the norms given in the Progressive Achievement Test manual, fifteen children in the third grade have attained higher educational ages than their measured mental ages. The number was twelve in the fourth grade, two in the fifth, and seven in the sixth grade. It should be noted that several pupils in each grade whose educational ages have not reached their mental ages are higher than the norm for their grade.

It should be remembered that a pupil in any one grade has had no opportunity to attain knowledge of processes and material presented in higher grades, and can not be expected to achieve in areas to which he has not been exposed. It is obviously incorrect to say that a child whose chronological age is eleven years eight months

mental tests and physical tests. The results of the mental tests are given in Table VII. The results of the physical tests are given in Table VIII. The results of the mental tests are given in Table VII. The results of the physical tests are given in Table VIII.

1. Mental tests. The results of the mental tests are given in Table VII. The results of the physical tests are given in Table VIII. The results of the mental tests are given in Table VII. The results of the physical tests are given in Table VIII.

Working above their chronological level. It is seen from Table VII on page 11, and Table VIII on page 12, that the progressive achievement test results of the children in the third grade have a high level of achievement. Their mental ages are higher than their chronological ages. The results of the mental tests are given in Table VII. The results of the physical tests are given in Table VIII.

Fourth grade. The results of the mental tests are given in Table VII. The results of the physical tests are given in Table VIII. The results of the mental tests are given in Table VII. The results of the physical tests are given in Table VIII.

Grade. It should be noted that the results of the mental tests are given in Table VII. The results of the physical tests are given in Table VIII. The results of the mental tests are given in Table VII. The results of the physical tests are given in Table VIII.

Grade whose chronological ages are not reached. The results of the mental tests are given in Table VII. The results of the physical tests are given in Table VIII. The results of the mental tests are given in Table VII. The results of the physical tests are given in Table VIII.

ages and higher than their chronological ages. The results of the mental tests are given in Table VII. The results of the physical tests are given in Table VIII. The results of the mental tests are given in Table VII. The results of the physical tests are given in Table VIII.

It is seen from Table VII on page 11, and Table VIII on page 12, that the progressive achievement test results of the children in the third grade have a high level of achievement. Their mental ages are higher than their chronological ages. The results of the mental tests are given in Table VII. The results of the physical tests are given in Table VIII.

Grade has no significant difference in mental knowledge. The results of the mental tests are given in Table VII. The results of the physical tests are given in Table VIII. The results of the mental tests are given in Table VII. The results of the physical tests are given in Table VIII.

processes and mental processes in their grades. The results of the mental tests are given in Table VII. The results of the physical tests are given in Table VIII. The results of the mental tests are given in Table VII. The results of the physical tests are given in Table VIII.

not be expected to reach the level of the other groups. The results of the mental tests are given in Table VII. The results of the physical tests are given in Table VIII. The results of the mental tests are given in Table VII. The results of the physical tests are given in Table VIII.

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child whose chronological age is not reached. The results of the mental tests are given in Table VII. The results of the physical tests are given in Table VIII. The results of the mental tests are given in Table VII. The results of the physical tests are given in Table VIII.

and whose mental age is fifteen years ten months is under-achieving because he has attained an educational age of only thirteen years five months. A child of twelve years should not be provided with a curriculum planned for high school sophomores. However, he does need a rich curriculum which will meet his individual needs.

When pupils who had achievement scores under the norm were considered, the number in the third grade achieving below measured capacity was six; in the fourth grade, four; and in the sixth grade, one. There were none in the fifth grade. This means that 13 per cent of all pupils included in the study presumably were capable of reaching goals which they were not achieving.

5. Comparisons of data obtained from sociograms showed very little relationship to data derived from the various tests. The correlation between social acceptance as indicated by the sociograms and percentile rankings on personality tests was $.16 \pm .07$, which is too low to be significant. Correlations between social acceptance and ratings on the Progressive Achievement Test were also too low to be significant except in Grade VI. There the correlation of $.82 \pm .04$ seems unexpectedly high. This was an unusually small grade of sixteen pupils, with a higher than average median IQ. Perhaps a different method of determining social acceptance should be tried.

and whose mental age is 11.5 or less for males is under-
achieving because he has reached an educational age of only
thirteen years five months. A child of twelve years should
not be provided with a curriculum placed at high school
sophomore. However, the child should be considered as
will meet the standard for the high school.
was pupils who had a mental age of 11.5 or less.
none were considered in the high school.
achieving below standard was also in the fourth
grade, four; and in the fifth grade, one. These were
in the fifth grade. This means that 13 per cent of all
pupils included in the study were considered as
reaching goals which they were not achieving.
B. Comparison of data obtained from various
showed very little relationship to data derived from the
various tests. The correlation between mental age and
as indicated by the achievement and reading tests was
personally less than .10, which is too low to be
significant. Correlations between mental age and
ratings on the Progressive Achievement Test were also low
low to be significant except in Grade VI. There the
correlation of .65, which was very high. This was an
unusually small grade of eleven pupils, with a mean
average median IQ of 100. There is a difference between
social acceptance which is not

6. The fifth percentile rank on the California Test of Personality was considered the norm. When scores on this tests were studied, it was seen that in general the children in this investigation were somewhat below the norm. The correlation of $.53 \pm .05$ showed at least a positive relationship between adjustment scores and IQ ratings. Correlations between percentile rankings and Progressive Achievement Test scores apparently follow no particular pattern. A correlation of $.20 \pm .12$ for the third grade seemed of little significance. In the fourth grade, r equalled $.47 \pm .11$ and might indicate a more positive relationship. When r equalled $.60 \pm .09$, as in the fifth grade, it might be assumed to be of some importance.

7. The high correlation of $.84 \pm .02$ between the grade point scores made on the Progressive Achievement Test and those made on the Stanford Achievement Test indicated that the two tests measured the same things. However, the difference between median grade point scores, and the difference between individual grade point scores apparently meant that a higher level of performance was required on the Stanford Test in order to acquire a grade point score equal to that on the Progressive Test.

Analysis of the performance of pupils on the respective tests indicated that the quantity of information taught at the several grade levels was more curricularly

6. The fifth percentile rank on the California Test of Personality was compared with the rank of scores on this test were studied, it was found that the general and children in this investigation were somewhat below the norm. The correlation of .55, 05 showed no test-retest reliability ship between adjustment scores and IQ ratings. Correlation between percentile rankings and progressive achievement Test scores apparently follow no particular pattern. A correlation of .50, 15 for the third grade seemed of little significance. In the fourth grade, a correlation of .47, 11 and might indicate a more positive relationship. When equalled .60, 09, as in the fifth grade, it might be assumed to be of some importance.

7. The fifth percentile of .55, 05 between the grade point scores made on the Stanford Achievement Test and those made on the Stanford Achievement Test indicated that the two tests measured the same thing. However, the difference between the two grade point scores, and the difference between the two tests, was not significant. It meant that a slight level of achievement was required on the Stanford Test in order to equal a grade point score equal to that on the Stanford Test. Analysis of the performance of pupils on the respective tests indicated that the quality of instruction taught at the several grade levels was more consistently

valid for the Progressive Tests. For example, at some grade levels pupils would need to make near perfect scores on what has been taught in order to approach the norms on the Stanford Tests. While the two tests produced a similar ranking of pupils, and thus produced a high correlation, the curricular validity was such that the Progressive Tests more nearly measured the information taught in the school from which these pupils were chosen. Whatever the reason, pupils included in this investigation were not keeping pace academically with children upon whom the Stanford Test was standardized. On the other hand their grade medians were equal to norms of the Progressive Achievement Test. These pupils apparently were achieving on a par with children upon whom this test was standardized.

8. Wide individual differences of children were noted in every phase of this study. On scores from the California Test of Personality, percentile rankings ranged from 10 per cent to 85 per cent. In social acceptance, the number of times chosen as indicated by the sociograms was from zero to twelve. The range of IQs was from 64 to 123. Grade point scores in the four grades differed from 1.7 to as much as 4.4 on the Progressive Achievement Tests, and from 2.1 to 5.9 on the Stanford Achievement Tests. In general, the range in each succeeding grade was wider than that in the preceding one. Some children with high measured

valid for the progressive tests. For example, at some grade
levels pupils would need to read more words than they
what has been taught in order to answer the items on the
Stanford tests. While the tests are designed to measure
reading of words, and thus require a high vocabulary,
the criterion of ability was also the progressive tests.
More nearly matched the Stanford tests in the early
from which these words were taken. While the reason
pupils obtained on the Stanford tests was not keeping pace
essentially with those who were the Stanford test was
essentially on the other side of the gap.

EFFICIENCY

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RAG CONTENT

8. With this kind of measure of efficiency
noted in every standard test. It is noted that the
California test of reading is more than twice as long
from 10 per cent to 20 per cent. In such a comparison, the
number of items chosen as standard for the Stanford test
from zero to 100. The range of the test is from 10 to 100.
Grade point scores in the test range from 10 to 100
as high as 100 on the Stanford test, and
from 10 to 100 on the Stanford test. It
General, the range in the Stanford test was wider than
that in the preceding test. A test with high efficiency

IQs were progressing more slowly than other children with lower IQs. If mental ability as measured by mental tests is indicative of ability to learn, there must be some other factor, or factors, influencing school achievement and blocking effectual use of intelligence. On the other hand, it might be asked what it is that enables some children to achieve beyond their measured capabilities.

II. RECOMMENDATIONS

1. Further study is needed to confirm or reject the findings of this investigation:

(1) Teachers often confuse achievement and capabilities.

(2) Scholastic achievement is not always in direct relation to abstract intelligence.

(3) Mental age is a better focal point than IQ for study of children's ability to learn.

(4) More children are working above capacities than below them.

(5) Social acceptance is not correlated highly with personality adjustment, IQ, or scholastic achievement.

(6) Personality adjustment has a positive relationship to IQ, but it is not high enough to be greatly significant.

(7) Although scores on the Progressive Achievement Test and scores on the Stanford Achievement Test correlate highly, and apparently measure the same things, the Progressive Test rates pupils at higher educational age and grade point levels.

(8) Wide individual differences of children were noted in every phase of the study.

2. Some way should be found to measure the effect of the pupil's attitude toward his school achievement.

3. Teachers should study each child carefully.

Observation over long periods of time and in many different

The work of the committee was to study the various factors which enter into the determination of the efficiency of the various departments of the Government. It was found that the most important factors were the quality of the personnel, the amount of the funds available, and the efficiency of the management. The committee recommended that the Government should take steps to improve these factors in order to increase the efficiency of its various departments.

The committee also found that the Government should take steps to improve the quality of the personnel, the amount of the funds available, and the efficiency of the management. It recommended that the Government should take steps to improve these factors in order to increase the efficiency of its various departments.

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situations, informal tests, conferences with parents and former teachers, and physical examinations should be combined with objective measurements to aid the teacher in planning how best to help the child.

4. Each teacher should adjust the curriculum to fit school work to the individual needs and capacities of each pupil. Using ungraded rooms, particularly at the primary level, or keeping a teacher with a group of children more than one year might help.

5. Each teacher should realize that he must teach at many different levels. In every grade pupils have widely varying mental and educational ages. Rates of progress also vary. Not all children learn in the same way. Teachers should use many different approaches and furnish opportunities for experiences of many different types in order to reach all children.

6. More effective help needs to be given the child who learns more slowly. Diagnosis of difficulties must be made, and individual help given when and where it is most needed. Interests should be utilized for motivation.

7. A richer and more challenging program must be provided for the child who learns more easily. Permanent seatwork of the type usually provided is a waste of time for the brighter-than-average pupil. He does not need exercises in the things he already knows, but something to

after school and before school at the same time.

For the first time, the public schools have been

placed with the private schools in the same

position as before.

It is the policy of the Board of Education

to provide for the best possible education

for all children.

Primary level, or keeping a child in school

until the age of six.

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round out his curriculum and to satisfy personal interests and intellectual curiosity. Assignments should include new and broader aspects rather than additional work of the same type.

8. Time must be given to help the child with his personal and social adjustments, his emotional problems, and his development of character. A feeling of confidence in his own ability to achieve success must be cultivated in the child. Rapport between teacher and pupil is needed to insure effective learning.

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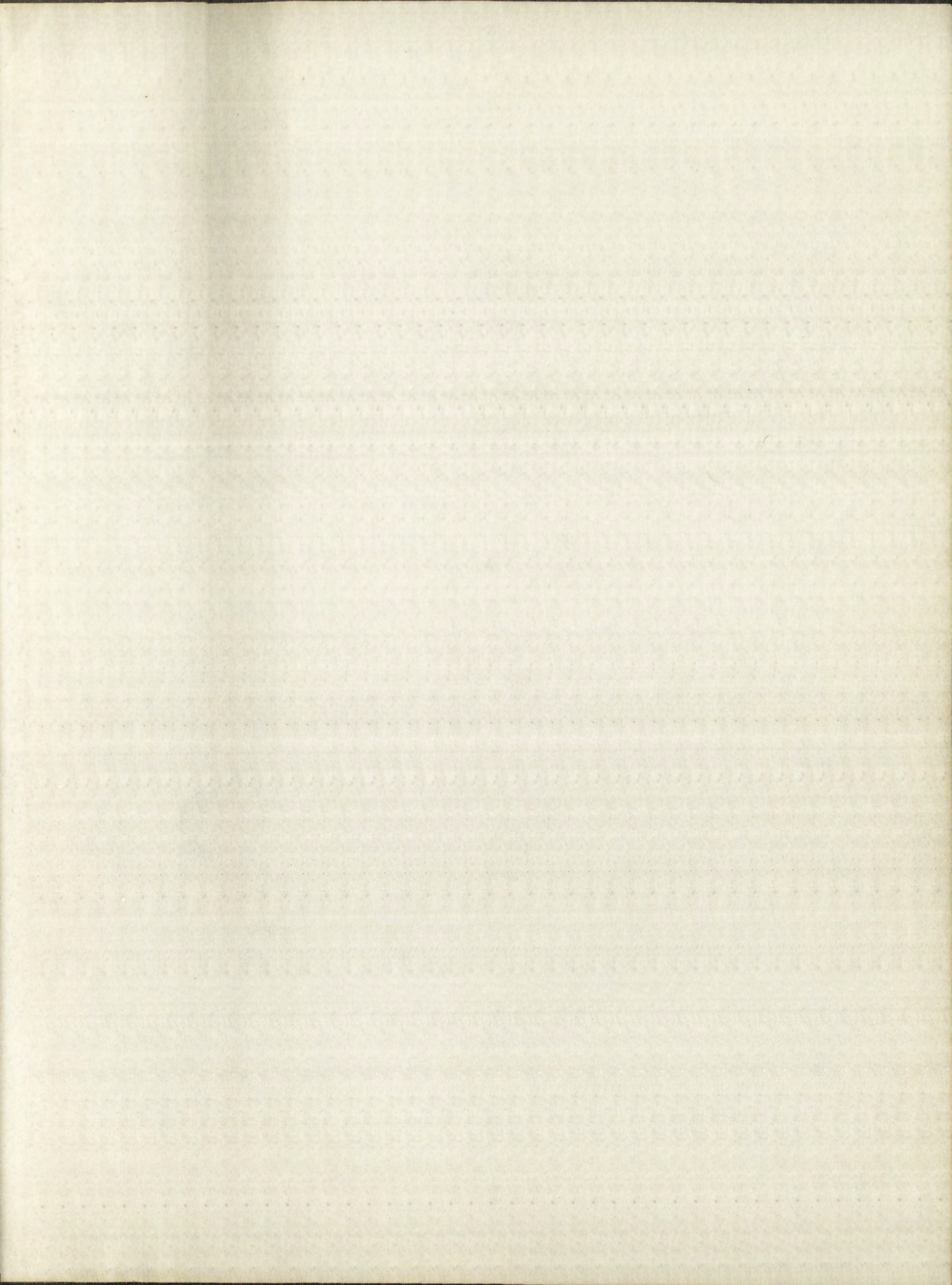
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