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by

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CHAPTER I  
INTRODUCTION  
The Problem

Educators today, and any who are in sympathy with the child, realize as never before, the great need for a sympathetic and unbiased understanding of child behavior.

Studies which lead to a better interpretation of child nature are always welcomed by educators and clinicians interested in child guidance. This research is an attempt to assist teachers in their understanding and direction of the primary child. It is an account of the development and use of a rating instrument for measuring social maturity in the first, second, and third grades of the elementary school. Any valid instrument measuring child nature and leading to a better and fuller understanding of child behavior should be made available for those who will use it intelligently.

### Importance and Justification of the Problem

Psychologists have discovered that unsocial traits are responsible for poorly adjusted lives. The lack of social behavior is, no doubt, the cause of many problem cases in school. In fact, this problem of maladjustment has assumed such proportions that educators are endeavoring to assure the development of the qualities which will best fit children for a successful social life. It is unnecessary to try to convince the reader of the importance of social development. Educational literature is full of it, preschool movements emphasize it, and educational psychologists and sociologists are directing attention to it.

There is some evidence to show that certain traits change from one age group to another (7:88). If this is true, studies must be made extending over two or three years of development in order to ascertain adequately, growth during childhood. Studies should not be too general in nature but should center upon particular stages of growth.

This research focuses attention upon the social development of the child during the primary

school period. Attention is centered here not only because of the priority of the period, but also because of the limited amount of work which has been done dealing with the social characteristics of primary children.

#### Definition of Social Maturity

For purposes of this study social maturity is defined as that growth or development of the individual, conditioned by both internal and external factors, which enables him not only to adapt himself successfully to his fellow men but also to adapt his fellow men to himself.

## CHAPTER II

### SURVEY OF RELATED LITERATURE

The study of social maturity as an important factor in the success of children is a part of the progress of the twentieth century. Early studies, or those made before 1929, dealing with social intelligence, social characteristics and social participation were made primarily for older children and adults. As a result of these pioneer studies an interest in the social life of the young child was developed. This review is largely a chronological survey.

Terman's (88) preliminary study in the psychology and pedagogy of leadership was one of the first experimental studies dealing with personality and social characteristics. Terman (88:434-5) discovered in this study that the following qualities were present in leaders: activity, quickness, skill in devising and playing games, good looks, neatness and dress, good disposition and temper, politeness, wealth, brightness, size and age. He (88:444) lists

undesirable qualities in "outcasts" as teasing, domineering ways, selfishness, bad disposition, ignorance, slowness, tale bearing, conceit, timidity, fault finding and slovenliness. Terman states that the bulk of returns shows very little real leadership in the first three or four years of school life.

Terman (87) made a later study of the mental and physical traits of one thousand gifted children. His study centered around the character and personality traits of these children. Six hundred from the gifted group were rated by teachers and parents.

These were compared with more than five hundred unselected children who acted as a control group. Each child was rated, by the graphic rating scale method, on twenty-five traits falling roughly into seven groups: intellectual, emotional, social, volitional, moral, physical and special ability traits. In only mechanical ingenuity was the control group rated higher than the gifted group.

Upton and Chassell (93) formulated a scale for measuring the importance of habits of good citizenship. This was reported in 1919. An attempt was made to analyze conduct in terms of concrete and specific habits and attitudes. These habits and

attitudes should characterize the child who is taking his part as a good citizen in an elementary democracy.

They endeavored to incorporate as many kinds of habits and attitudes as possible, such as physical, mental, moral, social, and religious. Seventy judges, ranging from kindergarten teachers to specialists, cooperated in the study.

Hollingworth (38:170) made a study of certain character traits of which sociability is one. She showed the correlation between sociability and the other traits studied as being:

|                              |      |
|------------------------------|------|
| sociability and neatness     | +.10 |
| sociability and intelligence | +.25 |
| sociability and humor        | +.55 |
| sociability and conceit      | +.07 |
| sociability and beauty       | +.32 |
| sociability and vulgarity    | +.18 |
| sociability and snobbishness | -.12 |
| sociability and refinement   | +.34 |

According to Hollingworth sociability correlates with nothing except humor. She does not, however, define what is meant by sociability.

Thorndike (91:228-9) stimulated psychologists to further study by suggesting that there were three kinds of intelligence. He states,

for ordinary practical purposes it suffices us to examine for three intelligences which we may call mechanical intelligence, social intelligence, and academic intelligence. . . . . By social intelligence is meant the ability to understand and manage men and women, boys and girls - - to act wisely in human relations. . . . . The best mechanic may fail as a foreman for lack of social intelligence.

If such is true, then we have woefully neglected the mechanical and social intelligence of our children. Our schools have pinned their faith to tests which have attempted to diagnose the academic type of intelligence. As Averill (6:282) says,

they have constructed curricula devoted almost exclusively to the scholastically inclined, and they have sought for and rewarded those of their clientele who were possessed of academic minds. For the mechanically intelligent and for the socially intelligent they have made no provision, yet the probabilities are good that these two together comprise the majority of the population.

Thorndike's statement of different types of intelligence quickened the interest of many psychologists who endeavored to give a fuller account of the nature of sociability. Some measures of social intelligence were formulated in the next few years.

Allport and Gordon (3:9) in 1921 suggested that the fundamental tendencies making up human personality are intelligence, temperament, self-expression (strength) and sociality. Under sociality they listed social participation, self seeking, aggressive self seeking, and susceptibility to social stimulus.

Allport (2:122) attempted to describe the sphere of sociality which he states,

is marked at one extreme by aggressive egoism, incapable of modification by social pressure; and at the other by high reactivity to stimulation from others and complete socialization of behavior in response to such stimuli.

He considers two traits. The first is a certain sensitivity which is called susceptibility to social stimulation. He (2:123) suggests that perhaps this is an original capacity and that "this susceptibility characterizes the man of tact, the diplomatist and the good mixer." The other trait characterizing sociality that Allport (2:124) stresses is "social participation." "This trait signifies in its possessor a drive for social activity, for reaching to his associates and causing them to react to him."

Ream (75), taking his cue from Thorndike,

devised what he called "A Social Relations Test."

This test indicates the range and type of social interest of an individual. The test was first used with salesmen. He believed they had a fund of information, mixed with many groups, were socially inclined and preferred to associate with others rather than to spend their time at home or with books.

The test consisted of fifty items from about twenty lines of social diversion and placed in three divisions: socially acceptable items, sport items, and questionable items. It would seem, however, that the intelligence factor was present since the test correlated  $r = .60$  with a special omnibus test which was adapted from the Army Alpha by the Bureau of Personnel Research. Ream (75:72) says about his test:

The test seems to have more negative than positive value for selecting insurance salesmen. In other words, ignorance of social diversions and lack of social contacts is unfavorable to success, but familiarity with many social diversions does not necessarily insure success in selling. Aside from the test's predictive value, it is a valuable aid in throwing immediate light on an applicant's interests and his activities outside of working hours.

Hughes (40) reported, in 1923, a rating scale designed to measure those individual capacities,

attitudes and interests which our civilization has found valuable and upon which it has placed a premium. The scale attempts to measure the following traits and attitudes: regularity and persistency, trustworthiness, sense of accuracy, confidence, initiative and aggressiveness, respect for authority, cooperation in group activities, force of personality, capacity for group leadership, quickness of thought, strength and control of attention, and retentiveness of memory.

Gates (31) made an experimental study of importance and interest. She found that ability to interpret facial expressions was one element in social intelligence. She defines social intelligence as "ability to meet successfully social situations." Later she (31:449) says

ability to meet successfully social situations depends, in part, on the capacity to make the appropriate tactful, courteous, aggressive, etc., reaction and in part on the ability to perceive accurately the conditions which are encountered.

This ability, she believes, increases with age. Her conclusions were drawn from a study involving six pictures published by Ruckmick showing different

emotional expressions (laughter, fear, scorn, surprise, pain, anger). The subjects were four hundred fifty-eight children ranging in age from three years to fourteen.

Gates concluded that inability to interpret correctly the pictures understood by more than half of the children of a given individual's age or grade, indicates a certain lack of social perception.

Gates (30) made another study later which was more intensive but involved the same problem. Among other things, she endeavored to discover the relationship which exists between social perception and other measures such as chronological age and mental age, physical measurements, social, emotional and intellectual maturity. These measures were arrived at from the opinions of teachers. The teachers were asked to score pupils one to ten on each trait, keeping in mind certain criteria which serve to differentiate these traits. Interest in this particular study is in one trait - social maturity - which she (30:456) defines as

the child's ability to cooperate, to get along with his fellows and superiors, to hold his own without being too aggressive, to participate in class activities, to respect disciplinary regulations, the property of others,

personal hygiene, and to exercise a wholesome influence in the classroom through his leadership.

Gates found the following correlations to exist between

|   |      |
|---|------|
| social perception - physical maturity   | r.26 |
| social perception - mental maturity     | r.22 |
| social perception - social maturity     | r.42 |
| social perception - scholastic maturity | r.60 |
| social perception - emotional maturity  | r.50 |
| social perception - chronological age   | r.31 |
| social perception - mental age          | r.12 |
| social maturity - social perception     | r.42 |
| social maturity - physical maturity     | r.61 |
| social maturity - mental maturity       | r.91 |
| social maturity - scholastic maturity   | r.59 |
| social maturity - emotional maturity    | r.80 |
| social maturity - chronological age     | r.08 |
| social maturity - mental age            | r.37 |

She (30:457) concludes quite conservatively,

some evidence has been presented to show that the present test is not merely another measure of chronological age or mental age, but that it gauges, in some measure, traits more definitely social in character.

Gates (29) later studied the auditory element in emotional expression. A student, noted for dramatic ability, recorded the alphabet on a phonograph in tones of happiness, unhappiness, anger, fear, surprise, scorn, defiance, pity and suspicion. Six hundred twenty-seven children in grades three to eight as subjects listened and interpreted. Facial

expressions were also used for comparison. The results demonstrated (29:175) :

1. The feasibility of using phonograph for such investigation.
2. An increase in capacity for understanding with age, grade and school experience.
3. A superiority for the more intelligent over less intelligent school children.
4. A larger percent of correct interpretations in the case of visual as contrasted with the auditory stimuli.
5. Differences in ease of interpretation of the types of vocal expression.

The work of Gates stimulated interest and opened up new channels for further study.

Moss and Hunt (65) made a study in 1927 directed toward the factors underlying or contributing to social intelligence.

Moss (64:168) later reports a test on the measurement of social intelligence. He believes one of the prime requisites for success in life is social intelligence or the ability to get along with people. A test was designed and given to 12,000 persons.

Moss judges the following traits to be necessary for making successful social contacts:

1. judgment in social situations
2. memory for names and faces
3. keenness in observing human behavior
4. ability to recognize mental states from facial expressions
5. understanding the motives behind the spoken words
6. information concerning topics of social interest.

A test was designed to measure each one of these characteristics. Recognizing his work as a measure of social intelligence, he states that a positive correlation has been found between social intelligence and abstract intelligence. Moss (64:169) lists the following:

|  |      |
|--|------|
| Thorndike Intelligence Test and Social Intelligence Test             | r.42 |
| George Washington Mental Alertness Test and Social Intelligence Test | r.54 |
| McCall Multi-Mental Test and Social Intelligence Test                | r.25 |
| Pintner Classification and Social Intelligence Test                  | r.30 |

Cornell, Cox and Orleans (20) developed the New York Rating Scale for School Habits. The scale uses nine school traits which influence school success.

After each trait is a line on which three points are marked and described. These points represent the poorest, the average, and the best in each trait. (20:2)

The following example illustrates the type of scale used.

#### ATTENTION

Extreme inability to give attention to task.

Usually pays attention; can be distracted.

Always pays very close attention while studying or during class period.

The importance of school habits for good school work may be measured by the relation between estimate of such habits and school marks. The correspondence between measures on the Rating Scale for School Habits made by eighth-grade teachers for a group of pupils and the first-term high school marks of these pupils has been found to amount to a correlation of between .55 and .75. It has been found that the correspondence between measures of school habits and school marks is about twice as close as the correspondence between intelligence-test scores and school marks. (20:1)

Gilliland and Burke (32:315) devised a test to measure social intelligence or sociability. They define the sociable individual as,

the individual who has the ability to get on agreeably with his fellow men, who is inclined or adapted for society, who is friendly and above all easy to talk to. He is companionable and fond of mingling with others; he seems to enjoy people and likes to be with them and to talk to them much of the time. In short, he is the type of individual we call a 'good mixer'.

There are four parts to the test,

1. recognition test, 2. similar test, 3. a dissimilar test, and 4. a questionnaire. They conclude that the questionnaire is the best single method yet devised to measure sociability.

Pintner and Upshall (73) show the correlations between the George Washington University Social

Intelligence Test and the Gilliland Sociability Test. It would be expected that, if these tests were measuring the same thing, there would be a high correlation between them. There should also be a similar correlation between each test and verbal intelligence. Using the part proved most reliable, of the Gilliland test, the questionnaire, Pintner and Upshall (73:370) show the following correlations:

Gilliland Sociability Test -  
Moss Social Intelligence Test  $r = .14$

Moss Sociability Intelligence Test -  
Verbal Intelligence Test  $r = .68$

Gilliland Sociability Test -  
Verbal Intelligence Test  $r = .12$

From these correlations it appears that the tests are not measuring the same characteristics.

Thorndike (90:233), in an investigation to determine whether the George Washington University Social Intelligence Test measures any unitary trait which is distinct from the ability measured by an abstract intelligence test, concluded:

Our conclusion is, then, that though the George Washington Sociability Intelligence Test may tap slightly some unique field of ability, it measures primarily the ability to understand and work with words which bulk so large in an abstract intelligence test.

Maher (53) studied the moral and social development of the six year old child. Case histories of children were kept by six teachers. Special attention was given to objective responses. These responses indicated the child's moral and social development. Twenty-two questions were proposed as measuring this development.

Lehman and Anderson (49:288-9), believing that "some evaluation of the play life of children is essential in estimating their social adjustment," made a study of social and solitary boys. They summarize their study in the following statements.

1. In the present study a group of twenty-five extremely social boys was compared with a group of solitary boys in reference to certain traits, the comparison being made on the basis of teacher ratings.
2. The extremely social group of boys received a lower rating in twenty-four out of twenty-six desirable traits, and a higher rating in each of six undesirable traits.
3. In a previous study, children of I.Q. 140 or above, were found to engage less frequently than average children in social plays and games.
4. In another study it was found that pedagogically retarded children tend to engage more frequently in social activities than children who were making normal school progress.

5. It is possible that too much social participation is just as unwholesome as too little social participation. There is probably an optimal range of social participation which needs to be discovered.
6. Although additional devices will of course need to be employed for such a discovery, the technique herein described suggests one means for the discovery of this optimal range of social participation.

Hsia (39:14) states regarding Lehman's findings:

However, before we can accept Lehman's findings as conclusive we should have information on two other points. First, what do other children say about the extremely solitary boys? From the standpoint of social adaptation, children's opinions are more important than those of the teachers, who are very likely to be biased in judging the quiet and controllable children at the expense of those who are keeping them busy and occasionally causing them some trouble. Secondly, as Lehman himself pointed out, there is both a quantitative and a qualitative social participation. When due allowance is made after careful analysis, the result may be quite different.

Studencki (84:63) made a study of the responses of children to certain questions. A type question used in this study is

"A boy was very much loved by everyone at home as well as at school. Tell me why.

All the characteristics mentioned by the children were divided into four categories:

1. subordination traits (obedient, obliging, respecting older persons etc.)
2. school characteristics (diligent, attentive, lazy, etc.)
3. social qualities (friendly, agreeable, compassionate, kind, a scrapper etc.)
4. personal characteristics (gay, noble, stupid, bold, naughty)

Studencki describes these four categories:

Within these four categories all characteristics are included, but each feature can belong to but one category. These four categories spring from four spheres which taken together form the whole of the child's world: home, society, and one's own self. The predominance of subordination qualities would indicate that the child's "setting" or direction came from the home, the predominance of school traits - that it came from school etc. In this way it is possible to determine the factors which influence the desire to improve and the environment which dominates the consciousness of the child.

Hsia (39:3) developed a sociability test designed for elementary school children.

The main task of the present study, then, is to ascertain the relationship, if there is any, between sociability as judged by the teachers and fellow pupils, on the one hand, and the various factors, separated or combined, on the other. This study is limited further by being confined to the children of the fifth, sixth, seventh, and eighth grades. As

important as these factors, personal, intellectual, and social, are to the child's ability to get along with others, their influence has not been determined. Yet they are the front line of attack. Further approach to the problem will be determined by this first advance. For instance, if we can tell the existence of the relationship between sociability and the various factors that we are going to investigate, we shall have a clearer idea of what constitutes sociability and what is unrelated to it. Sociability may be the by-product of general intelligence or it may result from good scholarship, from high social position of the family, from physical maturity, or the like.

Below are two sample questions taken from the sociability test to illustrate the type of procedure used in determining the socially adjusted and socially unadjusted child.

What would you do,

if somebody laughs at your clothes?

1. Tell him to shut up
2. Laugh at his
3. Ask him what is wrong with your clothes
4. Tell him to mind his own business

if some one teases you too much?

1. Tell him to stop teasing
2. Tease back
3. Give him a fight
4. Cry

Hsia (39:46-7) draws a number of interesting conclusions to the study:

1. With proper instruction, the teachers can rate their own pupils on sociability with a considerable degree of accuracy.

The ratings as a whole conform to the shape of a normal distribution, and the coefficient of contingency between the first and second ratings is .61.

2. The teachers' ratings and the combination of pupils' choices in invitation and voting situations show a reasonable agreement. The correlation in terms of Pearson  $r$  is .57±.03.
3. The most sociable children are favored in M. A., I. Q., reading ability, sociability as measured by the Sociability Test, and socio-economic status. The majority of them fall in the upper quartile of the distributions of the various factors. They show no tendency to cluster about the median or in the middle fifty percent.
4. Children's opinions of a "good mixer" emphasize the social and emotional qualities. Physical traits are scarcely mentioned.

Haggerty, Olson and Wickman (35:3-4)

developed some scales for the study of behavior problems and problem tendencies in children.

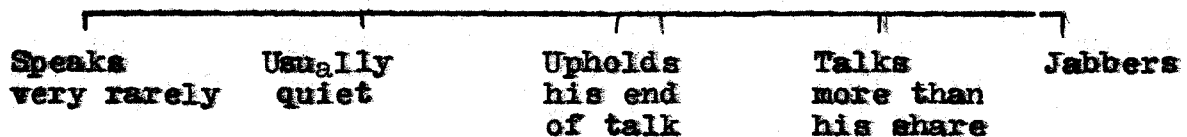
The Behavior Problem Record, Schedule A, is a list of behavior problems which have been listed on the schedule in order of their frequency, as reported for a group of elementary school children. To use the schedule, the teacher records on it the problems manifested during her experience with each child. The frequency of occurrence of each problem determines the rating assigned. Each problem and each level of occurrence have been assigned a statistical weighting based on seriousness and frequency. The score for a child is the sum of the weightings for the problems recorded. High scores indicate the presence of numerous

and serious problems, while low scores indicate the presence of few and less serious problems.

**The Behavior Rating Scale.**

Schedule B, consists of a graphic rating scale for each of thirty-five intellectual, physical, social, and emotional traits. Below the scale for each trait appears five descriptive phrases to assist the rater in making a quantitative judgment. Schedule A is designed to locate problem children through a record of overt behavior problems, while Schedule B covers personal characteristics on a variety of traits, regardless of whether or not the behavior described would be called a behavior problem. The amount of each trait in Schedule B has been assigned a weighting in terms of its relationship to Schedule A. The method may be illustrated by reference to Trait No. 15, Division III. Is he quiet or talkative?

Is he quiet or talkative?



Berne (7:14) made a study of social traits of one hundred thirty-two preschool children. Her study was set up to solve the four following problems:

1. To describe the patterns found in the social behavior of children in preschool groups.
2. To devise a rating scale for the measurement of social behavior patterns.

3. To arrange and give experiments for the measurement of selected social patterns.
4. To estimate the validity of the ratings and experiments by means of observational studies of a number of children.

She formulates and defines thirty pattern traits descriptive of the social behavior of preschool children. A question is asked about each trait and five degrees of response defined. This constitutes her rating scale. Berne (7:26) states

the wide range of social behavior responses of young children to the social environment of the preschool group is covered by the scale.

An example of the responses to the pattern of Obedience follows:

- |   |                                   |
|---|-----------------------------------|
| { | Decidedly submissive to authority |
| { | Noticeably obedient               |
| { | Equally obedient and disobedient  |
| { | Noticeably disobedient            |
| { | Refuses to obey decidedly         |
| { | Does what is prohibited           |

Berne concludes that her rating technique is reliable in studying social behavior in young children. The observational scores are in fairly high agreement with the ratings for the social behavior traits of twelve children and also with the experimental scores of eleven children. Her (7:88)

concluding paragraph states:

This investigation has shown that a large number of patterns are found in the social behavior of children from two to five years of age. Certain traits change from one age group to another. In other traits, individual differences are of more significance than age differences. Mental age is related to a large number of traits.

Rogers (76) measured personality adjustment in children from nine to thirteen years of age. By means of a paper and pencil test he measured roughly the satisfactoriness of a child's adjustment. He then selected fifty problem children and compared them with a group of at least one hundred normal children. The test (75:94) yields four diagnostic scores:

1. personal inferiority
2. social mal-adjustment
3. family mal-adjustment
4. day-dreaming

By comparing his test scores with ratings made by clinicians, he found that the scores agreed with ratings about as closely as the raters agreed among themselves. Thus he concludes that the test should be valuable to the ever increasing number of child guidance and behavior clinics throughout the country.

Carmichael (14) investigated the age at which the growing child is able to recognize some of the mental associations involved in the consideration of social situations frequently met.

A situation was chosen for the investigation in which a child met defeat at the hands of a playmate while he was throwing rocks. Fifty-six different relationships involved in this situation were set before primary children in five different test types. A study of the findings led to proposals for the gradation of instruction on the basis of certain percentages of children being successful on the different elements of the tests.

Parten (72) studied social participation among preschool children by observing the following types of behavior:

1. unoccupied behavior
2. onlooker behavior
3. solitary independent play
4. parallel activity

She (72:268) concludes her study with,

1. Social participation is dependent, to a large extent, upon the age of the children. As a rule, the youngest children either play alone or in parallel groups, while the oldest individuals play in the more highly organized groups. Marked

individual variation, however, was observed. The correlation between age ranks and the Social Participation ranks was .61.

2. There is a slight relationship between I. Q. and the degree of Social Participation of individuals (.26). Parallel play, however, correlated .69 with intelligence.
3. Nursery school experience correlated with Social Participation scores .12.

Courad (19) developed the California

Behavior Inventory for Nursery School Children.

The study was worked out with the cooperation of many individuals and includes an inventory of two hundred thirty-one traits. The separate traits are carefully phrased in an attempt to secure clarity and exactness. Each child is rated only in comparison with others of the same chronological age on a seven point scale. Under each item are defined the two extremes and the average. Two examples serve to illustrate this procedure:

17. Reaction to social pressure-

1. Accedes immediately to the demands (explicit or implied) of the group. Keen social sensibility.
4. Average. Responds with moderate promptness to reasonable demands of the group; but resists or becomes indifferent to the group's demands, if it expects him to serve as a butt of amusement, or perform disagreeable tasks, etc.
7. Indifferent or insensitive to the demands and expectations of the

group; individualistic. (19:19)

60. Popularity-

1. Child is a favorite with the other children; other children like especially to have the child as a playmate, or as a member in group-activities.
4. Average popularity; better liked by some children than by others.
7. Child is unpopular; other children seldom choose him as a playmate, and do not care to have him as a member in group-activities. (19:40)

Conrad (19:74) summarizes the inventory:

1.....The main service of the Inventory should consist in stimulating the closer observation of children, and facilitating the compilation of continuous records of children's behavior.

2. Statistical analysis of approximately 25,000 ratings by three nursery school teachers indicates that some ratings are almost worthless, whereas others are probably quite useful. It is shown that the reliability of ratings and the agreement between judges vary significantly with (a) the trait being judged, (b) the child being judged, (c) the estimated significance of the particular trait for the child in question, and (d) the confidence with which the judge rates the particular trait for the child in question. Ratings made with high confidence are more reliable and valid than those made with low or average confidence. Traits of significance in the personality of the child being judged, are rated much more satisfactorily than traits of less significance.

3. Concerning the general value of ratings, it appears that little definitive may

properly be said: so much seems to depend upon a host of important circumstances. The present study represents a first attempt to evaluate some of the more obvious factors which determine the excellence or poorness, the usefulness or worthlessness of personality ratings of nursery school children.

Hicks (37) developed a personality rating scale for children six to nine years of age.

Eighty-five items are listed under the following heads:

1. relations to others generally
2. relations to parents
3. relation to other children
4. physical health habits
5. emotional behavior patterns
6. initiative and interests
7. work and routine habits

These items were made up by listing the things which children of these ages often do. These habits were judged as to their desirability or undesirability by a group of experts. Each item was then given a score value. Before each item is placed a T, F, and U. The rater draws a circle around the T, if the statement is true about the child being rated; around the F, if the statement is false; and around the U, if the rater is uncertain.

An example of the form used in this scale follows:

1. T. F U Usually makes friends easily.
- 48 . T F U Usually seems happy.
- 57 . T F U Often is jealous.

Maller (54) developed a character and personality rating scale. This is a general scale comprising fifty aspects of human character and personality, each briefly described.

The scale was designed for classroom use. But the author suggests that it may be found valuable for young people's clubs and groups of employees.

Following each behavior pattern are three descriptions of that behavior representing the following levels:

1. low in that characteristic
2. just average
3. high in that characteristic

Maller (54:2) states,

the greatest value of this scale is for comparison of the relative merits of individuals within a given class or group rather than for comparison with any intrinsic standards or norms.

Fisher (25:364), investigating group differences between problem and non-problem children, found that

the most reliable group differences between problem and non-problem children lie in the social and emotional fields and that the social and emotional traits apparent at kindergarten age tend to persist.

Kawin (42) made a study on social adjustment and the preschool child. In conclusion Kawin (42:400) says,

from this study it appears that whether a young child is socially well adjusted or presents problems of social adjustment will depend upon a "constellation" of various factors in his own make-up and in his life situation. Outstanding among these is the intelligence of the child, the occupation of his father, the relationship of the father to the child, and the agreement of the parents in regard to the child's training.

Burke, Garrison, Thorne and Dalgliesh (12)

describe the social development of children on three age levels: four and five years, and first grade. They (12:366) conclude:

1. Analysis of group interest on the three levels shows the simplest and most fragmentary play in the four year group, more organized in the five year and still more in the first grade.
2. Analysis of social responsibilities show a very definite advance in older groups and ability to assume the responsibilities without teacher suggestions.

Miller (60), using third grade children as subjects, had each child checked on a social chart on certain analyzed objectives. Each objective was interpreted so that the children were able to note their own growth.

Doll (22:1) developed the Vineland Social Maturity Scale with definitely described levels for ages, one to twenty-five.

The Scale provides a definite outline of detailed performances in respect to which children show a progressive capacity for looking after themselves and for participating in those activities which lead toward ultimate independence as adults. The items of the Scale are now arranged in order of increasing average difficulty, and represent progressive maturation in self-help, self-direction, locomotion, occupation, communication and social relations. This maturation in social independence may be taken as a measure of progressive development in social competence.

It would seem, however, that the scale, although extensive in its scope, does not serve adequately for the measurement of classroom children.

Doll (22:4) says of the scale,

This Scale measures social competence in terms of a normal average for each life-age period. The Scale is not a rating scale, but describes social performance in terms of actual behavior such as self-help, self-direction, socialization, communication, occupation, and locomotion. The Scale does not measure behavior in the sense of conduct. It does not measure social adjustment, or personality, or attitude, or even social success in terms of worldly measures. It measures principally the degree to which an individual is capable of looking after himself and of functioning as an individual social unit "on his own."

Alstyne, and Others (4) (5) statistically selected thirteen situations for a scale to rate school behavior and attitudes. It was constructed

for general use from the preschool period through the sixth grade. Under each situation are listed five to ten levels of response. For example:

**Situation I.** When taking turns with apparatus or material or in a group discussion

waits patiently for turn  
 takes turn willingly  
 needs occasional reminder to be patient  
 is too patient - does not assert himself  
 is impatient while waiting turn  
 is unwilling to wait turn and interferes with other children's activities.

Joel (41) made a recent study of behavior maturity using 467 nursery school children as subjects. A rating scale of twenty items was developed. Under each item are defined degrees of development. For example:

19. How does he react to unfriendly advances of other children?
1. remains calm and does not appeal to adult.
  2. gets emotional, but does not appeal to adult.
  3. appeals to adult, but does not run away.
  4. runs away ( evades the problem)
  5. tantrum

Joel defines behavior maturity as the degree of independence, self-control, and social attitude reached. He believes the scale developed is an objective measure of the behavior maturity of nursery

school children. The coefficient of correlation between the California Preschool Mental Scale I. Q. and Behavior Maturity Index was found to be  $r = .036$ .

### Supplementary References

This review has endeavored to bring to light those studies which have a bearing, both in content and method, upon the present research. It is not intended to be an exhaustive summary of all the literature pertaining to social characteristics.

Two sources are recommended for those who wish to supplement this review.

Buhler (11:374-416) presents a summary of the literature dealing with the social life of children under the following headings:

1. Social behavior from the developmental point of view.
2. What are the factors which bring forth contact and result in group formation?
3. Types of social behavior.
4. Social behavior in different life-situations.

Morgan (61:396-426) also brings important findings together under the following captions:

1. Nature of social reactions
2. Social behavior in early childhood

3. Learning social maturity
4. Social influences

#### Summary

1. Early studies, or those before 1929, dealt largely with older children or with adults. Interest centered primarily in measuring and defining social intelligence, social participation, etcetera, and in showing their relation to other measures. As a result of these studies, attention was directed to the importance of the social life of the younger child.

2. Studies today deal with the young child. Most of the outstanding work has been done on the preschool level.

3. Measurement of social traits<sup>is</sup> carried on, largely, through rating techniques.

4. No adequate measures, designed specifically for primary use, are available. A number of general measures of behavior have been mentioned.

5. The relationship between social maturity and certain phases of school success is not known.

6. Proof that norms can be established adequate for classroom use has not been advanced.

7. It seems desirable to have scales formulated upon which children may be compared with norms and national standards rather than merely with each other in their grade groups.

### Significance for Present Investigation

Reliability of Rating Methods.- Rating scales are accepted as one of the best methods of diagnosing character (85:566). This is true provided the scales are specific and the judges thoroughly acquainted with the child. Rating scales are particularly valuable in the elementary school (4). Symonds (85:569) further states,

the writer believes that the development of various types of questionnaires and rating methods promises to yield the results which will be of most value in the immediate future.

Landis (46:19) says,

the rating scales give consistent results and correlate highly with measurements of the same traits. Therefore the rating scale must be considered a fairly reliable method.

Very few studies have been conducted in this field which can be used as patterns. Most studies using a rating instrument have either been developed to apply generally to all age levels or

specifically to age levels other than that of the primary school child.

Review of Rating Instruments.- Haggerty, Olson, Wickman (35), and Maller (55) have developed general rating instruments. Alatyne (4) developed a scale for measuring school behavior and attitudes from the preschool period through the sixth grade. Cornell, Coxe, and Orleans (20) developed the New York Rating Scale for School Habits. Doll (22) provides an outline of performances for ages one to twenty-five. Joel (41), Berne (?), and Conrad (19) developed rating instruments for preschool children. Hicks (37) developed an instrument for rating the personality of children six to nine years. However, the instrument does not classify the traits which constitute personality.

The foregoing summary shows the meager amount of work which has been done dealing directly with primary children.

Use of Subtraits.- No studies were found that adequately set forth subtraits or social patterns which exist in the personalities of primary school children. However, Berne (?), Conrad (19), Maller (55), and Cornell, Coxe, and Orleans (20) have used specific subtraits in their rating instruments. Their findings

do not apply directly to the primary level since their rating instruments were not constructed with the primary child in mind. Berne (7:88) concluded in her study at the University of Iowa, that certain traits change from one age group to another.

### Conclusion

The majority of rating scales have been developed to apply generally to all age levels or to age levels other than that of the primary school child. The one scale measuring personality of children from six to nine years, developed by Hicks (37), is lengthy and attempts no classification of the traits constituting personality.

Rating scales are accepted as a fairly reliable method for the study of personality traits.

In the measurement of social traits on the primary grade level, it is logical that a rating scale be used. This scale may well be based upon the measurement of traits constituting social maturity.

### CHAPTER III

#### THE DEVELOPMENT OF AN INSTRUMENT FOR THE MEASUREMENT OF SOCIAL MATURITY

##### Introduction

There is a growing conviction that personality and social traits are measurable and that people are consistent in the expression of these traits.

Symonds (85:564) says

the man who is generally honest is consistently honest but the man who is generally dishonest is inconsistent. The man with a good character is organized from within; at least he acts uniformly and consistently with regard to commendable qualities.

The social experiences which a child has when he is young determine his personality. The development of social characteristics may be thought of as the formation and fixation of social habits. If such social characteristics are considered no more than habits, they are, as stated above, measurable at any stage of development. Speaking of the types of social response in children Morgan (61:408-9) well expresses this belief in the following paragraph:

Most adults have characteristic ways of reacting to social situations; some are aggressive, some submissive; some are followers, others are leaders; some seek companionship, others shun it; some are trustful, some are suspicious; some are honest and some are deceitful. Various observations furnish convincing evidence that these characteristics are learned. In the first place, the young child does not have them as the preceding description of the social behavior of infants and preschool children demonstrates. In the second place, the study of children at different stages of maturity shows increasing tendencies toward fixed social habits. In the third place, genetic studies of single children, both by parents during development, and by clinical studies in retrospect, show the progressive stages in the fixation of such social habits. In other words, the social behavior of an individual can be understood as a study of habit formation in the same manner that skill in speaking, writing, walking, and the like are understood. Granted, there are fewer controlled experiments which demonstrate social learning than there are which demonstrate motor skills but those that have been published point in this direction.

From these statements, it appears that social maturity may be broken down into subtraits. In doing so, however, each trait should suggest the desired or positive aspect of development.

This research logically began with an attempt to discover the constituents or component parts making up social maturity as found in the primary child.

These constituents will later be referred to as patterns. Whether or not these patterns exist entirely separate, the one from the other, they do serve as a convenient way of classifying social behavior. The number of patterns to be selected is dependent upon the number needed to fully describe the social life of the primary child.

An adequate sampling of child experiences will be arranged in a rating instrument to measure each selected pattern. To be most useful the rating instrument must meet the following criteria:

1. It must be stated in terms most significant to the rater.
2. It must be stated in terms representing concrete types of behavior.
3. It must be stated in such a way that the individual will be accurately rated, not just compared with the behavior of other children within his group.
4. It must measure all phases of social behavior in the primary child.
5. Each statement must set forth a desirable element.

The advantage of a rating instrument conforming with the above criteria can readily be seen. It takes on an aspect of objectivity and at once

the rating becomes easier and more reliable.

The validity of any instrument is dependent to a great extent upon its construction. Ruch (77:28) makes the statement :

Validity refers to the care taken to incorporate in a test or examination those elements or items which are of prime importance and to the care taken to eliminate the non-essential.

The following pages will be devoted to the techniques used in constructing the instrument for measuring social maturity. A greater part of a year was spent in the selecting of patterns and sampling of child experiences which could be used by teachers to rate conveniently the social behavior of the primary school child.

#### Techniques Used in Selecting Patterns of Social Maturity

No single approach is wholly relied upon in the study of the children used in this research. One method leads into another. Of necessity there is overlapping as will be seen later. There is, however, an organization and unity of material so that ultimately there evolves a listing of patterns which have been checked against subjective judgment. For

the most part, the following techniques are used in the order given.

1. Observation of children working and playing together.
2. Specific observation of children selected because of their adjustment or lack of adjustment in social traits.
3. Interviews with primary teachers.
4. Informal interviews with primary school children.
5. Analysis of studies conducted by other research workers.
6. Criticisms of the selected constituents of social maturity by public school teachers and principals.

Introductory Data.- The investigation began with the observation of children. This fact is significant because there were no preconceived notions or ideas concerning the final classification of patterns. Approximately three months were spent in selecting the patterns constituting social maturity. Two hundred seventy primary school children were used as a working basis for the selection of these patterns. Fifty-five were studied individually by the method of specific observation (number 2) or interviews with the children (number 4) and in some cases both methods were

used. Although these fifty-five children were studied by these two methods, the studies were also supplemented in many cases by interviews with their teachers. Twenty public school teachers cooperated in giving suggestions and criticisms.

The following schools were used as study centers: Fairview School, Warner Street, and Twenty Third District School, Vine Street, Cincinnati, Ohio. McKinley Elementary School was used in Dayton, Ohio.

General Observation of Children.- Fairview and Twenty Third District schools in Cincinnati were used for observational purposes. These schools were chosen because of their proximity to the University and because the pupils attending come from neither wealthy homes nor yet very poor homes. The work was explained to each principal. Both were willing to cooperate and granted permission to use the different rooms in their schools.

Types of Activity in General Observations.- The following types of activities (taken from the records kept on the children observed) illustrate some child situations. These situations provide a good setting for the observation of social behavior.

- a. Children entering and leaving the classroom at the beginning and close of a period.
- b. Children playing and working together with blocks, at the sand table, at the work bench, and on the playground.
- c. Children in a free activity period.
- d. Children playing in the gymnasium under guidance.
- e. Children in recitation or discussion groups.
- f. Children left alone while the teacher is absent from the room.

The following incident, which occurred one morning, aptly illustrates situation f. Mrs. A. brought her child to school late. The child had been in trouble and as a disciplinary measure the parents had called in the police, thinking that the boy might be frightened into good behavior. The parent called the teacher from the room. The child was sent into the classroom alone. He was greeted by loud laughter from the children. They seemed to realize that he had been in trouble again and continued to tease and laugh at him until the teacher entered the room. Upon entering the room Mrs. A.'s child had taken his chair apart from the group and sat quietly, ignoring the jests and whisperings of the others.

Later this boy was judged by the teacher as being socially immature and was studied apart from the group.

Out of these general observations came suggestions for individual study. Of necessity, general and specific observations overlap considerably. As one observes a certain social situation, his attention is called to specific children and their behavior. Interest is naturally in the maturity that any child has reached. The greatest results then will come from the observations centered on children judged to be socially mature or immature. The general observation method was abandoned early or combined with the observation of specific children because of this fact.

Examples of General Observations.-- The following list of instances, taken from the notes kept during observations, will illustrate the value of the method as a beginning technique. It will also illustrate how attention is drawn to specific children and their actions.

- (a) Boy E, in the first grade, was painting near two little girls who were playing with building

blocks. While no one was looking, he knocked over the building that the girls had so carefully made. He immediately went back to his painting, acting as if nothing had happened. The girls, however, were much concerned and told the teacher of the boy's conduct. Although the boy was made to apologize to the girls, apparently it bothered him not at all, as he smilingly returned to his painting.

- (b) One boy seems to be the center of attention from the group at his table.
- (c) Three children are playing together harmoniously at the sand table.
- (d) Two children, free to choose their own play, change their activities five times in ten minutes. Later, the teacher judged both children to be socially immature.
- (e) There seems to be a definite lack of courtesy between the children. This is observed in the answering of questions, in interrupting each other, etc.
- (f) Child R is called in from the play ground for fighting. He has thrown some of the boys on the cement. When questioned by the teacher as to his reason for doing so he replied "I got a little mad. They were all on me and I had to do it. That was the game." When the teacher asked him what game, he answered "wrestling game." However, this was not his first offense at being rough on the playground.

- (g) Great individual differences exist in children. Some come into the room, sit down, begin a task and are soon lost in their work. Others waste much time. They go to the teacher for help, bother their neighbors or watch the other children work.
- (h) When the routine is broken, it is difficult for some of the children to get interested in their work again.
- (i) Children imitate continually. Many hold up their hands because others do. When asked for an answer they have none.

In the above recorded situations certain children stand out clearly but are observed as just a part of the group. This general technique differs from that of the second technique mentioned in that the particular child is not followed through long periods of time.

Observation of Specific Children.- Observations in Cincinnati were made in the Twenty-Third District School and in Fairview School. The principal of the school was informed as to the nature of the problem being studied. He was then able to select teachers and rooms best fitted for observational purposes. Explanation of the research was made to the teacher in charge. She was asked to select children in her room

who were representative of good social development and those representative of poor social development.

The children selected were observed intensively for as long as two-and-a-half or three hours. A complete record was kept of the activities of each child.

Two children were studied simultaneously. A simple set of symbols was worked out in order to record more easily the behavior of the children being observed. Usually one socially adjusted child and one socially unadjusted child were selected. Specific observations were made in first, second, and third grades of the elementary school.

Sample Observation Record.- Figure 1 is a sample sheet showing the records of two children who were observed through fifteen minutes of an afternoon period. No symbols are used in this example. An illustration of the type of symbol used in other record sheets is given here.

"S.I.C." .....meaning self-initiated contacts.

"D".....meaning child is wasting time;  
mind is apparently unoccupied,  
child is dreaming.

This fifteen minute record of two children made in Room 105 of Twenty-Third District School in Cincinnati, Ohio, is characteristic of the records

|                             |                             |               |
|-----------------------------|-----------------------------|---------------|
| School _____                | Teacher _____               |               |
| Child's Name _____ (B)      | Child's Name _____ (J)      |               |
| Socially (unadjusted) _____ | Socially (unadjusted) _____ |               |
| Grade _____ (Second)        | Grade _____ (Second)        |               |
| <u>Record</u>               | <u>Time</u>                 | <u>Record</u> |
|                             | 1:00                        |               |

**School is in Session**

Talks to boy near him -  
Self initiated contact.  
Dreaming - wasting time,  
apparently mind is un-  
occupied.  
Sits quietly - does not  
listen to an explanation  
given about a picture of  
Santa.  
Mind is not on school  
work.

"J" is sewing at her  
seat when school is  
called. She leaves  
her seat to look at a  
picture - exclaims -oo-  
"Prettiest picture I  
ever seen."  
Returns to chair  
talking loudly.  
Stands at her seat  
sewing.

1:07

Goes to see the  
explanation for making  
Santa.  
Called to the reading  
group. Takes seat and  
talks to the girl next  
to him.  
He doesn't have the place  
and cannot find page 94 in  
his book.  
Facial expression forlorn.

Talks to neighbor -  
Self initiated contact.  
Sewing. Changes activities  
often. Talks to three  
children - self initiated  
contacts.  
Sings to self. Goes to  
the teacher.  
Talking to self. Tries  
to help another make a  
picture of Santa -  
Self initiated contact  
Back to sewing.  
Talks to another child-  
Self initiated contact.

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**Figure 1.- Sample Sheet for Observational Purposes.**

kept on the primary children studied.

Analysis of Behavior.- Following a period of specific observation an attempt was made to analyze the behavior of each child observed. A written account was made which was clipped to the Record Sheet for future reference. Records of some of the children observed follow in order to illustrate the type of procedure employed.

Child B (George B) I. Q. 106. Well dressed.  
Second Grade.

1. Child B seems worried about something.  
(An interview with the teacher revealed the fact that he had been severely punished at home because he had hurt another child.)
2. He is left alone. Acts lonesome, looks lonely. Walks aimlessly around. Very seldom smiles.
3. A greater part of his school life is spent in dreaming.
4. Activity is aimless. He works at some things but his attention is not on his work.
5. Gives evidence of nervous habits (tics). Hands not still, face distorted especially when called upon to do anything.
6. Does not give attention to the teacher. Loses place in book.
7. Makes foolish answers. Other children laugh at him.
8. Shows curiosity in what the other children

are doing but doesn't bother to attempt doing anything for himself.

9. Very slow to respond.

Child G (Gloria D) Adjusted. Third Grade.

1. Exhibits well planned school life.
2. Very bright and enthusiastic.
3. Works quietly.
4. Goes from one task to another without waste of time.
5. Does very acceptable work.
6. Can be depended upon to be in her place.
7. Places neatness before speed although she shows speed in doing certain tasks.
8. Listens while another pupil is reading a story to the group.

Child J (Janette) Adjusted. Second Grade.

1. She stays at a task over an extended period of time.
2. Is dependable.
3. Is quiet at her seat. Talks quietly.
4. Is courteous in discussion group.
5. Shows affection for child sitting next to her.
6. Wants to be ahead of the others. Is anxious to do things.

7. Shows signs of undirected activity.  
Is silly at times.
8. Is not a good reader.
9. Volunteers suggestions.

Child M (Marjorie) Unadjusted. Twenty-Third  
District School. First Grade.

1. Extremely active. Activity is aimless. Often interferes with other children.
2. Feels lack of security. Wants to hold to someone's hand while in the gymnasium and while playing games.
3. Spent much time in day dreaming.
4. Very talkative. Much time spent talking to others. Mostly self initiated contacts.
5. Imitates other children. Has a tendency to depend upon the other children rather than listen to the directions of the teacher.
6. Does not attack work immediately. Wasted much time before doing any thing of a constructive nature.
7. Failed to play well with the group in the gymnasium.
8. Read quite well.
9. Enjoyed showing her work even though it was poorly done.
10. Annoyed other children considerably.

Two teachers from McKinely Elementary School, Dayton, Ohio, were asked to describe as clearly as possible the social characteristics of four children in their room. The teachers were to select two children well adjusted socially and two who were poorly adjusted.

The following excerpt is taken from the records of Miss B., first grade teacher, Dayton, Ohio.

Observations of Roger  
(Socially Mature)

1. Relations to others generally.
  - a. Usually makes friends easily.
  - b. He is truthful.
  - c. Shows consideration of others feelings and rights.
  - d. Often shares with others.
  - e. Often annoys other children by teasing, pinching, pulling.
  - f. Fits in a group and contributes to the group.
2. Emotional behavior.
  - a. Usually seems happy.
  - b. Shows sense of humor.
  - c. Fights when attacked by others.
  - d. Is concerned about other children's problems.
3. Initiative and interests.
  - a. Tries to solve his own problems.
  - b. Leads in group activities.
  - c. Knows whether work is good or not.
  - d. Has originality.
  - e. Shows leadership in a social situation.
  - f. During free activity period he works independently of others.
  - g. Does work neatly.

- h. Does what is expected of him.
- i. Finishes task set out to do.

**Observations of Elnora  
(Socially immature)**

1. Relation to others generally.
  - a. Rather shy and does not make friends easily.
  - b. Withdraws from group.
  - c. Works independently of others.
  - d. Sits looking around.
  - e. Watches groups of children but does not join them.
2. Emotional behavior.
  - a. Usually seems happy.
  - b. Doesn't have much to say.
3. Initiative and interests.
  - a. Tries to solve own problems.
  - b. No leadership shown.
  - c. Usually completes task begun.
  - d. Has feeling of inferiority.
  - e. Has difficulty in making decisions.
  - f. Does not find work to do when task is completed.
  - g. Shows no social initiative.

Miss S., second grade teacher, Dayton, Ohio, gives the following description of one socially adjusted child and one unadjusted child.

**Child C. Socially Immature.**

1. Does not fit into group.
2. Requires urging to start and finish work.

3. When he has finished a piece of work he sits in his seat and bothers his neighbors.
4. Is careless and indifferent with his work.
5. Does not have a good position in standing and sitting.
6. Does not have friends in the room.
7. Easily influenced.
8. Does not appreciate and respect views of others.
9. Is not courteous to others.
10. Is not open and fair in behavior with children.
11. Tells on the children.
12. Is not a leader.
13. Is willing to share.

Child K. Socially Mature.

1. Fits into the group.
2. Works well alone.
3. When she finishes a piece of work knows what to do next.
4. Does work neatly, carefully and quickly.
5. Has good position in standing and sitting.
6. Has many friends.
7. Accepts responsibility.

8. Appreciates and respects the views of others.
9. Is courteous to others.
10. Open and fair in behavior with others.
11. Is a leader.
12. Is socially adjusted.
13. Is willing to share.

Interviews with Primary Teachers.- These interviews were carried on with two purposes in mind. First, they were to supplement the observational studies. This method aids in interpreting the behavior of primary children in their adjustment to each other. Second, they were valuable in finding characteristics of primary children which were considered most important by their teachers.

Teacher judgment has received much criticism. The critics contend that the teacher has a tendency to be prejudiced and to interpret child behavior in terms of whether or not he fits into the school program.

Morgan (61:481) says

teachers have their own problems of adjustment, and they cannot wholly prevent these from coloring their reactions to the behavior of the children in their care. The behavior of the children is a stimulus

to the teacher, and she responds with her characteristic emotional reaction. Child behavior can only be understood in terms of this reciprocal relationship.

Nevertheless, teachers who have been carefully chosen can give much valuable information regarding the interpretation of the behavior of problem children.

The following statements from teachers about some of their pupils indicate that their judgment is based upon observation and constant contact with the children.

Child M is the leader of a small group of socially unadjusted inseparables. Her leadership qualities are limited to this group. She is under age, under nourished and small. She has a speech defect of which she is becoming conscious. She is intelligent but poorly adjusted socially.

Child R has leadership qualities. She is able to control practically every child in the room. She comes from a Turkish family and is well adjusted socially.

Child M M has a good family background. However, everything has been done for her and only recently has she learned to tie her own shoes. She is not good in school work and is poorly adjusted socially.

The teacher of Child M and Child M M states that they will not succeed until they develop control over emotion.

Child S, an intelligent but very dirty boy, comes from an unorganized family. He has a tendency toward negativism. He does a task his own way even though he has been told how it should be done. A physical examination showed him to be well developed. He has a tendency to steal and has no respect for the property of others. Is socially unadjusted.

Child J is the largest boy in the room. He manages the group by his display of strength. His first impulse is to fight. He has been apprehended for stealing. Is considered socially unadjusted.

One teacher made the comment that social maturity is dependent upon self-control and how the child conducts himself in the group.

Miss B a teacher in an elementary school in Dayton, Ohio, says:

I believe that social maturation depends largely on well adjusted homes.

If the parent is overly concerned about the child, brings him to school - takes his wraps off for him and calls for him again, he will most likely be socially immature.

A child who is taught to depend upon himself in dressing, going to and from school - in answering questions put to him, he will no doubt be able to adjust himself to the school situation quite readily. Much depends upon the parent's attitude toward the school and teacher. A child may begin school with attitudes formed by the parent and it would be hard for the child to break down these attitudes if against school and the teacher.

Informal Interviews with Primary Children.-

This technique grew out of the association with primary children. It might be designated as one of trial and error. During a period spent in a third grade room an opportunity was presented to talk with two boys at the recess period. They were asked a few questions and seemed quite willing to talk. They had definite ideas about one boy they did not like. Later that day one socially unadjusted boy was interviewed. This boy had been observed for a considerable time.

These three interviews were convincing enough to show that this way of gaining insight into the child's social attitudes and behavior held great possibilities. For this reason, arrangements were made with the third grade teacher of Fairview School, Cincinnati, Ohio, to talk informally with the children in her room. This room was selected for these interviews because of the fine spirit of cooperation on the part of the teacher during the observational periods. Also, the most recent observations had been made in this room.

The teacher explained to the twenty-nine children that Mr. M. was back to visit them again;

that he was interested in what they were doing and wished to ask them a few questions. She said that they should feel free to tell him what he wished to know. Interviews with these children took place in the classroom during the regular program.

All of the children appeared anxious to be interviewed and were enthusiastic in their replies. Although the interviews were informal certain basic questions were asked each child in order to facilitate the recording of the answers. Answers to the following questions were desired from each child.

1. With whom do you like to play best?
2. Why do you like to play best with \_\_\_\_\_?
3. What do you mean by \_\_\_\_\_?  
(This question followed number 2 to explain more in detail the answer given.)
4. With whom do you not like to play?
5. Why do you not like to play with \_\_\_\_\_?
6. What do you mean by \_\_\_\_\_?  
(This question followed number 5 to explain more in detail the answer given.)
7. Would you rather play alone with \_\_\_\_\_  
(number 1) than with a group of \_\_\_\_\_  
boys and girls?
8. If you had some work to do with another  
boy or girl, would you rather have \_\_\_\_\_  
(number 1) help you than anyone else?

All of the children seemed eager to answer the questions asked. Some of the questions were personal and some questions involved their classmates. These were answered just as readily as the more general ones.

The results of three interviews are selected and summarized to illustrate the procedure and type of answers given by the children.

Child J S said he liked to play best with Jimmy M (Jimmy was not in the same room) because he had a big back yard. Both he and Jimmy liked to climb and there were trees in the back yard. He said that Jimmy was "nice." When asked what he meant by "nice", he said, "Don't like to fight, and is not selfish." When asked whom he did not like to play with, he said, "Phyllis K, because she was 'stubborn' and 'cursed'." He illustrated by saying, "When her Mother tells her to go to the store, she just stands and looks at her." He also said he did not like Phyllis because she did not like Jimmy.

Child S says that she likes to play with Gloria ( in the room ) just because she is nice. By nice she means "she learns you things." She doesn't like to play with Violet ( in the room ) because she is selfish. By selfish she means "doesn't give you something, doesn't play fair."

Child D likes to play best with Jack K. because he " likes him, don't fight, don't break up games." By "like" he means "gives me stuff". He said, "one thing I don't like is that we both curse."

He doesn't like to play with B because he fights too much, snitches on people breaks up games." By "snitches" he means "tells". By "breaks up games" he means "just walks in and starts fighting."

It is needless to point out how the success of this method depends upon the willingness of the children to talk freely with the interviewer. Apparently, the best results are obtained through informal conversation. Many questions may have to be asked before the desired information is given. Each child must be encouraged to give as many reasons as possible why he likes or dislikes to play with a certain child.

The answers to question number 7 (Would you rather play alone with \_\_\_\_\_ (number 1) than with a group of boys and girls?) were totaled. Twenty of the twenty-eight third grade children responding to this question expressed themselves as preferring group play. Eight children preferred to play with but one child.

Obviously, the time is ripe for the teaching of social traits during this age when the children are interested in group activities.

So far as this research is concerned, the technique of informal interviews with children proves to be one of the best ways of studying the social traits of the primary child.

Analysis of Studies Conducted by other

Research Workers.- Studies conducted by other investigators serve a twofold purpose.

- (1) They serve as a check in ascertaining whether the list of patterns is complete. Studies on the preschool level seem of most value in this checking.
- (2) They suggest terms to use in the formulation and definition of patterns.

Haggerty, Olson, and Wickman (35:5,6)

list the following questions for use in making general ratings under Social and Emotional traits.

**DIVISION III  
(Social)**

15. Is he quiet or talkative?
16. Is his behavior (honesty, morals, etc) generally acceptable to ordinary social standards?
17. What are his social habits?
18. Is he shy or bold in social relationships?
19. Is his personality attractive?
20. How does he accept authority?
21. How flexible is he?
22. Is he rude or courteous?
23. Does he give in to others or does he assert himself?
24. What tendency has he to criticize others?

DIVISION IV  
(Emotional)

25. Is he even-tempered or moody?
26. Is he easily discouraged or is he persistent?
27. Is he generally depressed or cheerful?
28. Is he sympathetic?
29. How does he react to frustrations or to unpleasant situations?
30. Does he worry or is he easy-going?
31. How does he react to examination or to discussion of himself or his problems?
32. Is he suspicious or trustful?
33. Is he emotionally calm or excitable?
34. Is he negativistic or suggestible?
35. Does he act impulsively or cautiously?

Maller (55) gives descriptions for the following behavior patterns which he lists under Aspects of Character.

Behavior Pattern Concerning:

- |               |                   |
|---------------|-------------------|
| A. School     | G. Cooperation    |
| B. Teachers   | H. Loyalty        |
| C. Classmates | I. Foresight      |
| D. Study      | J. Self-control   |
| E. Conduct    | K. Persistence    |
| F. Honesty    | L. Fairmindedness |

- |                            |    |                   |
|----------------------------|----|-------------------|
| M. Good-naturedness        | S. | S. Sense of Humor |
| N. Generosity              |    | T. Frankness      |
| O. Thrift                  |    | U. Tactfulness    |
| P. Congeniality            |    | V. Courtesy       |
| Q. Leadership              |    | W. Responsiveness |
| R. Sportmanship            |    | X. Moderation     |
| Y. Impression of character |    |                   |

Maller (55) gives descriptions for the following behavior patterns which he lists under Aspects of Personality.

Behavior Pattern Concerning:

- |                      |                              |
|----------------------|------------------------------|
| A. Poise             | N. Objectivity               |
| B. Enthusiasm        | O. Inquisitiveness           |
| C. Mood              | P. Originality               |
| D. Change of Mood    | Q. Energy                    |
| E. Self-confidence   | R. Convictions               |
| F. Sensitivity       | S. Masculinity(boys)         |
| G. Ambition          | Femininity(girls)            |
| H. Speed of movement | T. Intellectual interest     |
| I. Attention         | U. Aesthetic appreciation    |
| J. Perseveration     | V. Practical mindedness      |
| K. Rationality       | W. Social mindedness         |
| L. Gracefulness      | X. Ethical interest          |
| M. Neatness          | Y. Impression of personality |

Cornell, Coxe, and Orleans (20) use the following nine traits in an attempt to determine whether desirable habits and attitudes are being formed in school children. Three levels of response are defined for each of the traits.

- |              |                |
|--------------|----------------|
| 1. Attention | 5. Initiative  |
| 2. Neatness  | 6. Ambition    |
| 3. Honesty   | 7. Persistence |
| 4. Interest  | 8. Reliability |
| 9. Stability |                |

Berne (7:20-7) developed a rating scale from the observation and diary records of children in the preschool laboratories at the University of Iowa. The following thirty patterns are used and defined.

1. **Obeys:** is submissive to authority; submissive to restraint, or command.
2. **Seeks approbation:** desires commendation, notice, sanction.
3. **Interested in the group:** has attention engaged by the group.
4. **Depends on adults:** depends on adults to provide activities for him; is unable to provide his own activity.
5. **Affectionate:** loves, has tenderness, fondness.
6. **Cooperates:** works or plays with others; works or plays jointly.
7. **Respect others' property rights:** respects another child's right to a possession.
8. **Participates:** contributes to the social development of the room; participates and is responsible for social organization, i.e. the making or carrying out of rules.
9. **Sympathizes:** is affected by emotion another feels; e.g. feels sad with another child; attempts to cheer him; or feels glad with another, laughs with him, etc.
10. **Understands own property rights:** Knows his right to a possession he has brought to school, or his right to play with something in his possession when another child wants it.

11. **Sociable:** is companionable, conversable, communicative; is fond of mingling and talking with others.
12. **Kind:** is disposed to be good and confer happiness; is benevolent; well disposed.
13. **Rivals:** shows personal competition; strives to equal or excell.
14. **Appreciates humor:** discovers, expresses, or appreciates the ludicrous or incongruous.
15. **Respects social ownership:** respects joint ownership of group: e.g. takes "turns" at slide, watering plants etc.
16. **Socially controlled:** is subject to influence of will of the group.
17. **Leads:** has initiative, self-reliance, decisiveness, and tact to inspire others to follow or cooperate.
18. **Initiative:** takes suggestion from behavior of others in his group; does what he sees others do.
19. **Teases:** annoys others in petty ways.
20. **Maternal:** is Motherly as an adult, playing down to another child (often including the directing of the others' activities).
21. **Jealous:** is jealous of playmates or adults.
22. **Self-defensive:** defends himself actively when crossed.
23. **Irresponsible for self:** takes no responsibility for himself.
24. **Critical:** critical of the behavior of others; e.g. actions, words, attitudes, work.

25. Selfish: cares supremely for self; regards own comfort or advantage in disregard or at expense of that of others.
26. Sensitive: is affected by negative criticism.
27. Irresponsible for others: takes no responsibility for others.
28. Socially conformant: keeps the social observances of the group; e.g. waits for others to be served before drinking orange juice etc.
29. Impolite: does not say "please," "thank you," "excuse me," "good morning," etc.
30. Ascendent: is dominant, is of paramount influence over individuals or group. (submissive; yielding; adjusts behavior to that of ascendent individuals.)

Berne states "the wide range of social behavior responses of young children to the social environment of the preschool group is covered by the scale."

Joel (41) chose twenty situations to reveal the child's behavior maturity, e.g. his independence in routine habits (eating, washing, etc), his emotional maturity (attitude in minor injury, etc) and his social maturity (group play participation, etc). In each of the concrete situations five possible reactions were listed. Only those situations applying to emotional and social maturity are given here.

1-5 Routine habits.

6. Did his initial adjustment to the school indicate emotional maturity?
7. Does his usual mood show a state of satisfactory adjustment?
8. How does he face his difficulties? (for example, when crossed)
9. For how long can he be absorbed in an activity?
10. Can he play by himself?
11. Is his emotional expression adequate (directed) or diffuse (irradiating)?
12. Does he take responsibility for his actions?
13. How does he control himself in a minor injury?
14. How does he behave in the face of a difficult task?
15. Does he show initiative?
16. What degree of social maturity is shown in his play with other children?
17. How much strain can his social attitude bear?
18. Does he see another's viewpoint?
19. How does he react to unfriendly advances of other children?
20. What is his place in the group?

Conrad's (19) Behavior Inventory consists of

000

231 traits for the rating of nursery school children. The list of traits is not included here because of its length.

Alatyne (4) selected thirteen situations as a foundation for rating school behavior and attitudes. Under each situation are listed five to ten levels of response characterizing children.

Situation I. When taking turns with apparatus or materials or in a group discussion.

Situation II. When there is a group project to be carried out.

Situation III. When faced with a social situation involving sacrifice of own interests or needs of those of the group.

Situation IV. When a child has a social task to be completed.

Situation V. Emotional tone in school.

Situation VI. When there is a chance to go to adults for help or approval.

Situation VII. When faced with failure.

Situation VIII. When in an organized group with teacher present.

Situation IX. When child has opportunity to take responsibility for a group task.

Situation X. When in a social situation which allows for initiative.

Situation XI. When he has finished studying a subject.

Situation XII. When he can get help from adult.

Situation XIII. When things must be organized for work.

#### Teacher Criticisms of Social Maturity Patterns.-

A detailed account of five techniques used in studying social maturity has been presented. The sixth technique, or teacher criticism, is a method of validating what has already been done. From the sources discussed there evolved a long list of traits which describe child behavior. These many traits were combined and made into a more compact and workable group. The following list of fourteen patterns is the first concrete form made from these five sources. This list was submitted to teachers for criticism.

#### Social Maturity Traits in the Primary Grades

1. Group Compatibility:  
Involves being companionable, conversable, communicative, fond of mingling and working with others.
2. Affection:  
Shows love and tenderness toward others. Negative - Lack of affection repels or drives others away.

3. **Efficiency in Work and Play:**  
Manifests itself in a feeling of responsibility in group relations, is socially cooperative, has flexibility, and contributes to the social development of the room.
4. **Sympathetic:**  
Affected by the emotions of others. e.g. feels sad with one child and attempts to cheer him or feels glad with another and laughs with him.
5. **Respect for the Rights of Others:**  
Respects the property rights of others, has understanding of his own rights and joint ownership of the group. e.g. takes turns at slide, shares, etc.
6. **Emotional Adjustment:**  
A feeling of security and manifests adequate ways for emotional release.
7. **Courtesy and Politeness:**  
Considerate and thoughtful of others. Socially conformant with the customs and traditions of the race.
8. **Ascendancy:**  
One who is dominant and has paramount influence over individuals or group. Negative - submissive, subservient, weak, yielding, etc.
9. **Dependable:**  
Characterizes the individual who is trustful, self-reliant, honest, calm, and exercises self-control.
10. **Leadership:**  
That characteristic which involves initiative, self-reliance, tact, decisiveness, aggressiveness, and popularity which inspires others to follow or cooperate.

11. **Personal Appearance:**  
Neat and orderly in dress, cheerful and attractive.
12. **Unselfish:**  
Regards comfort and interests of others before his own.
13. **Fair-play:**  
Behavior generally acceptable to social standards. Does not endeavor to obtain credit not due him. A good sport in school and on the playground.
14. **Self-Confidence:**  
Characteristic which gives courage to attempt the difficult, a feeling of assurance.

This first draft of traits was submitted to twenty teachers. They were asked to criticize the list on the following points:

1. Is the list of traits complete? If not, what traits would you add?
2. Would you combine any of the patterns?
3. Can you suggest better and more significant names for the patterns?

Each criticism received thoughtful consideration and was carefully evaluated. Changes were not made just because the teacher thought it advisable. For example, it seemed quite generally agreed that one trait should be named different from "fair-play." This term was used frequently by the children in describing their likes and dislikes. Thus, the name "fair-play" was retained.

With these criticisms in mind, a careful rechecking of results was made. These results were obtained from the five techniques already discussed. A new list of patterns resulted. The list includes in some form all of the group presented before. Eight original pattern names are retained. Some combinations are made and five new pattern names are added. Cooperation, originality, curiosity, neatness and orderliness, and cheerfulness are the new pattern names. Affection (2) and sympathetic (4) are combined under the pattern name "kindness and sympathy." Respect for the right of others (5) and unselfishness (12) are combined with "fair-play." Ascendancy (8) is combined or included in "leadership." Personal appearance (11) as a pattern name is dropped. Since neatness and orderliness may apply to personal dress and cheerfulness to disposition, it is adequately covered by these two new pattern names.

The revised list, which is used during the remainder of this research, is here presented with a careful re-definition of each pattern.

### Social Maturity Patterns

1. **Group compatibility.**- Able to get along congenially with varied groups of children, companionable, conversable, communicative and fond of mingling, talking and working with others.
2. **Kindness and sympathy.**- Kind in actions toward others with a mutual feeling of pleasure or pain; regarding the comfort and interest of others before his own.
3. **Efficiency.**- Achieves high standards, and shows a genuine effort to give of his best in work and play.
4. **Fair-play.**- Behavior generally acceptable to social standards, does not endeavor to obtain credit due others; shows a sportsmanlike attitude in school and on the playground and respects the rights of others.
5. **Emotional adjustability.**- Has a feeling of security and manifests adequate ways of emotional release.
6. **Courtesy and politeness.**- Considerate and thoughtful of others. Socially conformant with the customs and traditions of the race.
7. **Dependability.**- Can be depended upon to fulfill responsibilities accepted. Is trustworthy even when not being watched, is self-reliant, calm, and exercises self-control.
8. **Neatness and orderliness.**- Tidy and orderly in work and play, is clean and trim in personal appearance.
9. **Self-confidence.**- Has courage to attempt the difficult, shows assurance and confidence in behavior; shows finality of decision.

10. Cooperation.- Has the art of working with others harmoniously and shows willingness to sacrifice in the accomplishment of the desired end.
11. Originality.- Is original or novel in work and play; shows inventiveness and produces work without copying or imitating.
12. Curiosity.- Keenly curious, explores, investigates, asks questions and shows interest in the strange and novel.
13. Leadership.- Has initiative, self-reliance, tact, decisiveness, aggressiveness and popularity which inspires others to follow and cooperate.
14. Cheerfulness.- Laughs and smiles frequently, is pleasant and happy.

Rechecking of Pattern Sources.- A final

check was made on the list of patterns just presented.

This final checking serves a twofold purpose: (1) to ascertain whether each pattern is found in enough sources to warrant its inclusion in the list, (2) to determine that the personal judgment element has not controlled the selection of patterns. The three main sources used are:

1. Observations of children
2. Interviews with primary children
3. Related studies

Table I shows the fourteen patterns and their relation to these three sources. It also reveals that all patterns, with but two exceptions, are found in all sources. These two exceptions are leadership and originality which are not found in source 2. Leadership, however, might well have been included as being found in this source, since a number of the children referred to one girl as being the child with whom they liked to play best. Their answers indicated that this girl was no doubt a leader. Since there were no direct responses concerning her leadership, this source was omitted in the tabulation.

This analysis reveals a broad selection of patterns under which child behavior may be classified.

#### Measurement of Patterns of Social Maturity

A detailed account has been given of the selection and description of the patterns constituting social maturity. The list is considered adequate for the measuring of social maturity in primary school children. This is true because of the various methods used in the discovery of this list of patterns. The validity of the instrument will be shown later in the chapter.

**TABLE I**  
**PATTERNS OF SOCIAL MATURITY AND SOURCES**  
**IN WHICH THEY ARE FOUND**

| Number<br>of<br>Pattern | Name of Pattern          | Source |   |   |
|-------------------------|--------------------------|--------|---|---|
|                         |                          | 1      | 2 | 3 |
| I.....                  | Group Compatibility      | 1      | 2 | 3 |
| II.....                 | Kindness and sympathy    | 1      | 2 | 3 |
| III.....                | Efficiency               | 1      | 2 | 3 |
| IV.....                 | Fair-play                | 1      | 2 | 3 |
| V.....                  | Emotional adjustability  | 1      | 2 | 3 |
| VI.....                 | Courtesy and politeness  | 1      | 2 | 3 |
| VII.....                | Dependability            | 1      | 2 | 3 |
| VIII.....               | Neatness and orderliness | 1      | 2 | 3 |
| IX.....                 | Self-confidence          | 1      | 2 | 3 |
| X.....                  | Cooperation              | 1      | 2 | 3 |
| XI.....                 | Originality              | 1      | - | 3 |
| XII.....                | Curiosity                | 1      | 2 | 3 |
| XIII.....               | Leadership               | 1      | - | 3 |
| XIV.....                | Cheerfulness             | 1      | 2 | 3 |

**Key to source:**

1. Observation of primary children
2. Interviews with primary children
3. Related studies

The Selection of Items.- The next step considered is the measurement of each basic pattern. A sampling of behavior items covering each pattern was selected and placed in an objective rating instrument. The word "item" here refers to the way a child behaves when confronted with certain situations.

It is needless to reiterate the steps taken in the formulation of these items, since the same sources as were used in the selection of patterns were available. The sample observation sheet on page 49 shows how the records are made up of different types of behavior. Another source, however, proved very fruitful. A sheet containing the fourteen patterns and their definitions was sent or given to a number of teachers. They were asked to list any item of behavior which they thought should be considered in the measurement of each pattern.

Probably one of the best list of items submitted came from a first grade teacher of Huron, South Dakota. A sample of items listed under two patterns follow:

Kindness and sympathy

- a. Are his pets companions?
- b. Does he question widely concerning usual and unusual experiences?
- c. Does he live so within himself he does not outwardly register emotion?
- d. Is he easily frightened by sight of blood?
- e. Does he cry when listening to or reading a sad story?

- f. Is he so imbibed with the modern "I can take it" that he injures others to watch their reaction?
- g. Does he spend time in "street play"?
- h. Can he think of something to do to help an unfortunate playmate?
- i. Does he show regard for parents?
- j. Can he take care of his own personal habits and tasks to relieve Mother - such as 1. brushing his teeth 2. dressing himself 3. washing himself 4. picking up toys after play and etc.
- k. Does he shrink from gruesome pictures?
- l. Does he attend "grown-up-folks" movies?
- m. Does he mean "I'm sorry" when he says it?
- n. Has he a vocabulary to express sympathy and will he make an effort to express it?
- o. Can he care for younger brother, sister or playmate 1. on the playground 2. at work 3. in a crowd.

#### Neatness and orderliness

- a. Does he draw straight lines in connecting matching phrases of his work sheets?
- b. Is his coloring within bounds of object he is coloring?
- c. Is his coloring done in any certain form? (scribbled or with one way lines)
- d. Does he make his letters close together and his words far apart, in writing?
- e. Will he follow directions for margins, paragraphs and punctuations in writing?
- f. Does he bring a handkerchief to school?
- g. Does he object to safety pins in lieu of buttons? Will he keep clothes together with pins or buttons?
- h. Will he care for papers in desk and destroy those which are unnecessary?
- i. Does he annoy and hinder class by pulling things from his desk to the floor?
- j. Does he bring trinkets to keep in his desk?
- k. Will he handle his books carefully -
  - 1. opening at top and closing both sides together
  - 2. refrain from marking with crayon or pencil etc

- l. Does he take off school clothes and change to play clothes after school hours?
- m. Does he scribble on another's work - to spoil it?
- n. Can he suggest ways to make his surroundings better for sake of attractiveness?

The teacher suggestions were summarized under the pattern to which they applied. Although few of the suggestions were used as stated, they helped in obtaining a wide sampling of child experiences.

An attempt was made to select items other than just simple habits. Rather those items were selected in which improvement should be made as a child passes from grade to grade. A large sampling was chosen in order to measure each pattern adequately.

The Statement of Items.- To meet the criteria set up earlier in this chapter, all items are uniformly stated in positive, concrete form.<sup>1</sup> Each statement represents a desired stage of development. This form of statement allows each child to be rated according to his present degree of development in any particular trait. Thus, children are not compared with each other but are rated on their actual growth.

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<sup>1</sup>

See page 40 this thesis

The Criticisms of Experts.- The classification of items under each pattern was submitted to the criticism of experts. This precaution was taken in order to further validate the work done. Three members of the staff in the department of elementary education at the University of Cincinnati, an elementary principal in Cincinnati, and four elementary school teachers were given such classifications for criticism. The following points represent those in which criticism was desired.

1. Is the sampling adequate to measure the pattern in question?
2. Are the statements made in such a way that they are fully understood?
3. Do the statements represent the perfection of a trait we desire in the primary school?
4. Are there any items of vital importance that have been omitted?
5. Can you suggest any combinations of traits, thus cutting down the list?
6. Are all items placed in their proper places?
7. Will all teachers interpret questions alike? If not, which ones need to be more clearly stated?

From the criticisms and suggestions a revised list of items was made. There are in all 157 items classified under the fourteen patterns.

An Instrument of Measurement.- These 157<sup>2</sup> items were then placed in a rating instrument for the measurement of social maturity at the primary grade level. This instrument is called the Long Form of the<sup>3</sup> Rating Scale of Social Maturity .

Method of Scoring the Long Form of  
the Rating Scale of Social Maturity

Development in each item is represented by the following five point scale.

- "1" means never. The child has no development in the trait.
- "2" means 25% of the time. The child has some development but is still very low.
- "3" means 50% of the time. A fifty-fifty chance that the child will respond to the trait as given.
- "4" means 75% of the time. The child is noticeably developed in the trait so that he responds very often in the right way.
- "5" means always. The child has complete development in the trait.

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2

A copy of this selection of 157 items under their appropriate patterns may be found in Appendix B pages 149-60 this thesis.

3

The term scale is here used as a descriptive term. In the strict technical sense this term should be reserved for an instrument in which the units of measurement have been definitely graduated.

On each of the 157 items a child is given the point score which nearest represent his development.<sup>4</sup> The total number of points received is the social maturity score for that child. The score that the child makes constitutes a quantitative statement of his social development. The higher the score the greater the degree of maturity.

This Long Form of the Rating Scale of Social Maturity is far too cumbersome for use by the average classroom teacher. But it does represent an adequate inventory and give a picture of social behavior for the primary child.

#### Validity and Reliability of the Long Form of A Rating Scale of Social Maturity

Validity.- The validity of the social maturity rating scale is based upon:

1. The care taken to incorporate within the rating scale those items which are of prime importance in the measurement of social maturity.
2. Criticism and judgment of competent judges.
3. The use of related studies.
4. A sampling of items large enough to include the essentials in the measurement of social maturity.

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Further explanation of the rating technique may be found in the Introductory Sheet accompanying the list of items. See Appendix A pages 146-8 this thesis.

Reliability.-- The Long Form of the scale was used in two schools and then checked for reliability. Seventy-five primary school children were selected from an elementary school in Dayton, Ohio, and seventy-five from an elementary school in Portsmouth, Ohio. In each school the first three grades were equally represented with twenty-five children in each grade. One teacher, acquainted with all of the children, made the ratings on the social maturity scale for the Portsmouth group. The children of the Dayton school were rated on the social maturity scale by different teachers. The principal, however, was in charge of and present at all of the ratings made in Dayton.

The chance halves method for the computation of reliability was used. The formula is

$$\text{reliability} = \frac{2x r}{1 + r} \quad (28:271)$$

The correlation between the chance half scores made on the Long Form of the Rating Scale of Social Maturity by the Portsmouth group is  $r = .946 \pm .008$  and for the Dayton group is  $r = .978 \pm .003$ . When the formula is applied to obtain the reliability for the complete scale, it is  $r = .972$  for the combined grades of the Portsmouth group and  $r = .989$  for the combined grades of the Dayton group.

Reliability coefficients were computed by the rank

difference method for two single grades of twenty-five children. The reliability for the first grade in Portsmouth is  $\sqrt{.831}$  and for the third grade in Dayton  $\sqrt{.979}$ . This was done in order to show that the reliability coefficients were high not merely because the three grade groups were combined.

### Summary

1. This chapter deals with the techniques used in the development of a scale for the measurement of social maturity in primary school children.

2. Through the use of six techniques the following fourteen patterns were found to constitute social maturity.

- I. Group Compatibility
- II. Kindness and sympathy
- III. Efficiency
- IV. Fair-play
- V. Emotional adjustability
- VI. Courtesy and politeness
- VII. Dependability
- VIII Neatness and orderliness
- IX. Self-confidence
- X. Cooperation
- XI. Originality
- XII. Curiosity
- XIII Leadership
- XIV. Cheerfulness

3. One hundred fifty-seven items of behavior were used to measure the fourteen patterns selected. These items were clearly and briefly stated and placed

in a rating scale. This has been termed the Long Form of the Rating Scale of Social Maturity.

4. Validity of the Long Form of the Rating Scale is established through satisfying certain stated<sup>5</sup> criteria .

5. Reliability was established by the chance halves method of computing reliability. In two schools used for experimental purposes, one in Portsmouth, Ohio, and one in Dayton, Ohio, reliability is  $\sqrt{.972}$  and  $\sqrt{.989}$  respectively.

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<sup>5</sup>

See pages 84-5 this thesis

## CHAPTER IV

### SOCIAL MATURITY AND ITS RELATION TO MENTAL AGE, CHRONOLOGICAL AGE, AND INTELLIGENCE QUOTIENT

#### Introduction

Related Studies.- A number of studies on different levels of maturity have been made. These studies have attempted to measure various phases of social traits such as social intelligence, social perception, and sociability. In almost every case the correlation between the intelligence quotient and social characteristics was low. This was also true of the correlation between mental age and social characteristics. These low correlations intimate that the test or scale used measures a trait other than intelligence.

Hollingworth (38) showed sociability to correlate with intelligence  $r=.25$ . Ream (74) devised a social relations test which correlated with intelligence  $r=.60$ . Gates (30) showed social perception to correlate with mental maturity  $r=.22$

and social maturity and mental age  $r = .37$ . Moss (64) found correlations to be low when four intelligence tests were correlated with a social intelligence test. The Gilliland Sociability test (73) correlated  $r = .12$  with intelligence. Parten (72) shows social participation to correlate  $r = .26$  with intelligence quotient.

Recognition of Social Maturity.- It is a common thing to uphold academic intelligence as being of primary importance in the success of children both in and out of school. It is, of course, a common practice to classify children on the basis of academic intelligence alone. If social maturity is a distinct trait and as important as studies suggest, then it too should have a place in the program of education. All educators are aware that some brilliant children do not get along with their fellow students, yet they are judged successful in the eyes of their teachers.

Finding the relationship between social maturity, as measured by the Long Form of the Rating Scale of Social Maturity, and mental age, chronological age, and intelligence quotient will act as a further check on the validity of the instrument. If the results somewhat agree with those of other studies, it it

logical to conclude that it is measuring a distinct trait.

### Experimental Situation

Selection of Children.- Seventy-five primary children were selected from an elementary school in Dayton, Ohio and seventy-five from an elementary school in Portsmouth, Ohio. There were twenty-five children in each of six groups. The six groups included two first grades, two second grades, and two third grades, making a total of 150 children. Both schools have activity work in the primary grades, although the administrative policy is somewhat different in organization of work. Activity work in the foregoing sentence means that the child has an opportunity for self-expression in his work and play with other children. The children are not confined by rigid rules or strict discipline.

Children in the Dayton groups are largely limited to their own room for the school program. They are not rigidly graded in their work. One of two grades may be received: (S) for satisfactory work and (U) for unsatisfactory work.

The principal in charge of the Dayton groups says,

we are aiming at a condition of pupil control and pupil activity. We are trying to make the informal, natural atmosphere of the school room resemble life on an ideal plane. Instead of an autocratic dictator the teacher is trying to be a friendly advisor.

Children in the Portsmouth groups spend one half of their time in the home room, the other half is spent in special rooms where they are given opportunity for free expression in art, music, nature study, physical education and dramatization.

The children of these six groups were chosen as being representative of their grade. The selections were made in the Dayton school by the principal. In the Portsmouth school the teacher in charge of the auditorium, to which all children went sometime during the day, made the selection.

The mean intelligence quotient for the Portsmouth first grade is 106 and ranges from 96 to 122. For the second grade the mean intelligence quotient is 102 and ranges from 86 to 123. For the third grade the mean intelligence quotient is 105 and ranges from 82 to 124.

The mean intelligence quotient for the Dayton first grade is 96 and ranges from 85 to 112. The mean intelligence quotient for the second grade is 100 and ranges from 89 to 112. The mean intelligence quotient

for the third grade is 100 and ranges from 90 to 110. The Dayton school groups are referred to later as "Group D." The Portsmouth groups are called "Group P."

Rating of Children.- These 150 children were scored on the Long Form of the Rating Scale of Social Maturity. Group P children were all rated by the same teacher. This teacher had charge of the auditorium to which all of the primary children came to prepare programs, dramatize reading stories etcetera. Group D children were rated by different teachers. However, all ratings in Group D were under the direct supervision of the Dayton school principal.

Intelligence Tests from which Mental Age and Intelligence Quotients are derived.- Mental age and intelligence quotient scores for Group P children were derived from the Detroit First Grade Intelligence Test. Mental age and intelligence quotient scores for Group D children, grades I and II, were derived from the Otis Quick-Scoring Mental Ability Tests, Alpha Test: Form A. Mental age and intelligence quotient scores for Group D children, grade III were derived from the Henmon-Nelson Tests of Mental Ability - Form A. All tests for Group D children were administered in 1937.

#### Relation between Social Maturity Score and other Measures

In the following tables used in this chapter the correlations are figured by the rank-difference

method and translated into corresponding values of "r." The probable errors are figured from a table for computing probable errors of the corrected rank correlation coefficient. (23A:43)

Table II shows the correlation between the total scores made on the Long Form of the Rating Scale of Social Maturity and the chronological ages of the pupils.

TABLE II  
RELATION BETWEEN SOCIAL MATURITY  
SCORE AND CHRONOLOGICAL AGE

| Groups | Coefficients of Correlation, Probable Errors, and Grades |                |                |
|--------|--|----------------|----------------|
|        | First Grade  | Second Grade   | Third Grade    |
| D      | $+.04 \pm .14$   | $-.21 \pm .13$ | $+.31 \pm .13$ |
| P      | $-.33 \pm .13$   | $-.25 \pm .13$ | $+.04 \pm .14$ |

There are no correlations in this table which are high enough to show any more than chance relationship between chronological age and the social maturity score

within a certain grade<sup>6</sup>. While the correlations fluctuate considerably, they are not significant enough to indicate a relationship.

Table III shows the correlation between the social maturity score and mental age. The relationship is somewhat higher than found between social maturity and chronological age in table II. Although correlations

TABLE III  
RELATION BETWEEN SOCIAL MATURITY  
SCORE AND MENTAL AGE

| Groups | Coefficients of Correlation, Probable Errors,<br>and Grades |                       |                       |
|--------|---|-----------------------|-----------------------|
|        | First<br>Grade  | Second<br>Grade       | Third<br>Grade        |
| D      | $\text{+.19} \pm .14$                                       | $\text{-.08} \pm .14$ | $\text{+.46} \pm .11$ |
| P      | $\text{+.21} \pm .13$                                       | $\text{+.52} \pm .10$ | $\text{+.56} \pm .10$ |

are not high enough to predict social maturity upon knowing a child's mental age, a low relationship is found in both groups. This relationship is less in

<sup>6</sup>"It is customary, therefore, not to consider a correlation as reliable - as indicative of a correlation at least better than 0 - unless it is at least 4 times its PE." (28:170)

in Group B than in Group P.

There is a higher and more consistent relationship shown between social maturity and mental age in the third grade of both groups than in either the first or second grades.

TABLE IV  
RELATION BETWEEN SOCIAL MATURITY  
SCORE AND INTELLIGENCE QUOTIENT

| Groups | Coefficients of Correlation, Probable Errors and Grades |                |                |
|--------|---|----------------|----------------|
|        | First Grade   | Second Grade   | Third Grade    |
| B      | $r.42 \pm .12$  | $r.16 \pm .14$ | $r.20 \pm .14$ |
| P      | $r.33 \pm .13$  | $r.64 \pm .08$ | $r.57 \pm .10$ |

Table IV shows the correlation between the social maturity score and the intelligence quotient. There is a positive correlation in each case which is slightly more consistent than is found in either of the other tables. Both tables III and IV show that there are some factors used in the measurement of intelligence that have added to the social maturity score. With but one exception all correlations are positive. It is

impossible to say just what these factors are. In order to discover them an analysis of the factors contained in general intelligence tests would be necessary. Then the study of the functional relationship of these factors in the makeup of the social maturity scale would have to be made. It can readily be seen that this would be a study in itself.

#### Summary and Conclusions

1. Studies cited at the opening of the chapter show low correlations between measures of social characteristics and intelligence.

2. Low correlations are also found in this research between social maturity and chronological age, mental age, and the intelligence quotient within the first, second, and third grades.

3. These results, although based upon findings in small groups, are in keeping with those of other studies.

It can safely be said that certain elements are being measured which are different from those used in the measurement of intelligence. What Gates (30:457) says regarding social perception and social maturity in her work is equally true here.

Some evidence has been presented to show that the present test is not merely another measure of C. A. or M. A., but that it gauges in some measure, traits more definitely social in character.

Correlations indicate some relationship between the Long Form of the Rating Scale of Social Maturity and general intelligence tests. Sorenson (80:277), however, says

coefficients of correlation of from 0 to 0.60 are not very useful for purposes of individual prediction.

Mental age, the intelligence quotient, or chronological age, therefore, cannot be used within the first, second, or third grade to predict social maturity.

CHAPTER V  
SOCIAL MATURITY AND SCHOOL SUCCESS

Introduction

Cornell, Coxe and Orleans (20:1) studied the importance of the New York Rating Scale for School Habits with reference to school success. They say:

Ordinarily a pupil's school life is thought of in terms of the amount of subject matter he acquires and how thoroughly he masters it. It is frequently either overlooked or not entirely appreciated that success in school work is dependent to a great extent on school habits and attitudes. The ones developed by the pupil in mastering the school curriculum are often the ones which he will use in making adjustments after he leaves school.

.....The importance of school habits for good school work may be measured by the relation between estimate of such habits and school marks. The correspondence between measures on the Rating Scale for School Habits made by eighth-grade teachers for a group of pupils and the first-term high school marks of these pupils has been found to amount to a correlation of between .55 and .75. It has been found that the correspondence between measures of school habits and school marks is

about twice as close as the correspondence between intelligence-test scores and school marks.

An opportunity to study the relationship between social maturity and school success in the primary grades is made possible by the nature of the present study. This relationship is shown by the correlation between social maturity scores and teachers' estimate of success.

Much has been written, by those who have observed children, regarding the importance of social traits. However, little scientific proof has been advanced as to the importance of these traits in school success. Rather, mental age and intelligence quotients have been relied upon as the basis for the prediction of success in school. This, however, is to be expected. In the past few years rapid progress has been made in the formulation and use of intelligence tests. Today, there is a growing conviction that success is dependent upon more than one factor.

Betts (8:165-6), in discussing prevention and correction of reading difficulties, writes concerning intelligence tests and reading ability as follows:

During the past decade intelligence test have increased in value because their limitations are better understood. Many investigators have recorded the fact that individuals with reading difficulties do not perform as expected on many of the group tests of intelligence. A large percentage of disabled readers have been found to possess normal or superior intelligence when measured by means of a non-verbal test.

.....For a child of low intelligence, formal reading instruction should be postponed until he has attained a mental age of at least six and one-half years. Such an individual will progress more slowly and require more repetition. The greatest mistake is usually made by initiating the slow learning child into typical first-grade reading activities before he has the mental maturity. Although it appears that many factors other than intelligence contribute to reading aptitude, it is well established that mental maturity is one essential element in the situation.

Since it is generally agreed that there are other factors entering into the success of children in the primary school, the next step is to discover what relation, if any, social maturity has with school success.

#### Experimental Situation

Chapter IV shows the relationship between social maturity and mental age, chronological age, and intelligence quotient. In the present study 150

children selected from two schools were used. The same groups are used in the findings of this chapter.<sup>1</sup>

Pupils of Group D classes are not given grades. It is the policy of the school to mark children (S) satisfactory, or (U) unsatisfactory.

Because there were no grades received or recorded in cumulative records for all pupils, it was necessary to use another method of obtaining a measure for success in school. To be consistent in both groups all the children were ranked from one to twenty-five by their teacher on the following:

1. subjects and study involving formal and individual work.
2. subjects and study involving informal and group work.
3. health and hygiene habits.

Dividing the work of the primary child in this manner allowed the teacher to express her opinion of the child's accomplishment in school better than could be done in one statement of general ability.

#### Discussion of Tables

All correlations were computed by the rank difference method and translated into corresponding values of  $r$ . The probable errors were computed from

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<sup>1</sup>

See pages 90-2 this thesis.

a table for computing the probable error of the corrected rank correlation coefficient (23A:43).

Table V shows the correlation between the mental age and the rankings in school success of Group D classes. Most correlations show little more than chance relationship. Highest correlations exist

TABLE V

RELATION BETWEEN THE MENTAL AGE OF  
GROUP D CHILDREN AND SCHOOL SUCCESS

| Grade  | Coefficients of Correlation, Probable Errors<br>and School Work |                           |                                 |
|--------|---|---------------------------|---------------------------------|
|        | Formal<br>Work  | Informal<br>Work          | Health and<br>Hygiene<br>Habits |
| First  | $\text{r} = .29 \pm .13$  | $\text{r} = .33 \pm .13$  | $\text{r} = .08 \pm .14$        |
| Second | $\text{r} = -.02 \pm .14$                                       | $\text{r} = -.10 \pm .14$ | $\text{r} = -.19 \pm .14$       |
| Third  | $\text{r} = .44 \pm .11$  | $\text{r} = .40 \pm .12$  | $\text{r} = .33 \pm .13$        |

between mental age and school success in both informal and formal work in the third grade. In studying table V it appears that mental age is no more significant for one type of school work than for another.

Table VI shows the correlation between scores made on the social maturity scale and rankings in school success for Group D classes. There are, in most cases,

high correlations throughout table VI. Especially is this true of the first and second grades. Correlations for informal work are extremely high in all grades. No correlations are low enough to lack significance, the lowest being  $r = .62 \pm .09$  in the third grade. This exists in the relationship between social maturity and health and hygiene habits.

TABLE VI  
RELATION BETWEEN THE SOCIAL MATURITY SCORE  
OF GROUP D CLASSES AND SCHOOL SUCCESS

| Grade  | Coefficients of Correlation, Probable Errors,<br>and School Work |                   |                                 |
|--------|--|-------------------|---------------------------------|
|        | Formal<br>Work   | Informal<br>Work  | Health and<br>Hygiene<br>Habits |
| First  | $r = .85 \pm .04$  | $r = .89 \pm .03$ | $r = .81 \pm .05$               |
| Second | $r = .87 \pm .03$  | $r = .95 \pm .01$ | $r = .91 \pm .02$               |
| Third  | $r = .78 \pm .06$  | $r = .96 \pm .01$ | $r = .62 \pm .09$               |

Table VII shows the correlation between intelligence quotient and ranking in school success of Group D classes. Correlations in each case are positive but still considerably lower than those shown in table VI. The highest relationship between

between intelligence quotient and school success in both formal and informal work exists in the first grade. The most significant fact shown in a comparison

TABLE VII

RELATION BETWEEN INTELLIGENCE QUOTIENT  
OF GROUP D CLASSES AND SCHOOL SUCCESS

| Grade  | Coefficients of Correlation, Probable Errors,<br>and School Work |                  |                                 |
|--------|--|------------------|---------------------------------|
|        | Formal<br>Work   | Informal<br>Work | Health and<br>Hygiene<br>Habits |
| First  | $r.50 \pm .11$   | $r.44 \pm .11$   | $r.19 \pm .13$                  |
| Second | $r.27 \pm .13$   | $r.27 \pm .13$   | $r.10 \pm .14$                  |
| Third  | $r.25 \pm .13$   | $r.31 \pm .13$   | $r.23 \pm .13$                  |

of tables V, VI, and VII is that the lowest correlation between social maturity and school success is higher than the highest correlation between either mental age and school success or intelligence quotient and school success. Tables V and VII show very little relationship between intelligence quotient or mental age and health and hygiene habits.

Table VIII shows the correlation between the

TABLE VIII

RELATION BETWEEN THE MENTAL AGE OF  
GROUP P CHILDREN AND SCHOOL SUCCESS

| Grade  | Coefficients of Correlation, Probable Errors,<br>and School Work |                    |                                 |
|--------|--|--------------------|---------------------------------|
|        | Formal<br>Work   | Informal<br>Work   | Health and<br>Hygiene<br>Habits |
| First  | $r = .06 \pm .14$  | $r = -.19 \pm .14$ | $r = .25 \pm .13$               |
| Second | $r = .25 \pm .13$  | $r = .25 \pm .13$  | $r = .06 \pm .13$               |
| Third  | $r = .25 \pm .13$  | $r = -.27 \pm .13$ | $r = .29 \pm .13$               |

mental age and school success rankings of Group P children. No scores in table VIII are high enough to say that they represent more than chance relationship. The highest correlation is  $r = .29 \pm .13$ .

Table IX shows the correlation between social maturity scores and the school success rankings of Group P classes. This table shows a reasonably high correlation between social maturity and formal work, informal work, and health and hygiene habits of children in the first grade. Lower correlations are found in the second grade and no more than chance relationship in the third grade.

TABLE IX

RELATION BETWEEN SOCIAL MATURITY SCORE  
OF GROUP P CLASSES AND SCHOOL SUCCESS

| Grade  | Coefficients of Correlation, Probable Errors,<br>and School Work |                   |                                 |
|--------|--|-------------------|---------------------------------|
|        | Formal<br>Work   | Informal<br>Work  | Health and<br>Hygiene<br>Habits |
| First  | $r = .78 \pm .06$  | $r = .79 \pm .05$ | $r = .68 \pm .08$               |
| Second | $r = .46 \pm .11$  | $r = .42 \pm .12$ | $r = .44 \pm .11$               |
| Third  | $r = .06 \pm .14$  | $r = .13 \pm .14$ | $r = .19 \pm .13$               |

Table X shows the correlation between intelligence quotient and school success rankings of Group P classes. Correlations in both tables V and X are consistently low and generally below those obtained when the social maturity score is correlated with school success rankings.

A teacher's judgment in the Long Form of the Rating Scale of Social Maturity is more predictive of school success, when school success is judged by teachers, than is the score on a mental test, whether expressed in terms of mental age or in terms of intelligence quotient.

TABLE X

RELATION BETWEEN INTELLIGENCE QUOTIENT  
OF GROUP P CLASSES AND SCHOOL SUCCESS

| Grade  | Coefficients of Correlation, Probable Errors,<br>and School Work |                   |                                 |
|--------|--|-------------------|---------------------------------|
|        | Formal<br>Work   | Informal<br>Work  | Health and<br>Hygiene<br>Habits |
| First  | $r = .19 \pm .13$  | $r = .00 \pm .14$ | $r = .37 \pm .12$               |
| Second | $r = .19 \pm .13$  | $r = .35 \pm .12$ | $r = .10 \pm .14$               |
| Third  | $r = .15 \pm .14$  | $r = .15 \pm .14$ | $r = .15 \pm .14$               |

Since the Long Form of the Rating Scale of Social Maturity has been checked for validity and reliability it seems reasonable to say that social maturity is a better criterion of a child's success in the primary school than either mental age or intelligence quotient.

The foregoing tables reveal another interesting factor. The correlations between social maturity and success in school are lowest in the third grade, with but one exception. On the other hand correlations between mental age and school success are highest in the third grade. This conclusion is subject to error, however, because correlations between mental age and

school success in no case were above  $\sqrt{.441.11}$ .

### Summary and Conclusion

1. High correlations are found between the social maturity scores and the rankings in school success in formal and informal work in the primary grades.

2. Correlations indicate that the social maturity scale predicts more accurately a child's success in the primary grades than does mental age or intelligence quotient.

3. Correlations of tables VI and IX indicate a relationship between social maturity and health and hygiene habits.

4. Correlations between social maturity and school success show a tendency to be lower in the third grades than in the first and second.

## CHAPTER VI

### A SCALE FOR THE MEASUREMENT OF GROWTH IN SOCIAL MATURITY

#### Introduction

To measure social maturity in terms of growth items is not easy. Social maturity is not defined as are most growth factors. For instance, there are tests of achievement for the purpose of finding out whether the child measures up to standard for his age, grade, etcetera. Schools have definite subject matter to be acquired and definite objectives to be attained. The curriculum is built up and organized around the child's ability to master these.

The development of the social life of the child is altogether different. There is no definite subject matter to which he may be directed. It cannot be said, "Master this subject, or master that one, and you will be socially well adjusted." There are no definite methods by which a child may learn to be socially mature. Yet the importance of social traits cannot be over estimated. Emphasis is being

placed, more and more, upon the well adjusted life. Investigations into the personality of the one who is socially well adjusted are being made.

It is generally understood that achievement in subject matter does not assure success in life. Certain attitudes and habits acquired in school and through mingling with others are, no doubt, of more importance than the mastery of subject matter. Even though the importance of social traits is known, very few teachers take into account the social development of their pupils.

Before primary teachers can be expected to emphasize the development of social maturity in their teaching, there is a definite need for an instrument which is useable. To be most useable this instrument should be brief, objective, and all inclusive.

If it is possible to establish norms for social maturity, then children may be compared with these standards. This chapter is a study of growth in social maturity from two angles. First, can norms be established for social maturity? Second, can a short scale be formulated which will be adequate for use by the primary teacher?

A study of table II <sup>1</sup> shows no more than chance relationship between social maturity and chronological age within a certain grade. Grade differences are taken into consideration in this chapter rather than the chronological ages of the children for the study of growth in the social maturity rating scale.

#### Experimental Situation

The same 150 children <sup>2</sup>, known as Group D classes and Group P classes, are used for this study of growth in social maturity. In neither school is there five points difference in the mean intelligence quotient of the grades selected. According to teacher judgment the children of both Group D and Group P classes have about the same family and social background.

These children, selected as a representative group of their grade, were rated <sup>3</sup> on the social maturity rating scale. When the rating scale was

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<sup>1</sup> See page 93 this thesis.

<sup>2</sup> See page 90 this thesis.

<sup>3</sup> See page 83 for method of scoring.

administered, pattern names were not used. This was in order to eliminate any biased judgment which might result from knowing the pattern name. Items measuring each pattern were listed in individual tests.

Growth in Combined Group Scores.- Table XI shows the combined pupil scores made on the Long Form of the Rating Scale of Social Maturity.

TABLE XI

COMBINED SCORES FOR THE SIX GROUPS  
MADE ON THE LONG FORM OF THE  
RATING SCALE OF SOCIAL MATURITY

|                 | Grades and Scores |              |             |
|-----------------|-------------------|--------------|-------------|
|                 | First Grade       | Second Grade | Third Grade |
| Group P         | 11,026            | 12,985       | 15,506      |
| Group D         | 11,881            | 12,812       | 12,266      |
| Combined Groups | 22,907            | 25,797       | 27,772      |

Scores for Group P show consistent growth from grade to grade. This is also true for Group D, first and second grades. The third grade score is slightly below that of the second grade score. The

combined groups show very consistent growth scores for each succeeding grade.

Growth in Pattern Scores.-- Table XII shows the combined pupil scores made on each of the fourteen patterns constituting social maturity. In Group P classes there is a growth tendency shown in thirteen out of the fourteen patterns. The one exception is in dependability. This shows a lower score in the second grade than in the first. In Group D classes there are eight patterns showing growth throughout the three grades. There are, however, no patterns in which the second grade score is not higher than the first. The combined group scores shown in table XII reveal that all patterns, with but three exceptions, show growth. The three exceptions are in dependability, curiosity, and leadership. Curiosity and leadership show score increases in the second grade over the first grade. These results show a definite tendency toward growth in each succeeding grade.

Growth in Item Scores.-- One hundred<sup>4</sup> fifty-seven items are used to measure the fourteen patterns of maturity. Of these 157, there are thirty-nine<sup>5</sup>

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<sup>4</sup>  
See page 83 this thesis.

<sup>5</sup>  
These thirty-nine items are marked with an asterisk  
See Appendix B.

TABLE XII  
 COMBINED PATTERN SCORES FOR THE SIX GROUPS ON THE LONG FORM OF THE RATING SCALE  
 OF SOCIAL MATURITY

| Pattern Names           | Groups, Grades and Scores. |            |            |            |            |            |                 |             |             |
|-------------------------|----------------------------|------------|------------|------------|------------|------------|-----------------|-------------|-------------|
|                         | Group P                    |            |            | Group D    |            |            | Combined Groups |             |             |
|                         | 1st. Grade                 | 2nd. Grade | 3rd. Grade | 1st. Grade | 2nd. Grade | 3rd. Grade | 1st. Grades     | 2nd. Grades | 3rd. Grades |
| Dependability           | 1168                       | 1066       | 1236       | 1134       | 1161       | 1239       | 2302            | 2227        | 2475        |
| Group Compatability     | 777                        | 841        | 1033       | 885        | 894        | 905        | 1662            | 1735        | 1938        |
| Cooperation             | 808                        | 938        | 1133       | 946        | 981        | 941        | 1754            | 1919        | 2074        |
| Emotional Adjustability | 893                        | 1052       | 1190       | 1034       | 1102       | 1136       | 1927            | 2154        | 2326        |
| Fair-play               | 907                        | 1059       | 1255       | 1014       | 1083       | 1152       | 1921            | 2142        | 2407        |
| Courtesy and Politeness | 745                        | 888        | 1054       | 867        | 916        | 989        | 1612            | 1804        | 2033        |
| Self-confidence         | 773                        | 884        | 1101       | 840        | 916        | 812        | 1613            | 1800        | 1913        |

TABLE XII (continued)

| Pattern Names            | Group P    |            |            | Group D    |            |            | Combined Groups |             |             |
|--------------------------|------------|------------|------------|------------|------------|------------|-----------------|-------------|-------------|
|                          | 1st. Grade | 2nd. Grade | 3rd. Grade | 1st. Grade | 2nd. Grade | 3rd. Grade | 1st. Grades     | 2nd. Grades | 3rd. Grades |
| Kindness and sympathy    | 858        | 1046       | 1220       | 954        | 1004       | 1044       | 1812            | 2050        | 2264        |
| Neatness and Orderliness | 660        | 824        | 942        | 699        | 738        | 883        | 1359            | 1562        | 1825        |
| Originality              | 674        | 830        | 1049       | 615        | 718        | 519        | 1289            | 1548        | 1568        |
| Cheerfulness             | 770        | 890        | 1031       | 757        | 810        | 821        | 1527            | 1700        | 1852        |
| Efficiency               | 716        | 918        | 1143       | 745        | 969        | 762        | 1461            | 1814        | 1905        |
| Curiosity                | 578        | 796        | 969        | 637        | 731        | 465        | 1215            | 1508        | 1434        |
| Leadership               | 699        | 953        | 1150       | 754        | 872        | 598        | 1453            | 1825        | 1748        |

which show gains in score for each successive grade in both groups. Sixty-three more items show score gains when the groups are combined. When scores are combined for the remaining fifty-five items, all third grade scores are above those of the first grade. About one-half of the items show the third grade below the second, the other half show the second grade below the first.

#### Relation of Growth Items to Social Maturity

Considering all the items the results verify further the evidence shown in tables XI and XII that growth in social maturity is made in each grade. Apparently, the items selected in this scale were not just simple habits<sup>6</sup> in which children made no improvement. The thirty-nine items showing consistent growth in both groups and one other item showing growth when the groups were combined were correlated with the Long Form of the Rating Scale of Social Maturity. These items were chosen regardless of the patterns they represent and their importance in the rating scale.

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See page 81 this thesis.

The correlation between these items of growth and the Long Form of the Rating Scale of Social Maturity for the 150 primary children is  $r = .844 \pm .016$ . A high correlation such as this points to the existence of a definite relationship between the score on growth items and the social maturity score. It further points to the practicability of formulating a scale with norms for each grade and which would be truly representative of the rating scale.

#### The Short Form of the Rating Scale of Social Maturity

The first step in the formulation of a representative group of items was to include with the list of thirty-nine, the sixty-three items showing score gains when the groups were combined. This makes a total of 102 items from which a short scale is selected. The following standards were considered in the selection of items for a short scale by which to measure social maturity in primary children.

1. A greater number of items should be selected from patterns which seem most important.
2. Items showing the greatest variability between grade scores should have preference.
3. Items showing a tendency for consistent growth from grade to grade should be used.

Seventeen teachers were asked to judge the patterns as to their importance in the development of social maturity, each pattern to be rated on the following five point scale:

- "1" meaning high in importance
- "2" meaning between high and average in importance
- "3" meaning average in importance
- "4" meaning between low and average in importance
- "5" meaning low in importance.

Table XIII shows the findings for the fourteen patterns together with the average score for each pattern and its rank in importance.

According to the judgment of these teachers, the three patterns standing highest in importance are dependability, cooperation, and group compatibility. The three patterns standing lowest are leadership, curiosity, and originality. The range is between the average score for dependability, 1.29, and leadership 3.41. Analysis of the table shows very few judgments on any pattern below average in importance.

In the three high ranking patterns dependability received only four rankings below "1", group compatibility only six rankings below "1", and cooperation only eight rankings below "1". Of the low ranking patterns leadership had only one ranking of "1",

TABLE XIII

MEAN RATINGS AND RANKS FOR FOURTEEN  
PATTERNS OF SOCIAL MATURITY AS JUDGED  
BY SEVENTEEN TEACHERS

| <u>Traits</u>                       | <u>Average<br/>Rating</u> | <u>Rank in<br/>Importance</u> |
|-------------------------------------|---------------------------|-------------------------------|
| <u>Group<br/>compatibility</u>      | 1.64                      | 3                             |
| <u>Kindness and<br/>sympathy</u>    | 2.29                      | 8.5                           |
| <u>Efficiency</u>                   | 2.29                      | 8.5                           |
| <u>Fair-play</u>                    | 1.88                      | 4                             |
| <u>Emotional<br/>adjustability</u>  | 2.00                      | 6                             |
| <u>Courtesy and<br/>Politeness</u>  | 1.94                      | 5                             |
| <u>Dependability</u>                | 1.29                      | 1                             |
| <u>Neatness and<br/>orderliness</u> | 2.06                      | 7                             |
| <u>Self-confidence</u>              | 2.35                      | 10                            |
| <u>Cooperation</u>                  | 1.58                      | 2                             |
| <u>Originality</u>                  | 3.00                      | 13                            |
| <u>Curiosity</u>                    | 2.76                      | 12                            |
| <u>Leadership</u>                   | 3.41                      | 14                            |
| <u>Cheerfulness</u>                 | 2.41                      | 11                            |

curiosity one ranking of "1", and originality two rankings of "1". There is a similarity of judgment between the teachers.

Items Selected for New Scale.- Thirty

items were selected for a new social maturity scale. The selection of the items was based largely upon the judgment of the seventeen teachers. Three items were selected from the pattern of dependability, three from group compatibility, three from cooperation, three from fair-play, and three from emotional adjustability. Two items were chosen from each of the following patterns: courtesy and politeness, self-confidence, kindness and sympathy, neatness and orderliness and efficiency. One item was selected from each of the following patterns: originality, curiosity, and leadership.

With but one exception, these thirty items were selected from the 102 growth items. This one exception occurred in the pattern of dependability, which had only two items in this growth group. The third item chosen to represent dependability shows a fair variation from the first grade to the third. In the second grade it is only two score points below the first grade.

This group of thirty items is termed the Short Form of the Rating Scale of Social Maturity<sup>7</sup>. It may rightfully be called a rating scale. The items selected come from a growth group. Also, the number of items selected from each pattern was based largely upon the importance of that pattern in social maturity.

The correlation between the Short Form of the Rating Scale of Social Maturity and the Long Form of the Rating Scale of Social Maturity is  $.925 \pm .007$ . The Pearson "r" is based upon scores made by 150 primary children who were scored on the long form of the rating scale. This correlation is significant. It shows the possibilities in a short form which correlates very high with the long form. The scale is stated in concrete form and is easily used.

Tentative Grade Norms.- Table XIV shows the means, figured to the nearest whole number, made<sup>8</sup> by the 150 primary children on the Short Form of the Rating Scale of Social Maturity.

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<sup>7</sup>

See Appendix C pages 161-2 for this scale.

<sup>8</sup>

See pages 90-2 for a discussion of these children.

**TABLE XIV**  
**TENTATIVE NORMS FOR THE SHORT FORM**  
**OF THE RATING SCALE OF**  
**SOCIAL MATURITY**

| Items            | Grades and Mean Scores |              |             |
|------------------|------------------------|--------------|-------------|
|                  | First Grade            | Second Grade | Third Grade |
| Number of Pupils | 50                     | 50           | 50          |
| Mean Score       | 86                     | 98           | 111         |

Consistent advancement is seen in the mean scores made. These means are to be considered only as tentative norms.

The question whether children advance socially by chronological age is studied for 139 children ranging between ages six years and four months to nine years and four months. These children are from the group of 150 previously discussed and who are within this three year range.

Table XV shows the averages, to the nearest whole number, made on the Short Form of the Rating Scale of Social Maturity. Age intervals of four months are used for these primary school children.

TABLE XV  
 DISTRIBUTION BY AGE OF SCORES  
 MADE ON THE SHORT FORM OF A  
 RATING SCALE OF SOCIAL MATURITY

| Age Intervals* | Mean Scores, Lowest Scores and Highest Scores |            |              |               |
|----------------|---|------------|--------------|---------------|
|                | N   | Mean Score | Lowest Score | Highest Score |
| 9-0            | 7   | 113        | 91           | 124           |
| 8-8            | 22  | 110        | 77           | 127           |
| 8-4            | 17  | 106        | 80           | 125           |
| 8-0            | 14  | 101        | 71           | 120           |
| 7-8            | 19  | 94         | 65           | 120           |
| 7-4            | 11  | 101        | 83           | 120           |
| 7-0            | 15  | 93         | 67           | 121           |
| 6-8            | 19  | 87         | 72           | 111           |
| 6-4*           | 15  | 78         | 68           | 119           |

\* 6-4 means the age interval beginning at 6 years 4 months and including 6 years 7 months.

It is difficult to draw definite conclusions on these figures because there are too few cases in each age interval. There is, however, a definite trend toward growth and only in one case is the advanced age score less than the preceding age score. If the ages were divided as six years, seven years,

eight years, and nine years, a definite tendency toward growth would be shown.

Table XV further reveals that, within this three year range, some children in older age intervals make almost as low scores as those in younger age intervals. The reverse is also true.

#### Consistency of Judgments Between Different Teachers

The scale was checked in order to find out how nearly alike teachers rated the same children. Seventy-four primary school children were selected from three schools in the city of Cincinnati for this purpose. The three schools are cooperating centers for student teaching for the Teachers College of the University of Cincinnati. Twenty-five first grade children known to three teachers, the cooperating teacher and two fifth year student teachers, were selected from the College Hill Elementary School. Twenty-five second grade children known to three teachers, the cooperating teacher and two fifth year student teachers were selected from Kilgour Elementary school. Twenty-four third grade children known to three teachers, the cooperating teacher and two fifth

year student teachers, were selected from Bond Hill elementary School. These children were rated independently by the three teachers for each grade on the Short Form of A Rating Scale of Social Maturity. There was no discussion of the children between the teachers.

Table XVI shows the correlation between the raters for each grade. Rater I in each case is the cooperating teacher. These correlations are the

**TABLE XVI**  
**RELATION BETWEEN THE RATINGS OF THE SAME**  
**CHILDREN BY DIFFERENT TEACHERS**

| Raters* | Coefficients of Correlation, Probable Errors and Grades |                   |                   |
|---------|---|-------------------|-------------------|
|         | First Grade   | Second Grade      | Third Grade       |
| I-II    | $r = .41 \pm .11$                                       | $r = .72 \pm .07$ | $r = .85 \pm .04$ |
| I-III   | $r = .47 \pm .11$                                       | $r = .71 \pm .07$ | $r = .81 \pm .07$ |
| II-III  | $r = .47 \pm .11$                                       | $r = .85 \pm .04$ | $r = .88 \pm .03$ |

\*Teachers who rated children in the first, second, and third grades respectively.

Pearson "r" computed from scatter diagrams.

The most significant fact in this table is the consistency of the coefficients of correlation for each grade. All first grade correlations range from  $\pm .41 \pm .11$  to  $\pm .47 \pm .11$ . Even though these correlations are not high, scarcely could it be said that they are only chance relationships. All second grade correlations range from  $\pm .71 \pm .07$  to  $\pm .85 \pm .04$ . These correlations are within close range and are high enough to be significant. All third grade correlations range from  $\pm .81 \pm .05$  to  $\pm .88 \pm .03$ . These correlations are also significant.

From an analysis of the table it appears that third grade children can be more accurately rated than second, and second grade children can be more accurately rated than first.

The correlations of table XVI indicate that the rating scale is objective. Since this is true, it may be used with confidence in the primary school.

Garrett summarizes the discussion pertaining to the significance of correlations (28:298).

There seems to be fairly general agreement among workers with tests that an "r" from .40 to .70 denotes substantial or marked relationship. "r" from .70 to 1.00 denotes high relationship.

Haggerty, Olson, and Wickman (35:2)

found in connection with the Behavior Rating Schedules ratings of the same pupils, when made by different judges under somewhat different conditions, commonly correlated about .60 for elementary children.

#### Summary and Conclusions

1. There is a definite tendency toward growth in the patterns constituting social maturity. This is also true of the items measuring each pattern.
2. In two experimental school situations, a correlation of  $\sqrt{.8441.06}$  is found between scores made on items showing consistent growth and the Long Form of the Rating Scale of Social Maturity. These items were selected irrespective of the pattern they represented.
3. There is a correlation of  $\sqrt{.9251.007}$  between the Short Form of the Rating Scale of Social Maturity and the Long Form of the Rating Scale. The Short Form of the Rating Scale of Social Maturity is made up of carefully selected items which represent growth. All patterns are included in this scale.
4. One hundred thirty-nine children show growth tendencies in scores made on the Short Form of the Rating Scale of Social Maturity, when placed in their

respective groups by chronological age. The chronological ages are divided into four month intervals, beginning at six years, four months and including nine years, four months. The children are classified under these divisions.

5. When three teachers rated the same children, the reliability of ratings made show correlations between  $r = .41 \pm .11$  and  $r = .47 \pm .11$  in the first grade,  $r = .71 \pm .07$  and  $r = .85 \pm .04$  for the second grade, and  $r = .81 \pm .05$  and  $r = .88 \pm .03$  for the third grade. These relationships are significant because of their consistency and because of the high correlations obtained.

CHAPTER VII  
FINAL SUMMARY AND CONCLUSIONS

Summary

This study deals with the development and use of an instrument which is intended to adequately measure social maturity in the first, second, and third grades of the elementary school. The purpose of the investigation is to aid primary teachers in a better understanding of the social traits of the young child.

The complexity of the problem of social maturity is well illustrated in this study. Social maturity does not consist of a unitary factor, but involves many desirable social traits. In the measurement of these traits, social maturity itself has been measured.

Rating scales are considered valid techniques for the measurement and study of social characteristics, especially in the elementary school. Accordingly, this study employs a similar method.

The research is largely concerned with the

development of an instrument which includes all behavior patterns necessary for a complete classification of social traits.

The following techniques were used in the discovery of these necessary patterns:

1. Observation of children working and playing together.
2. Specific observation of children selected because of their adjustment or lack of adjustment in social traits.
3. Interviews with primary teachers.
4. Informal interviews with primary children.
5. Analysis of studies conducted by other research workers.
6. Criticisms by public school teachers and principals.

Results from these sources indicate that the following fourteen patterns are the constituents of social maturity at the primary level.

1. Group compatibility
2. Kindness and sympathy
3. Efficiency
4. Fair-play
5. Emotional adjustability
6. Courtesy and politeness
7. Dependability
8. Neatness and orderliness
9. Self-confidence
10. Cooperation
11. Originality
12. Curiosity
13. Leadership
14. Cheerfulness

Through the same sources items of behavior were obtained and classified under the proper pattern. One hundred fifty-seven items were used. These items were clearly and briefly stated and placed in a rating instrument. The primary grades of two elementary schools were used for experimental purposes. One hundred fifty children were rated on the social maturity scale in its long form.

Results pointed to the possibilities in such a scale for the measurement of social maturity. However, for practical purposes a shorter scale was desired. Thirty items were selected from the long form of the social maturity scale. These thirty items showed growth from grade to grade. This shorter scale, called the Short Form of a Rating Scale of Social Maturity, was used in three experimental situations in the city of Cincinnati in order to check the reliability of different teachers rating the same children.

### Conclusions

Since social maturity is so complex in nature, no one study can be considered final and conclusive. This work is merely a beginning in the study of the social life of the child. It should open

avenues for further research.

The facts revealed by this study enables the investigator to draw the following conclusions:

1. Studies before 1929 dealt largely with older children and adults. Interest centered primarily in the measuring and defining of social intelligence, social participation, etcetera, and in showing their relation to other measures. Attention is directed today to the younger child. Outstanding work has been done on the preschool level.

2. Rating instruments are accepted as one of the best methods of studying personality traits. The techniques used in this study proved adequate for the formulation of a reliable instrument for the measurement of social maturity.

3. Of the techniques used, informal interviews with children, proved to be the best method of studying social traits in the primary school child.

4. Mental age, chronological age, or the intelligence quotient cannot be used within a certain grade to predict social maturity. As measured by the rating scale developed social maturity at the primary level is shown to be largely independent of general intelligence.

5. Correlations indicate that the Long Form

of the Rating Scale of Social Maturity predicts more accurately a child's success in the primary grades than does mental age or the intelligence quotient.

6. This dissertation is a pioneer study in the measurement of social maturity with attention centered upon the growth aspect of traits and items. A high positive correlation of  $r = .844 \pm .06$  exists between scores made on items showing consistent growth gains in the primary grades of two elementary schools and social maturity scores. Further analysis of items shows a tendency toward growth in all items.

7. Dependability, group compatibility, and cooperation were judged by teachers to be the outstanding patterns in the group of fourteen. Curiosity, originality and leadership were considered least important.

8. The Short Form of the Rating Scale of Social Maturity, made up of thirty carefully selected growth items, correlates  $r = .925 \pm .007$  with the 157 items contained in the Long Form of the Rating Scale of Social Maturity.

9. When three teachers rated the same children on the Short Form of the Rating Scale of Social Maturity, correlations between the ratings ranged from  $r = .41 \pm .11$  to  $r = .47 \pm .11$  in the first grade,  $r = .71 \pm .07$  to  $r = .85 \pm .04$  for the second grade, and  $r = .81 \pm .05$  to

~~4.88±.32~~ for the third grade.

10. In view of the importance of social maturity to school success, special attention should be given to the measurement and development of social traits of children in the primary grades. This study not only shows the importance of these traits but it has developed a scale reasonably accurate for the measurement of such.

11. The following contributions are made to primary education by this study:

- a. A practical technique has been explained and used in the development of a rating instrument.
- b. Social maturity is an independent characteristic at the primary level.
- c. The importance of social maturity measurement is shown.
- d. Social maturity patterns are measured and their relative importance in a rating scale of social maturity, as judged by teachers, is shown.
- e. The relation of social maturity to school success is revealed.
- f. Social maturity may be measured by behavior items showing growth.
- g. A valid and reliable scale has been developed which may be used for the measurement of social maturity in the elementary school.

### Problems for Further Investigation

This study has opened up rather than closed avenues for further research in this field. Some related problems which would add to our knowledge of children may be listed.

1. A similar study of a group of children over a period of three or more years, using the rerating or retesting method.
2. The scientific development of a course of study for the teaching of social traits.
3. A study of the causes underlying retarded social development.
4. Studies of social maturity on different levels of child development covering short periods of time, these to result in an unbroken record of social maturity.
5. The development of social maturity measures for each grade of the elementary school which will be comparable with current measures of intelligence.
6. The determination of the advisability of using social maturity measures as a basis for child guidance in the schools.

7. The discovery of the relationship between social maturity and subject readiness in the lower grades of the elementary school.

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**A P P E N D I X**

**APPENDIX A**  
**INTRODUCTORY SHEET**

**RATING SCALE OF SOCIAL MATURITY**

**Directions to Raters**

**Read Through Carefully Before Beginning to Check Pupils**

For some time, we have been able to measure children in certain characteristics. We have shown how second graders are more developed than first and how third graders are more developed than second.

The purpose of this scale is to make a study of the development of the social life of first, second, and third grade children and to determine differences in the growth of social traits in those years.

1. For the Judge.- Much time has been given to the formulation of this scale and the results depend upon your cooperation and the soundness of your judgment in each case.

We believe each statement used represents a desired and positive characteristic. Thus, in measuring these items we will have insight into the social development of the child. **THE RATING OF ANY CHILD IS NOT DEPENDENT UPON COMPARISON WITH OTHERS.**

2. Directions.- (Read carefully). The rating scale consists of fourteen distinct tests, each of which measures a distinct phase of social maturity. Please give each child a rating on each trait with the symbol which nearest expresses the stage of development he has reached. **RATE EACH CHILD SEPARATELY ON ALL ITEMS IN ONE TEST BEFORE GOING TO THE NEXT CHILD.**

The symbols to be used in rating are as follows:

- \*1\* means never. The child has no development in the trait.
- \*2\* means 25% of the time. The child has some development but is still very low.
- \*3\* means 50% of the time. A fifty-fifty chance that the child will respond to the trait as given.
- \*4\* means 75% of the time. The child is noticeably developed in the trait so that he responds very often in the right way.
- \*5\* means always. The child has complete development in the trait.

Note: These symbols are thought of as being a quantitative statement of the child's development in each item.

3. Cautions in Rating.- (1) Give your honest opinion whether complimentary or not. Do not stop to

think up possibilities of doubt about ~~rating~~ and then <sup>148</sup>  
"give the benefit of the doubt." (2) Beware of the  
influence of previous ratings. (3) REMEMBER YOU ARE  
CHECKING CHILDREN WITH REGARD TO THE PERFECTED ITEMS -  
YOU ARE NOT COMPARING THEM WITH EACH OTHER. (4) Be  
sure to rate each child exclusively on the trait under  
consideration, avoid any "halo effect."

APPENDIX B  
PATTERNS AND ITEMS USED IN THE LONG FORM  
OF THE RATING SCALE OF SOCIAL MATURITY

TEST I

(Dependability)

Rate children using symbols 1,2,3,4,5, according to the meaning given to each number in the introductory sheet. If you are not sure of the meaning consult the directions. Be thoughtful and careful. REMEMBER YOU ARE CHECKING CHILDREN WITH REGARD TO THE PERFECTED ITEMS & YOU ARE NOT COMPARING THEM WITH EACH OTHER.

1. Does he complete the task started without urging?
2. Does he return to a task, unfinished from the previous day, and develop it?
3. Does he occupy himself with something worthwhile when the teacher is busy with other children or duties?
4. Does he assume responsibilities in the performance of duties?
5. Does he do his own work? i.e. not offering another's as his own.
6. Does he avoid exaggerations and inaccuracies?
7. Does he tell the whole truth in each situation? i.e. not pointing at someone else.
8. Does he care for and handle books carefully even though they do not belong to him?
9. Is he from day to day, consistent in his work?

10. Is he prompt in getting ready for work?
11. Is he reliable in performing a task? i.e. when told to do a thing will he do it?
12. Is he punctual in keeping appointments and agreements?
13. Would he seek to find the owner of a lost article even though he would like to have the article himself?
14. Would he admit his misdemeanor? i.e. tearing a page from a book, breaking a window, tripping another, etc.

## TEST II

### (Group compatibility)

1. Does he make friends quickly and easily?
- \*2. Does he subjugate himself to reasonable demands of the group when convinced of their value?
3. Does he say anything of community interest?
4. Does he engage actively in discussions?
- \*5. Does he adjust himself to the opposite sex without appearing self-conscious?
6. Does he work for the good of all when placed in any group?
7. Does he come through his misunderstandings to a point of agreement without appealing to an adult?
8. Do his expressions, actions, etc. show that he enjoys working with others?
9. Would he rather participate in playground activities than "walk with the teacher"?

10. Is a leader likely to want to choose him for his side?
11. Is he willing to sacrifice to further the group objectives?

## TEST III

## (Cooperation)

1. Does he lose himself as an individual in the group?
2. Does he obey the teacher promptly without resistance?
3. Does he give his best while playing any part in a game? i.e. even a minor part.
4. Does he do his share of work in group activities?
5. Does he work harmoniously with others in routine activities? i.e. keeping the room tidy and clean.
6. Does he do his part in making play enjoyable and successful?
7. Does he take his place in line or in a called group quietly and quickly?
8. Does he exhibit good school spirit?
9. Does he feel any responsibility for classroom affairs?
10. Does he present good suggestions to better the group activities?
11. Does he find ways of adapting his own work to the interest of the group?
12. Would he do something which might work a hardship on himself for the good of the group?

## TEST IV

## (Emotional adjustment)

1. Does he adjust himself well after he has been thwarted? i.e. no prolonged after effects, pouting, irritability, etc.
2. Does he try to overcome obstacles and frustrations in a courageous manner?
3. Does he strive for personal improvement after defeat?
- \*4. Does he remain composed toward unfriendly advances?
- \*5. Does he remain calm when he cannot get what he wants?
6. Does he admire superiority in others?
7. Does he manifest a feeling of security in new environments?
8. Does he express evidence of being happy and contented in school?
- \*9. Does he take criticism kindly?
10. Does he make a genuine effort to control his emotion?
- \*11. Is he free from excitable, excessive talking?
- \*12. Is he able to take a joke?
- \*13. Is he free from nervous habits? i.e. biting nails, fiddling with hands and clothes.

## TEST V

## (Fair-play)

1. Does he act the part of a good sport even though he loses? i.e. does not sulk.

2. Does he act the part of a good sport when he wins? i.e. does not gloat.
- \*3. Does he accept failures as his own responsibility? i.e. does not blame others, tools or materials, or exaggerate another's part.
- \*4. Does he accept decisions of the one in charge of the game without showing emotion?
5. Does he await his turn even though less mature children are involved?
6. Does he apply "fair-play" of his own free will, even though it affects him adversely?
7. Does he show respect for the views of others? i.e. does not have to have his own way or argue the point unduly.
8. Does he respect playthings and books belonging to his classmates and school?
- \*9. Does he play games fairly with all children, not taking unfair advantage of others?
10. Does he try to help others feel the need of fair-play?
- \*11. Is he peaceful and loveable? i.e. not threatening or intimidating other children.
- \*12. Is he loyal to friends or groups of which he is a part?
13. Is he generous in giving credit when credit is due?

#### TEST VI

(Courtesy and politeness)

1. Does he use only the space allotted to him? i.e. hang wraps on one hook, keeps materials close to him.

- \*2. Does he try to express appreciation for kindness shown him?
- \*3. Does he think to go around two people engaged in conversation?
  - 4. Does he show courtesy to teachers both in the classroom and out?
  - 5. Does he talk and laugh in a quiet manner?
- \*6. Does he pick up things dropped by other people?
- \*7. Does he, of his own free will, try to be courteous and polite?
- \*8. Does he answer questions in polite manner and polite language?
  - 9. Would he offer a visitor a chair or an explanation of the work without being told to do so?
  - 10. Would he suggest to the teacher that he be the one left out if someone in the group must be an onlooker?
- \*11. Is he courteous to other children in discussions? i.e. not interrupting, talking loudly, etc.

#### TEST VII

#### (Self-confidence)

- 1. Does he work as far as possible on a problem before asking help?
- 2. Does he make decisions and choices quickly?
- 3. Does he have finality of decision? i.e. abide by decisions and choices.
- 4. Does he give his contributions to the group without self-consciousness?
- 5. Does he have confidence in his own ability to meet new problems in his work and play?

6. Does he talk in a convincing manner?
7. Does his behavior inspire the group with confidence in his ability to do things?
8. Is he eager to have responsibilities?
9. Is he willing to attempt problems presenting extreme difficulty?
10. Is he self-reliant, rarely asking for assistance?
11. Is his confidence in himself in keeping with his ability? i.e. not over-estimated, nor under-estimated.

### TEST VIII

(Kindness and sympathy)

- \*1. Does he console a classmate who has met with an accident?
2. Does he help smaller children on the playground when he sees the need?
3. Does he think of something to do to help an unfortunate playmate?
4. Does he show pleasure over the accomplishments of others?
5. Does he try not to be overly rough on the playground?
6. Does he make an effort to express sympathy?
- \*7. Is he inclined to sympathize rather than laugh at those in difficulty?
- \*8. Is he anxious to play with everyone? i.e. not cliquish.
9. Is he willing to stop playing an interesting game to help another in distress?
- \*10. Is he willing to help others who are behind in their work?

- \*11. Would he go out of his way to help another child find his lost belongings?
- \*12. Are his remarks about others kind? i.e. not saying things to hurt others feelings.

## TEST IX

## (Neatness and orderliness)

- \* 1. Does he keep his clothes clean?
- \* 2. Does he put away his books and materials neatly?
  - 3. Does he destroy papers that are of no value?
- \* 4. Does he give evidence of well co-ordinated bodily movements?
- \* 5. Does he have good posture habits?
- \* 6. Does he have pride in the matter of personal appearance?
- \* 7. Is he interested in having the finished product neatly and well done? i.e. regards neatness ahead of speed, "getting by", etc.
  - 8. Is he exact and neat in written work? i.e. drawing straight lines, in matching phrases, underscoring words, coloring within bounds, etc.
- 9. Is he interested in keeping the room in order?

## TEST X

## (Originality)

- \* 1. Does he find additional worthwhile work to do when he has finished a task and has no unfinished assignments?
- 2. Does he tend to be constructively imaginative in oral and written expression?

3. Does he have dramatic ability?
4. Does he find, by himself, ways of overcoming difficulties?
5. Does he suggest ways of making his surroundings better for the sake of attractiveness, ease and efficiency?
- \*6. Does he have good taste in decoration? i.e. bulletin board, teachers desk, flowers, windows, etc.
7. Is he creative in art and handwork? i.e. music, drawing, modeling, constructing, etc.
8. Is he clever in inventing games and amusements?
9. Is he independent in choosing work?
10. Could he suggest a costume in keeping with a particular character in his classroom skits?

#### TEST XI

#### (Cheerfulness)

1. Is he agreeable at all times, yet not meek?
- \*2. Is his characteristic facial expression agreeable?
3. Does his voice have good tone quality?
4. Can he receive praise without being spoiled?
5. Does he have a cheery "good-morning" for people he meets?
- \*6. Does he try to make others happy?
7. Does he make a congenial companion to his friends?
8. Does he try to make strangers feel comfortable?
- \*9. Does he have a good sense of humor?

- \* 10. Does he have a direct, pleasant manner of speaking? i.e. not egotistical, shy or self-conscious?

## TEST XII

## (Efficiency)

1. Does he listen to and follow directions carefully?
2. Does he persevere even when making little or no progress?
3. Does he express his ideas accurately and clearly?
4. Does he give his best in work and play? i.e. not satisfied with a fair achievement even though he might "get by".
5. Does he try to overcome difficulties and problems without appealing to an adult?
6. Does he show interest in finding out what is wrong with his work?
7. Does he plan carefully before cutting into new materials?
8. Does he go from one purposeful activity to another without waste of time?
9. Does his thinking show signs of having method? i.e. not jumping at conclusions, considering all the evidence, etc.
10. Can he think accurately in unusual circumstances? i.e. loss of books and materials, facing an accident, sudden anger in others, etc.
11. Is his quality of work interfered with when the superintendent, health nurse, etc. enter the room?

TEST XIII  
(Curiosity)

1. Does he give evidence of wondering about natural phenomena? i.e. storms, fossils, growing things, etc.
2. Does he ask questions for information?
3. Does he bring interesting things to school and ask about them?
4. Does he show definite interest in what other children or adults are doing?
5. Is he willing to do research in order to find the answer to problems? i.e. reading, asking questions of parents, collecting materials, etc.
6. Is he alert and interested in new situations?
7. Is he interested in how a thing is made?
8. Is he interested in trying out things?
9. Is he curious enough to prolong his attention in order to find the answer to his question?

TEST XIV  
(Leadership)

1. Is he in demand for suggestions in group activities?
2. Is he a favorite playmate with the other children?
3. Is he persuasive in getting other children to do what he wishes them to do?
4. Is he able to offer suggestions to others in solving their problems?

5. Is he generous? i.e. with his time and belongings.
6. Is he consulted by individual classmates when they need help?
7. Do other children accept him as a competent chairman or leader in their activities?
8. Do other children generally follow his suggestions?
9. Does he have foresight regarding the consequences of his behavior?
10. Can he put himself forward without antagonizing others?
11. Does he command the attention of the group while speaking?

APPENDIX C  
THE SHORT FORM OF  
THE RATING SCALE OF SOCIAL MATURITY

RATING SCALE OF SOCIAL MATURITY

Directions

101

Check (✓) the symbol 1, 2, 3, 4, 5, which best describes the development of the child in each characteristic.

Interpretation of Symbols:

- "1" means never. The child has no development in the trait.
- "2" means 25% of the time. The child has some development but is still very low.
- "3" means 50% of the time. A fifty-fifty chance that the child responds to situations involving the trait as given.
- "4" means 75% of the time. The child is noticeably developed in the trait so that he responds very often in the right way.
- "5" means always. The child has complete development in the trait.

REMEMBER YOU ARE CHECKING EACH CHILD WITH REGARD TO THE PERFECTED CHARACTERISTIC - YOU ARE NOT COMPARING THEM WITH EACH OTHER.

|   |  |              |   |   |   |   |
|---|--|--------------|---|---|---|---|
| Child's Name: _____   |  | Grade: _____ |   |   |   |   |
| Child's Age (as of May 1, 1937) Years: _____ Months _____   |  | SYMBOLS      |   |   |   |   |
| Child's I.Q.: _____ Intelligence Test Used: _____   |  | 1            | 2 | 3 | 4 | 5 |
| 1. Does he return to a task, unfinished from the previous day, and develop it?  |  |              |   |   |   |   |
| 2. Does he tell the whole truth in each situation? i.e., not pointing at someone else.  |  |              |   |   |   |   |
| 3. Would he admit his misdemeanor? i.e., tearing a page from a book, breaking a window, tripping another, etc.                        |  |              |   |   |   |   |
| 4. Does he make friends quickly and easily?   |  |              |   |   |   |   |
| 5. Does he subjugate himself to reasonable demands of the group when convinced of their value?  |  |              |   |   |   |   |
| 6. Does he adjust himself to the opposite sex without appearing self-conscious?   |  |              |   |   |   |   |
| 7. Does he lose himself as an individual in the group?  |  |              |   |   |   |   |
| 8. Does he exhibit good school spirit?  |  |              |   |   |   |   |
| 9. Would he do something which might work a hardship on himself for the good of the group?  |  |              |   |   |   |   |
| 10. Does he remain calm when he cannot get what he wants?   |  |              |   |   |   |   |
| 11. Is he able to take a job?   |  |              |   |   |   |   |
| 12. Is he free from nervous habits? i.e., biting nails, fiddling with hands and clothes.  |  |              |   |   |   |   |
| 13. Does he accept decisions of the one in charge of the game without showing emotion?  |  |              |   |   |   |   |
| 14. Does he accept failures as his own responsibility? i.e., does not blame others, tools or materials, or exaggerate another's part. |  |              |   |   |   |   |

|  | SYMBOLS |   |   |   |   |
|--|---------|---|---|---|---|
|  | 1       | 2 | 3 | 4 | 5 |
| 15. Does he play games fairly with all children, not taking unfair advantage of others?  |         |   |   |   |   |
| 16. Does he of his own free will try to be courteous and polite?   |         |   |   |   |   |
| 17. Does he answer questions in polite language and polite manner?   |         |   |   |   |   |
| 18. Does he work as far as possible on a problem before asking help?   |         |   |   |   |   |
| 19. Does he have confidence in his own ability to meet new problems in his work and play?  |         |   |   |   |   |
| 20. Is he inclined to sympathize rather than laugh at those in difficulty?   |         |   |   |   |   |
| 21. Are his remarks about others kind? i.e., not saying things to hurt others feelings.  |         |   |   |   |   |
| 22. Does he have good posture habits?  |         |   |   |   |   |
| 23. Is he interested in having the finished product neatly and well done? i.e., regards neatness ahead of speed, "getting by", etc.      |         |   |   |   |   |
| 24. Does he have good taste in decoration? i.e., bulletin board, teachers desk, flowers, windows, etc.                                   |         |   |   |   |   |
| 25. Is his characteristic facial expression agreeable?   |         |   |   |   |   |
| 26. Does he have a direct, pleasant manner of speaking? i.e., not egotistical, shy or self-conscious?                                    |         |   |   |   |   |
| 27. Does he go from one purposeful activity to another without waste of time?  |         |   |   |   |   |
| 28. Can he think accurately in unusual circumstances? i.e. loss of books and materials, facing an accident, sudden anger in others, etc. |         |   |   |   |   |
| 29. Is he alert and interested in new situations?  |         |   |   |   |   |
| 30. Can he put himself forward without antagonizing others?  |         |   |   |   |   |

Total score \_\_\_\_\_ (Do not fill in)

This child was rated by (Please sign) \_\_\_\_\_