

University of Montana

ScholarWorks at University of Montana

Graduate Student Theses, Dissertations, &
Professional Papers

Graduate School

1958

We must cultivate our gardens a study of the social status of the gifted child amongst his peers

Mary Goetting Huffine
The University of Montana

Follow this and additional works at: <https://scholarworks.umt.edu/etd>

Let us know how access to this document benefits you.

Recommended Citation

Huffine, Mary Goetting, "We must cultivate our gardens a study of the social status of the gifted child amongst his peers" (1958). *Graduate Student Theses, Dissertations, & Professional Papers*. 7909.
<https://scholarworks.umt.edu/etd/7909>

This Thesis is brought to you for free and open access by the Graduate School at ScholarWorks at University of Montana. It has been accepted for inclusion in Graduate Student Theses, Dissertations, & Professional Papers by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact scholarworks@mso.umt.edu.

WE MUST CULTIVATE OUR GARDENS

A Study of the Social Status
of the Gifted Child
Amongst His Peers

by

MARY G. K. HUFFINE

B.A. Montana State University, 1957

Presented in partial fulfillment of the requirements for the degree of

Master of Arts

Department of Sociology

MONTANA STATE UNIVERSITY

1958

Approved by:


Chairman, Board of Examiners


Dean, Graduate School

AUG 21 1958

Date

UMI Number: EP38710

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



UMI EP38710

Published by ProQuest LLC (2013). Copyright in the Dissertation held by the Author.

Microform Edition © ProQuest LLC.

All rights reserved. This work is protected against unauthorized copying under Title 17, United States Code



ProQuest LLC.
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 - 1346

. . . "'Tis well said," replied Candide, "but we must cultivate our gardens."

Voltaire Candide 1.30.

ACKNOWLEDGMENTS

It is a pleasure to acknowledge the gracious guidance and generous help given me by the various members of my Committee--Dr. Thomas C. Burgess, Dr. Barbara R. Day, and Dr. Raymond L. Gold.

I am particularly indebted to Dr. Gold, who acted as Chairman of my Committee, and whose experienced and liberal counsel was always available to me.

Appreciation is also extended to the members of the library staff, and to Dr. James J. R. Munro, who first invited my attention to the imminent testing program in the city schools.

Without the generous cooperation of Mr. Clarence S. Porter, Superintendent of Schools, his staff, principals, and third grade teachers, this investigation would not have been possible. To them I extend sincere thanks.

It is impossible to adequately express the debt of gratitude truly due and felt toward my husband and family for their patience throughout this study.

Mary G. K. Huffine

TABLE OF CONTENTS

	Page
LIST OF TABLES	v
LIST OF ILLUSTRATIONS	vi
INTRODUCTION	1
Chapter	
I. THOUGHT'S A WEAPON	8
II. THE WAY OF THE INVESTIGATION	40
III. THE FINDINGS OF THE INVESTIGATION	67
IV. SUMMARY AND CONCLUSIONS	96
APPENDIX	113
BIBLIOGRAPHY	119

LIST OF TABLES

Table	Page
1. Incidence of Expected and Actual IQ Scores Located	44
2. Distribution of Gifted and Typical Children in Class- rooms Where Sociometric Questionnaire Was Administered . .	71
3. Distribution of Total Preference Choices on All Cri- teria, As to Sex and Groups (Gifted vs. Typical)	117
4. Incidence of Stars Within Gifted and Typical Groups . . .	76
5. Incidence of Neglectees Within Gifted and Typical Groups	77
6. Incidence of Critical Scores on Each Social Criterion, Among Children Chosen as Stars	78
7. Teachers' Correct Selections of Children's Choices on Sociometric Questionnaire	88
8. Mean Ratings Given by Classroom Teachers to the Gifted Boys	91
9. Mean Ratings Given by Classroom Teachers to the Gifted Girls (N=46), and to Total Group of Gifted	92

LIST OF ILLUSTRATIONS

Figure	Page
1. Percentages of Gifted and Typical Boys and Girls in Total Group to Which the Questionnaire Was Administered	74
2. Distribution of the Children, As to Sex and Group, Who Were Chosen at Least Once on Any of the Social Criteria	75
3. Percentages of Stars in Gifted and Typical Groups Who Attained Critical Scores on the Various Criteria	118
4. Distribution of Teachers' Ratings of Gifted Group on Each Category	94

INTRODUCTION

GIFTEDNESS

The Whence of the Study

The genesis of this study lies in a combination of "golden opportunity" and an ever-growing interest in the subject of the mentally superior child. My interest in the subject is not new, by any means. But it has been considerably sharpened through an expanded acquaintance with psychological testing in recent years.

Representing one facet of the subject of our intellectually superior youth is the puzzler which keeps cropping up repeatedly. I refer to the age-old contrast between individual potential and personal achievement, noticeable almost everywhere, but particularly compelling of attention in cases of identified intellectual superiority.

Karl Mannheim has pointed out:

The unceasing interplay between our primary impulses which seek for satisfaction and their repudiation or remoulding by the counteraction of the already established relationships makes the theme of the history of mankind.¹

Mannheim's idea involves recognition of a bio-cultural factor in the age-old contrast mentioned above. It would be difficult to deny such an involvement, while recognizing the influence that any individual in

¹Karl Mannheim, Essays on Sociology and Social Psychology, ed. Paul Kecskemeti (New York: Oxford University Press, 1953), p. 240.

society must feel from his own social environment. Acknowledging the influence, as we must, then it would seem that a self-conscious examination of our present society might be in order.

Just what is it that prevents natural ability from being synonymous with, and equal to, personal achievement? Where is the thwarting factor? Is it the reaction upon the individual of established social relationships, as they are found in empirical institutions and function? Such must be the concern of sociologists. Or is the origin of motivation, characterized in "psychic driving forces"¹ chiefly of subjective nature? Some psychologists might favor this explanation.

The question of motivation is an extensive one which commands the attention of sociologists and psychologists alike. They also generally recognize that such matters as status, role, and self-other orientations are also associated with individual ability and achievement. Yet, neither group of social scientists has made systematic efforts to link these important dimensions of interaction to the recognized relationship between measured intelligence and personal fulfillment. Particularly noticeable in both groups is the dearth of effort to link status and role with the intellectual performance of children.

It is probably true that complete personal fulfillment for everybody is possible only in Utopia. However, given the available research tools of sociology and psychology, it is by no means premature to point out that it is already possible to begin to identify gifted children, and guide them toward realization of their individual potentials. Better

¹Ibid., 241.

guidance for them, and for other children, awaits fuller utilization of these available research tools.

Status-Awareness and Achievement

A child is only part way on what we hope will be a unilinear path to maturity. And for most young children, this is a natural and pleasant process. But, as regards the mentally superior child, he is, ex termini (by force of the phraseology), a member of a statistical minority.¹ Does such a numerical position necessarily have its counterpart in ambiguity of status? A creature of one mental age and a differing chronological age, could such a child find himself confused, uncertain as to just where he does belong in the vast society he sees about him?

The predicament of Christopher Robin comes to mind:

Halfway down the stairs
Is a stair
Where I sit.
There isn't any
Other stair
Quite like
It.
I'm not at the bottom,
I'm not at the top;
So this is the stair
Where
I always
Stop.

Halfway up the stairs
Isn't up,
And isn't down.

¹David Wechsler puts only 2.2% of the general population at an IQ level of 130 or above (WAIS Manual /New York: The Psychological Corporation, 1955/, p. 20). Highly relevant to our discussion here are the research findings which to date, show that children of high IQ's maintain their score levels relatively well into and through adulthood (Catherine Cox Miles, "Gifted Children," Manual of Child Psychology, ed. Leonard Carmichael /John Wiley & Sons, Inc., 1954/, pp. 1008-19.

It isn't in the nursery,
 It isn't in the town.
 And all sorts of funny thoughts
 Run round my head:
 "It isn't really
 Anywhere!
 It's some where else
 Instead!"¹

Neither in the nursery nor in the town, neither upstairs nor down-- such a plight does sound confusing. And especially so, when we realize that, to give an adequate performance, an individual must know what is expected of him.

This notion of status-awareness vs. achievement leads to some speculating. Does the mentally more capable child know what society expects of him? (For that matter, does society know, itself?) If not, then does this social neophyte of contrasting chronological and mental ages find it difficult not only to discover, but also assume, a becoming, yet personally satisfying role? How does he function within his social group? Do the other group-members like him, and accept him? Does he like and accept them? Just what are their feelings toward each other? Most important, are these reciprocal feelings such as make for a sharing of interests, values, goals?

Our specific concern is with the fulfillment of potential. Eventually, the gifted child must realize that he is, somehow, different from the others of his age group. Does this state of being unusual--intellectually set apart--make it difficult for him to identify himself with his more average peers, as he goes about the process of every-day living? If

¹A. A. Milne, "Halfway Down," When We Were Very Young (New York: E. P. Dutton & Co., Inc., 1934), p. 81.

so, then the child is handicapped, since he cannot identify himself with the group within which he is functioning, nor can he claim true identification with any other group, for that matter.

Marginality can be unhealthy for any individual, because of the frustrations and tensions it may cause within him. With a child, who is just learning the tools of social communication and interaction, such an ambiguity of status would lead to uncertainty of behavior. In most cases,¹ this would be detrimental to maximal performance and achievement. Most children, regardless of their intelligence, need a great deal of reassurance and positive direction as they grow up.

Sociologists and psychologists recognize the importance of an individual's awareness of the status and role assigned him, knowing that it is only through such an awareness that the individual can be assured of what is expected of him. Only when he is cognizant of these expectations can he plot a positive pattern for his own behavior in society. The child, as well as the adult, must know what is expected of him, where and what is the niche which belongs to him.

Why, then, in the many investigations aimed at determining the possible social and psychological disorders which might affect performance and achievement--why is the gifted child, representing so much of the nation's potential, overlooked? In a country like ours, noted for its efficiency and practicality, the omission pointed out here seems paradoxical.

¹Too little is known about the genius (IQ of 180 or above) to either include or exclude him as being affected by such ambiguity.

The Why of the Study

This research is aimed at investigating the social status, and thereby, through deduction the role,¹ of the gifted child, in terms of peer group acceptance and functioning. Accepting the concept of reciprocity as an essential factor of interaction, data from the present research should provide us with a clue to the subject's attitude toward society. Is there any pattern, in the tradition of the formal school, which is apparent in the reciprocal interaction of the gifted children among their more-nearly average peers? Do the more able children show any promising signs of emerging leadership, apparent in the interactions of the group functioning within the regular school room? We are hopeful.

Specifically, the present study aims to discover at least partial answers to such questions as:

1. Does the gifted child accept a membership role amongst his classmates? Is he accepted by them?
2. Does his status appear to be at all unique?
3. Does this same status give any evidence to support a promise of developing leadership abilities, and/or the inclination to do so?

Insight into the young child's awareness of the differing attitudes and opinions of others should also emerge from this study, to show how

¹Role and status are deemed to be inseparable, the first being simply a representation of the dynamic aspect of the second. Thus, it would seem to follow that, by determining the status of an individual child within his peer group, we can legitimately deduce something about his role. Furthermore, it should be pointed out that acceptance or rejection by children at elementary school ages, especially in the lowest grades, is usually more spontaneous than calculated. The children involved in this investigation were all third graders.

far along he is on the path from egocentricity to cognizance of the generalized other, and thus his own unity of self.

Faris has expressed the opinion that "proper" methods of socialization could bring out a great deal of latent talent now in existence, adding "This will probably constitute the accomplishment of the next half-century."¹ This study is an attempt to contribute toward such an accomplishment.

A second objective is to invite further sociological study to the subject of gifted children as potential leaders. Not only the educator, but the whole nation, has a stake in the unique resource located in its intellectually superior youth. It may be that it is the responsibility of the sociologists, in the Comtian tradition, to further expound this fact.

¹Robert E. L. Faris, Social Psychology (New York: The Ronald Press, 1952), p. 391.

CHAPTER I

THOUGHT'S A WEAPON

Currently, much attention is being focussed on the gifted child. In 1955, there were almost 30 million children between the ages of 5 and 17 enrolled in the public elementary schools of this country.¹ According to estimates based on normal curve distribution,² nearly 1-1/3 million of these children had intelligence quotients of 130 or better, ranking in the upper 4% of the population. Obviously, this represents an extensive potential of brain power--a natural resource which we cannot afford to overlook as our country strives to retain its badly-threatened position of prestige and pre-eminence.

James B. Conant, former President of Harvard University, has put it bluntly: "To find and educate the gifted youth is essential for the welfare of the country; we cannot afford to leave underdeveloped the greatest resource of the nation. To identify and guide gifted students as far as possible toward a place in our society commensurate with his or her ability is essential for the dynamic stability of free men in an age of cities and machines."³

¹U. S. Office of Education estimate, cited in The World Almanac (New York: New York World Telegram/1958/), p. 484.

²Maud A. Merrill, "The Significance of IQ's on the Revised Stanford-Binet," Journal of Educational Psychology, XXIX (1938), pp. 641-51.

³James B. Conant, adapted from a speech (n. d.) as reported by

This chapter is presented to give the reader a general background pertaining to the relationship between intelligence and social behavior. A review of the literature on certain relevant studies of the gifted child, group relations, and leadership, is included, as is some indication of theoretical implications which provide a sociological framework for the investigation.

Intelligence and Social Behavior

Pedagogy

The idea of an intellectual elite has persisted since at least the time of Plato; Pareto and Karl Mannheim can be numbered among its more recent advocates. And it may well be that there is a place for philosopher-kings in Utopia. But to the modern sociologist, this idea offers a very impractical solution to the very real problem of deputizing the greatest amount of authority and responsibility to those most capable of handling them.

Certainly our hope must be that the most intelligent persons among our youth will fill future positions of responsibility; equally as certain is the conviction that these leaders must emerge through the democratic process. The basis for this statement is a fundamental belief which underlies democratic governments. That is, a nation will be more wisely governed if its people have a voice in the selection of their leaders. And within such a form of government, the difficulty of placing individuals with ability in positions where they can use their intellectual talents

Merle E. Gall and Elena D. Gall, "Special Education for the Exceptional," Education, LXXVIII, 6 (1958), p. 355.

is readily recognizable.

Mannheim consistently and continually expressed concern for the training of the unusually gifted in society, reminding that genius represents both an asset and a threat. Here Mannheim was merely restating the ancient social problem. This lay, and continues to lie, in the conviction that any deviation from the social norms must, somehow, be made useful for the realization and maintenance of social values, if only for the protection of society.

It is pleasant to aspire to factual agreement with Tumin, who suggests that there is such a thing as what Veblen has termed "instinct for workmanship"--what we now more usually label "intrinsic work satisfaction." It is unreasonable to assume that because certain socially serviceable motivations have not yet been institutionalized, they cannot be canalized into actions which are functional to the democratic objectives of individual and societal goal-fulfillment. Tumin provocatively queries: "Is it indeed impossible to build these motivations into the socialization pattern to which we expose our talented youth?"¹ There appears to be no democratically logical justification for a negative answer.

We accept IQ scores as being valid indicators of an individual's minimum educability, nothing more. The mind, itself, is not static, but

¹In 1945, Kingsley Davis and Wilbert E. Moore, in the article "Some Principles of Stratification" (American Sociological Review, X [1945], 242-49) claimed "social inequality is an unconsciously evolved device by which societies insure that the most important positions are conscientiously filled by the most qualified persons" (p. 244). Melvin Tumin replied some 8 years later, offering in his criticism the idea of social serviceability as a powerful, talent-motivating force (Tumin, "Some Principles of Stratification: A Critical Analysis," American Sociological Review, XVIII, [1953], 387-94). In "Comment," (Ibid., p. 94), Davis attempts a rebuttal.

an acquired organization of behavior, continually being built up during the process of social interaction.¹ Within our society, it is recognized that an individual must function as a part of a whole. This means that what he will do with his mind, how he will use it, results, in great measure, from the desires created within him by the social processes.

Achievement, then, is not merely a function of intelligence. Equally important are the pressures and promises of society. And most vital in guiding either the mental deviate or the more average individual into becoming society's asset, rather than liability, are the processes of social control. Experience, training, and formal education all aid in the internalization of such social control. It is through these very processes that the youngster acquires most of his sense of values. These make up his morality, which is destined to play an important part in future actions and achievement.

Society, the Individual, and Education

Such morality is explained by Durkheim in terms of collective representations which emerge from social life. Durkheim's concept provides a partial basis for our discussion above. Digging deeper, into the evolution of moral values, Jean Piaget stresses the importance of the relations of cooperation as a factor in establishing moral judgments of the child-who-is-to-become-man. Piaget further asserts that it is only through such cooperative relations that the young citizen can achieve autonomy in his moral and intellectual evolution.²

¹Anselm Strauss (ed.), The Social Psychology of George Herbert Mead (Chicago: University of Chicago Press, 1956), p. 298.

²Jean Piaget, The Moral Judgment of the Child (Glencoe, Ill.: The Free Press, 1951), p. 418.

Philosophy, too, supports the idea that there must be rules which transcend the individual, and that these rules can develop only through social contacts.¹ Most convincing of all, however, is our own observation of the need for social control, smoothest when internalized. A look around us gives sufficient evidence of the truth in Piaget's statement: "The more complex the society, the more autonomous is the personality and the more important are the relations of co-operation between equal individuals."²

With the possible exception of the potential genius (whose IQ is usually identified as being 180 or above as previously mentioned), there can be little doubt that man functions most efficiently when he is at harmony with his social group. Yet, we know that, in the beginning, society is external to a child's mind. Somewhere along the path of socialization, this young individual becomes aware of the importance of rapport, of communication, of group effort to attain his own goals, and those of society at large. Where, when does he learn this need for harmonious interaction?

Is it within the schools? Not entirely, of course. Very few children reach school age without having had some experience with family and play groups. But it is usually at school that he gets his first wholesale exposure to demands for group interaction with his peers. At school, all are on an equal footing with respect to such exposure. Here, possibly

¹George Santayana has described the so-called paradise of anarchy as "but a moment of sporadic enjoyment of an underlying paradise of order . . ." (George Santayana, Dominations and Powers [New York: Charles Scribner's Sons, 1951] p. 242.)

²Piaget, p. 336.

for the first time, he is more or less on his own, no one's "little boy" or "little girl"--just an individual who is part of a group of other individuals, all working (and learning) together.

Emile Durkheim pointed out the importance of formal education in socialization, when insisting that it must also be understood as a factor of the total social system, not alone as sheer pedagogy. With Kant, Durkheim agreed that the end of education is to develop in each individual all the perfection of which he is capable:

Education consists of a methodical socialization of the young generation. In each of us, it may be said, there exist two beings which, while inseparable except by abstraction, remain distinct. One is made up of all the mental states that apply only to ourselves and to the events of our personal lives; this is what might be called the individual being. The other is a system of ideas, sentiments and practices which express in us, not our personality, but the group or different groups of which we are part . . . Their totality forms the social being. To constitute this being in each of us is the end of education.¹

We are concerned with the gifted child. Agreeing with Durkheim's educational philosophy, as quoted above, it is only natural to wonder just how these children are faring with the process of socialization which they are undergoing in their school groups. What kind of totality, to use Durkheim's phrase, is being constituted in these children, as a result of the education process? How does such totality harmonize with the "individual being" of each of these children?

¹Emile Durkheim, Education and Sociology, trans. S. D. Fox (Glencoe, Ill.: The Free Press, 1956), pp. 71-2. As has been pointed out by Talcott Parsons, the fact that Durkheim held a professorship in sociology and education is often overlooked, or forgotten. Undoubtedly, his thinking was greatly influenced by this dual interest, apparently expressed in his insistence upon separating the sociological and psychological levels of analysis. It was in his writing on education that he first mentioned the concept of the internalization of norms as a form of constraint.

Peer Group Relations

From the standpoint of statistics, the gifted child must be an "odd one." Eventually, such a child seems bound to become aware of that fact, through his interactions with others of inferior mental ability. Just how much, if at all, does the feeling of being different affect our gifted child in his relations with his peers? Does being different reflect, somehow, in the attitudes and behavior which such a child assumes as he participates in the overt expression of the social pattern of which he is a part?

Reciprocal behavior, on which society is so dependent for its functioning, necessarily demands an assignment of statuses and roles, so that each individual can know the attitudes and behavior which are his, as group-participant.¹ Without such knowledge, his behavior must remain uncertain.² Our gifted child, then, must share the meanings of objects, share the understanding of situations, with his contemporaries, in order to know just what his own position is, and just what is expected of him.

These same factors of empathy are essential in the production of true leadership. Leta Stetter Hollingworth, a pioneer in the recognition and study of mentally superior children, realized that the few children who test at the very top of the juvenile population can indeed have a unique value for society. Perhaps more than any other worker in this field, past or

¹Ralph Linton, The Study of Man (New York: Appleton-Century-Crofts, Inc., 1936), pp. 113-19.

²Kurt Lewin, "Behavior and Development as a Function of Total Situation," Manual of Child Psychology, xv, 945-65.

present, she was acutely aware of the great loss which society suffers from inadequate academic and social guidance of superior children.

Dr. Hollingworth stressed the need for early identification of these children, and for development of their leadership potential. Almost 20 years ago she reiterated her thought in one of her last public addresses. It seems prophetic now: "The times cry out for leaders to guide the people safely in a world where, without vision, more people will perish in more different ways than have ever perished before."¹

Hollingworth also expressed concern for the adjustment of these gifted children in terms of their peer relationships. Similar sentiments have been expressed by other psychologists and educators.² Yet, practically nothing has yet been ascertained concerning the quality of such relationships.

Currently, industry is very much concerned with intragroup action, particularly as to its effects on motivation and, thereby, production. It seems almost too obvious to point out that the workers whose attitudes are now being so carefully investigated were once children. If, as we have decided, an individual's development in the socialization process parallels his physical and mental development, then, by the time a worker enters industry, many, perhaps most, of his basic social attitudes are already quite definitely established.

In line with this reasoning, it appears extremely short-sighted

¹Leta S. Hollingworth, "What We Know About the Early Selection and Training of Leaders," Teachers College Record, XL (April, 1939), p. 575:

²Infra, p. 25.

to direct no attention to the years during which self-other orientations are being taught and learned. In particular, the early school years loom as being among the most important times for the child's learning of the basic tools which he will continually use as he functions socially, in communication and participation with others.

For the world, at least our world, is full of "others." "No man is an Iland, intire of itselfe: every man is a peece of the Continent, a part of the maine . . ." ¹ Our concern is with the gifted child. Does he accept a member role, so that he can be expected to function as a part of the whole? Or does he tend to be an Iland, an individual oddity?

A wise gardener does not wait until his plants are well started on their growth to investigate the condition of the soil. He knows that if the soil is, and remains, worthless, he can expect little from his plants. He also is fully aware of the harmful effects of adverse climatic conditions. Prudently, therefore, he analyzes the soil, giving extra food when necessary. Cautiously he watches the growth.

He is equally ready to provide support or training to the young vine or shoots which might need such to grow properly. And always, the conscientious nurseryman keeps his protective eye on those plants which are labeled "blue ribbon variety," just in case they may need special attention to produce the unusual blooms he has a right to expect from such superior plantings.

The early periods of learning can be considered to be somewhat analogous to the young garden. It may be well-planted. But the condition

¹John Donne, Devotions, xxvii.

of the soil remains indeterminate, simply because no one has bothered to analyze it carefully. Furthermore, it appears to be beyond the province of anyone to watch and possibly guide the shoots as they grow.

Under conditions such as these--a garden untended--how can we realistically hope for the maximum growth of any of our future citizens? In particular, what about our "blue ribbon variety"--our gifted children?

The Idea of Social Intelligence

Spearman, a pioneer in measurement of individual differences, advocated the theory that general intelligence is made up of one general ("g") factor, plus various specific ones. Thomson, in his multiple-factor theory (1939), claimed the predominance of group factors in mental organization.¹ And Thurstone is well known for his efforts to establish a multiple-factor concept of intelligence. However, such factor theories have not yet led to the construction of intelligence tests with empirically-demonstrated validity.²

Present objective tests of ability, or intelligence tests, may or may not measure the potential for an individual's adjustment within a society which is made up of the complex social functioning we find in our own. Opinions differ concerning the adequacy of any existing tests of objective nature to measure so-called "social intelligence." Thus, there is pointed out a general recognition of the fact that the capacity for learning certain skills, for manipulating ideas, for abstract thought,

¹A. B. Crawford and P. S. Burnham, Forecasting College Achievement (New Haven: Yale University Press, 1946), Part I, vi, 170-215.

²Anne Anastasi, Psychological Testing (New York: Macmillan Co., 1954), pp. 352-358.

outside a framework of social interaction, does not necessarily go hand-in-hand with an equal ability to manipulate, and be manipulated by, one's fellows in ways which maximize self-expression at minimal self-risk.

Many studies, including those of Brandenburg (1925), Tyler (1931), and Brewer (1927), to name but a few, have shown consistent correlations between an adeptness at the use of the tools of interaction and "success in life." Literature reiterates the fact that, in practical living, the ability to get along with people outweighs that of sheer, cold decision-making, as based on objective logic alone. The question remains--why must these two types of abilities, that to logically weigh and make decisions in an impersonal way, and that which includes a recognition of the necessity for consideration of other individuals, at least to the point of communicating and understanding, why must these remain separated? Or must they?

Very recently, the English historian, Edward Crankshaw, pointed to the pathetic loss of talent which results from this very separation mentioned above. In his article of June 29, 1958, written to re-emphasize the American democratic dream, he referred to "the suicidal rejection of eggheads, of reason and brain."¹ There is some truth in his statement, concerning America. Nor can we deny that the situation demands rectifying.

The Problem of Utilizing Latent Intellectual Talent

We can see, then, that there are complicating elements in the task

¹"A Challenge for July 4--And All Days," The New York Times Magazine, June 29, 1958, p. 24.

of utilizing the potential of individuals of superior intelligence. If they are going to be placed in important decision-making positions, sheer intelligence, or educability, as measured on our existing objective scales, is not enough.¹ Our future leaders must also be able to function adequately within the dynamics of the prevailing social situations of the every-day world, which is full of every-day people. These people are of all kinds, all descriptions; they are at all levels of human intelligence.

The fact that the hoped-for intellectually superior leaders must, along with all leaders, possess an empathy with their less-gifted colleagues and contemporaries does not mean a consequent sacrifice of individuality. Blind conformity and intellectual knee-bending are not what are needed. Far from it.

Rather, as John Stuart Mill has pointed out so well: "The honor and glory of the average man is that he is capable of following that (from individuals) initiative; that he can respond internally to wise and noble things, and be led to them with his eyes open."² This is America.

Piaget remarks that the relationship of equilateral mutual respect begins to replace that of unilateral respect for adult authority within

¹George Stoddard's definition of intelligence hints at some of those qualities we tend to identify with leadership: "Intelligence is the ability to undertake activities that are characterized by difficulty, complexity, abstractness, economy, adaptiveness to a goal, social value, and the emergence of originality, and to maintain such activities under conditions that demand a concentration of energy and a resistance to emotional forces," in The Meaning of Intelligence (New York: The Macmillan Co., 1943), p. 4.

²"On Liberty," The Enduring Questions, ed. Melvin Rader (New York: Henry Holt & Co., 1956), p. 511. This essay is available in many collections and editions. Chapters 2 & 3 from it are particularly relevant to the discussion here.

the child as he reaches 7 and 8 years of age.¹ The third graders investigated in this study were just past or in this initial phase of growing altruism and cooperation. Aware of the "sounding-board" qualities of most children, we might well seek further knowledge concerning the social functioning of our gifted children from their peers themselves.

Children usually have keen insight, particularly as regards other individuals. Therefore, to enlighten us more concerning the questions of meaningful communication, rapport, group-belongingness, etc., which have been raised in the preceding pages, and particularly those enumerated on page 6 above, this investigation was taken right into the schoolroom, to study empirically demonstrated peer group relationships. Our chief concern, of course, remains with the mentally superior youngsters.

It Has Been Written . . .

Since the time of Aristotle, man has been thinking about social behavior as we know it, and literature is filled with studies of its various aspects. The emergence of Social Psychology as a separate field sui generis gave a terrific impetus to research along these lines; currently, much attention is being directed toward better understanding of group interaction. Moreno's work Who Shall Survive?, which appeared in 1934, revitalized and enlarged a method of research which has influenced greatly the approaches to investigation of interpersonal relations, most particularly in groups. Helen Hall Jennings, who collaborated with Moreno in his early work with the sociometric method,² is notable for her

¹Piaget, iii, iv, 195-414.

²Since the sociometric method is being used as a tool in this research, it is described in the chapter which deals with methodology and which follows--Chapter 2 (p. 40).

research, reports, and interpretations throughout the recent years.

There have been and are many other investigators making available a vast fund of literature concerned with group behavior and interaction. Most of this is built on the foundations laid down by Durkheim, Simmel, Cboley, and Mead, plus the work of eminent psychologists. Among present or very recent investigators in these fields we find Lundberg, Katz, Lewin, Allport, Gurvitch, Merton, Turner, and Bjerstedt, to name but a few.

. . . About the Gifted Child

So, too, has the gifted child been the subject of study--who he is, where he comes from, his physical, mental, and developmental characteristics. A plethora of general descriptive terms such as "well-adjusted" and "mal-adjusted" appears continually in references to these intellectually superior individuals. But the social roles of these children, in terms of interaction within their peer groups, remain largely unstudied.

A survey of the literature on the gifted child has been a pleasurable and interesting experience, to me. It has also proved to be a further stimulant for my investigation. There is no gainsaying the evident dearth of consensus regarding so many phases of description relating to the intellectually superior child--phases in which we are most interested right now. The many demands in multiple fields for the attention of the modern sociologist have kept him occupied elsewhere. With that in mind, then, I have aimed to summarize and briefly present here some of the studies which have been made, chiefly by psychologists and educators, of the identified mentally superior youngsters.

Early studies

As previously mentioned, Plato spoke of the importance of discovering and educating youths of superior native ability; he even suggested tests for their selection. But it was not until the appearance of objective tests like the Binet that practical methods were utilized in selecting and training gifted children. At all times, parents have been alert at recognition; finally, however, the genetic and statistical researches of Galton in 1869 injected some scientific method, coupled with aroused interest, into quantitative psychological studies of human endowment. DeCandolle (1885), Yoder (1894), and Cattell (1915, 1917), in tracing the origins and boyhoods of great men, also used a scientific approach. So did Terman, with his study of comparative abilities of bright and dull boys in the spring of 1905.¹

Binet's scale appeared in France in 1905, Goddard's translation of it in 1911, and Terman's revision in 1916. Yet, studies of gifted children remained largely anecdotal and descriptive until the second decade of this century. Gradual development of systematization in method and presentation have taken place, with the most outstanding studies being those, truly monumental, of Terman and his associates at Stanford,² and

¹Lewis M. Terman, "Genius and Stupidity," Journal of Pedagogical Seminary, XIII (1906), 307-73. Catherine Cox Miles, in her chapter "Gifted Children," (Manual of Child Psychology, xvi) states: "In the title of this study . . . Galton's concept of genius as superior mental ability was introduced." (p. 988)

²Lewis M. Terman et al., Genetic Studies of Genius, 4 vols. (Palo Alto, Calif.: Stanford University Press, 1925-47).

the researches of Hollingworth in New York.¹ Witty, in 1930, reported his work with 100 mentally superior children, and supplied a follow-up after six years.² These data gave much support to the Terman studies, which, too, were longitudinal as well as cross-sectional. They also corroborated the findings of other researchers in the field. In 1942, Hollingworth's final publication, Children Above 180 IQ, Stanford-Binet, appeared; it presented studies of a group of a dozen youngsters whose IQ's, as indicated in the title, were of the "genius" category, and was prefaced by a review of previously published accounts of 19 other children of similar IQ rating.³

Characteristics and problems

In 1915, Terman first used the Binet test to identify a small group of children with exceptionally high IQ's. After observing them, he reported that they otherwise appeared to be regular, adequately adjusted (from all standpoints) children.⁴ Since then, however, other literature has indicated that, generally speaking, mentally superior children appear to have many traits in common, but, as a whole, differ markedly from average children of the same ages. In general, the deviation of the gifted

¹Leta S. Hollingworth, Gifted Children: Their Nature and Nurture (New York: Macmillan Co., 1926).

²Paul A. Witty, "A Study of One Hundred Gifted Children," University of Kansas Bulletin of Education, State Teachers College Study in Education, I, No. 13 (Lawrence, Kansas: University of Kansas, 1930).

³Hollingworth, Children Above 180 IQ, Stanford-Binet (Yonkers-on-Hudson, New York: World Book Co., 1942).

⁴Terman, "The Mental Hygiene of Exceptional Children," Journal of Pedagogical Seminary, XXII (1915), 535-36.

child is claimed to be "upward" in nearly all traits, from "good looks" to achievement, from physique to attitudes. Possibly there is a reflection of cultural bias here. Anyway, the upward deviation is said to be most evident in those traits which are most closely correlated with intellect.

Terman found that 84% of his children (this group included more boys than girls, not because of their higher incidence,¹ but because of the methods of nomination and admission used) exceeded the mean on unselected children for social interests (which he defined as an interest in persons).² However, one-third to one-half of the mentally superior children fell below the lower quartile of the control group on sociability ratings.³ Terman also reported that the gifted child displayed a degree of interest maturity 2 or 3 years beyond the age norm.⁴ This confirmed Hollingworth's anxiety. She feared that the very factor of statistical infrequency had to result in a lack of congenial companionship at a similar age level for such talented youngsters.⁵

Both of these pioneers stressed the necessity for, and probable difficulty of, adequate social adjustment on the part of the gifted

¹The sex ratio of gifted children remains undetermined, because of a lack of homogeneity in population samples, and an inadequacy of tests equally fair to both sexes at the upper extremes. Furthermore, the samples are statistically inadequate to provide true insight into the sex ratio (Cox, Manual of Child . . ., p. 994).

²Terman et al., Genetic Studies, I, 475.

³Ibid., 455-83.

⁴Ibid., 425-26.

⁵Hollingworth, Gifted Children, v, 116-49.

children. This adjustment the psychologists deemed essential, so that these superior youngsters might avoid the development of traits of character which would mark them as "queer," and thus, possibly, preclude them from acceptance and leadership as adults. Hollingworth, particularly, expressed deep concern with, and interest in, the social status and development of "her" children (and others like them), assuming that one of their greatest problems throughout life would be to learn to "suffer fools gladly." She stressed the word "gladly," believing that a reasonable tolerance of the seeming foolishness of others was essential for the gifted child to avoid disillusionment and misanthropy as he personally develops.¹

Recent studies

Far from favoring reclusion,² evidence seems to indicate that the individuals with high IQ's not only eagerly accept the roles and goals associated with the more responsible and higher socio-economic classes, but, as adults, also successfully maintain such positions with comparative ease and personal satisfaction. However, skill in working and living with others of high achievement does not satisfy our concern with the adequate socialization of the youngster in order to ensure his maximal

¹Hollingworth, Children Above 180 IQ, Stanford-Binet (Yonkers-on-Hudson: World Book Co., 1942), pp. 259-61, 298-302.

²In an address delivered to the American Association for the Advancement of Science, and reported in The New York Times, December 27, 1957, Dr. Elizabeth Drews of Michigan State University emphasized this characteristic. In a 4-year project which involves 150 of the most gifted (IQ 130 and above) children among 3,000 public school children of Lansing, the university researchers have found that their group, composed of ages 16 and 17, consider friends more important than anything else, either in or out of school.

societal role and status. In parlous times like these, the gifted person's talents, fully developed, are direly needed in areas both specialized and non-technical.

It is quite apparent that, within the last 25 years, both individual and group studies have contributed much to our understanding of the able, or gifted, child. Currently, throughout the country, there are a number of research projects involving him going on. Still, only very meager information relative to him as regards peer status, or symptoms of emerging leadership, is available.

Work done on any relationship between intelligence and social acceptance and/or leadership qualities has been mostly of an incidental nature, included in studies which have sought to correlate a variety of factors, such as chronological age, mental age, grade placement, family background, propinquity, interests, etc. with associate-choice, or with group acceptance.

Among these studies is that of Almack in 1922. This was one of the first of its kind, and concerned 387 children in grades 4 to 7. Almack concluded that either chronological or mental age was a better basis for the selection of friends than was IQ similarity.¹ Bonney, in 1934, discovered a very small tendency for those who are superior in intelligence and academic achievement to also enjoy greater social acceptance. His investigation involved only 48 children in the elementary grades.²

¹John C. Almack, "The Influence of Intelligence on the Selection of Associates," School and Society, XVI (November, 1922), 529-30.

²Merl E. Bonney, "The Relative Stability of Social, Intellectual and Academic Status in Grades II to IV, and the Inter-relationships between These Various Forms of Growth," Journal of Educational Psychology, XXXIV (1934), 88-104.

Davis, as recently as 1957, published a study which dealt with 100 adolescents in eighth grade. In that report, Davis felt that his most significant finding related to the correlation between behavior and intelligence. Among the young adolescents, the peers seemed to perceive such behavioral correlates and to react favorably to their more intelligent group members (all boys).¹ On the other hand, Furfey's work, directed toward an analysis of the factors which influenced boys in the selection of their chums, showed a correlation coefficient between the mental ages of the studied chums equal to only .24 to .26.²

The works mentioned above may indicate a slight tendency toward agreement, in that the importance of mental age is recognized as a factor in selection of friends. However, none of these studies is concerned with the gifted child--the child of high intellectual ability. Furthermore, there are other reports which disagree with even those noted, involving intelligence vs. friend-selection. On the whole, the investigative results have been inconclusive and even in conflict.

Relevant to our concern with the gifted child's acceptance is a recent study by Meta F. Williams. Her work pointed to a significant positive correlation between group acceptance and academic performance of the mentally superior child.³ Here we are given a tangible reason for a

¹Junius A. Davis, "Correlates of Sociometric Status Among Peers," Journal of Educational Research, L (April, 1957), 561-570.

²Paul H. Furfey, "Some Factors Influencing the Selection of Boys' Chums," Journal of Applied Psychology, XI (1927), 47-51.

³"Classmate Acceptance in Relation to the Performance of Intellectually Gifted Children in Certain Elementary Schools" (unpublished Ph. D. dissertation, Department of Education, New York University, 1956).

decision to investigate such children in terms of peer group acceptance.

Two other recent studies, one by a sociologist and the other by 2 collaborating psychologists, have aimed specifically at discovering the role and status of the gifted child in the classroom. The first of these was an exploratory study in the area of social roles, by Kerstetter in 1952. She used a selected group of twenty-five highly gifted (IQ's 160 or better) children, who were located in 15 different class groups, all but one of these being special classes for the gifted. The IQ's of the class members ranged from 95-202 on the Stanford-Binet Scale. She reports that her analyses give no tenable evidence which might uphold the opinions of Hollingworth and others that individuals above the "optimum level" of intelligence (e.g., 125-155 IQ) tend to become isolated, the more so as their deviation from the norm increases. Kerstetter utilized original sociometric tests and a Self-Portrait-N test (emotional needs test). In her groups, 6 of which contained children with scores below 130, the highly gifted tended to play positive roles, but these, in themselves, were not significantly different from those played by their more typical classmates.¹

A more recent and highly relevant study, which again was restricted to investigation of the very highly gifted children, was that undertaken by Gallagher and Crowder of the Institute for Research on Exceptional Children. Their sample of 35 youngsters attending grades 2 to 5 was located in a midwestern city, and was processed by the case-study

¹Leona M. Kerstetter, "A Sociometric Study of the Classroom Roles of a Group of Highly Gifted Children" (unpublished Ph. D. dissertation, Department of Sociology, New York University, 1952).

method over a period of 2 years. The purpose of the study was to discover to what extent the highly intelligent children were having difficulty in adjusting to regular classroom situations academically, intellectually, socially, and emotionally. A so-called "sociometric" was given in each class in which one or more of the children had been identified; each child was asked to name the 5 people in the class who were his best friends.¹ Fifty-three percent of the gifted group, all of whom were scored at 150 or better on the Binet, ranked in the top quartile on the basis of social popularity, as compared to 24% in a random sample (the psychologists' report fails to indicate whether this latter group included any of the gifted). Sixteen children from the primary (second and third) grades were represented in the sample; no specific information as to their sociometric ratings is given. Two (12%) of them were diagnosed as showing problems of social adjustment, as compared to 26% of the 19 in the elementary (fourth and fifth) grades.

Teacher ratings on certain aspects of behavior and personality were generally favorable to the gifted group of this study. However, creativity and leadership were not among the traits reported as outstanding in these children. Only 10 of the superior group were rated as leaders, with another 18 being indicated as "potential" leaders, should they care to assume such roles. Just 9 of the children were considered by their teachers to be showing creativity in developing original ideas; the Rorschach Ink Blot tests administered to the children by the psychologists

¹From the beginning, Moreno has insisted on the use of a definite choice criterion (preference aspect) to define the kind of interaction setting being offered in the choice (s) (Who Shall Survive? [Beacon, New York: Beacon House, 1952], p. 99.

corroborated this rather negative finding. Gallagher and Crowder found, contrary to the teachers' reports, a low level of motivation on the part of the gifted group.¹

Social acceptance

Taylor, Johnson, and Miller have reported on the relationship between intelligence and social acceptance of children of various IQ levels in studies which were not directed primarily at research on the gifted child. Data from Taylor's study point to a tendency for an individual to choose his associates from among those of his own mental level,² whereas both Johnson and Miller found that the mentally superior were the most highly accepted.^{3,4} These results compare with the older pro and con data mentioned above. Unfortunately, none of these three used intelligence tests with sufficient established empirical validity for computation of IQ's for the groups, Miller's classification being based on the scores from the Primary Mental Abilities Tests, which emphasize speed and correlate most highly with school achievement, and Taylor and Johnson having used the California Test of Mental Maturity, which is beset with dubiousness

¹James Gallagher and Thora Crowder, "Gifted Children in the Regular Classroom," Exceptional Children, XXIII (April, 1957), 306-12, 317-19.

²Edward A. Taylor, "Some Factors Relating to Social Acceptance in the Eighth Grade Classroom," Journal of Educational Psychology, XLIII (1952), 257-272.

³G. Orville Johnson, "A Study of the Social Position of the Mentally Handicapped Children in the Regular Grades," American Journal of Mental Deficiency, LV (1950), 60-89.

⁴Robert V. Miller, "Social Status and Socioempathic Differences Among Mentally Superior, Mentally Typical, and Mentally Retarded Children," Exceptional Children, XXIII (December, 1956), 114-19.

as to both reliability and validity.¹ Regardless of IQ, however, Taylor's work, which involved 1,177 eighth graders, did show that, with his group, social acceptance scores during a 3 or 4 month interval were as constant "as IQ is usually reported to be."²

Thorpe's London study of older children (ages 11 to 17) in 34 school classes, also classified the pupils on the basis of the Primary Mental Abilities Test. His data gave a correlation coefficient of .152 for intelligence and sociometric status.³ Grossman and Wrighter of Penn State sought to determine relationships between selection-rejection and the factors of intelligence, social status (as measured on a near-sociometric⁴ instrument), and personality among 117 sixth grade children, 12 of whom had Binet scores of 130 or better. Data analysis from this investigation points to an "exponential rather than a rectilinear relationship between intelligence and selection-rejection."⁵ That is, intelligence appeared to make a difference up to a certain point only. There was no significant difference between sociometric scores of the normal and

¹Anastasi, pp. 365-68, 377. It should be pointed out that Mr. Johnson's concern was with the mentally-retarded, and those individuals were located by Binet tests.

²Taylor, Journal of Educational Psychology, XLIII, 269.

³J. G. Thorpe, "An Investigation into Some Correlates of Sociometric Status Within School Classes," Sociometry, XVIII (February, 1955), 45-61.

⁴The term "near-sociometric" is often used by sociometrists to designate choice situations which use a specific choice aspect but do not involve group rearrangement (Polansky, Lippitt, and Redl, Sociometry, XIII, 49).

⁵B. Grossman and J. Wrighter, "The Relationship Between Selection-Rejection and Intelligence, Social Status, and Personality Amongst Sixth Grade Children," Sociometry, XI, 349.

superior groups.¹

Leadership

As reported above,² to the gifted child is attributed a maturity in interests which is generally beyond that of his same-age group. This concept includes the idea that his knowledge about play, games, and amusements, as well as sports, is also greater: he knows more about the background and the rules, probably has figured out the tricks and investigated the short-cuts in method, etc. It is not hard to infer that such knowledge could bring consequent authority which might edge him toward leadership, although Hollingworth opined that "the leader of a group is likely to be more intelligent, but not too much more intelligent, than the average of the group led."³ Jennings agreed that the average child or student leader is apt to surpass his classmates in intelligence to some extent, but insists that "the why of leadership is not explainable by any personality quality or constellation of traits. Leadership is a manner of interacting; many share in it."⁴ She further noted in reporting her study at the New York Training School for Girls that

In personality a number of characteristics of leaders stand out as common attributes. Each leader "improves" from the point of view of the membership, through one method or another, the social milieu. Each widens the social field for the participation of others (and indirectly her own social space) by ingratiating them into activities, introducing new activities, and by fostering tolerance on the part of

¹Ibid., 346-55.

²Supra, p. 24.

³Hollingworth, Children Above . . ., p. 287. Also, pp. 257-58.

⁴Helen H. Jennings, "Sociometry of Leadership: Based on the Differentiation of Psyche Group and Sociogroup," Sociometry Monograph, No. 14 (New York: Beacon House, 1947), 21.

one member towards another. Each leader shows a feeling for when to censure and when to praise and apparently is intellectually and emotionally "uncomfortable" when others are "unhappy" or "left-out."

No leader is invariably a "pleasant" person . . . instead, each is definite in her stand and will fight for what she considers right.

Both leadership and isolation appear as phenomena which arise out of individual difference in inter-personal capacity for participation and as phenomena which are indigenous to the specific social milieu in which they are produced.¹

Gibb similarly concludes that leadership status is more often than not associated with some superiority in intelligence.² Cartwright and Zander, as well as Harvey--the last named having used ten adolescent cliques in his investigation--found that status based on prestige and expectations on the part of the group was a very positive factor in recognition of leadership.^{3,4} Pellegrin reached the same conclusion, and stresses the "situational" approach as being dominant,⁵ as do Barnlund⁶ and Cattell.⁷

¹Helen H. Jennings, Leadership and Isolation: A Study of Personality in Inter-Personal Relations (New York: Longmans, Green & Co., 1950), pp. 203, 204.

²Cecil A. Gibb, "Leadership," Handbook of Social Psychology, ed. G. Lindzey (Cambridge, Mass.: Addison Wesley Publishing Co., Inc., 1954), II, 886.

³D. Cartwright and A. Zander, Group Dynamics: Research and Theory (Evanston, Ill.: Row, Peterson, 1953), pp. 535-50.

⁴O. J. Harvey, "An Experimental Approach to the Study of Status Relations in Informal Groups," American Sociological Review, XVIII, (August, 1953), 357-67.

⁵Roland J. Pellegrin, "The Achievement of High Statuses and Leadership in the Small Group," Social Forces, XXXII (October, 1953), 10-16.

⁶Dean Barnlund, "Leadership Evaluation: Some Premises and Procedures," Journal of Communication, III (1953), 24-28.

⁷R. B. Cattell, David R. Saunders, and Glen F. Stice, "The Dimensions of Syntality in Small Groups," Human Relations, VI (1956), 331-56.

Bell and Hall, in their research, found support for the "need" theory of leadership, i.e., the selection of a leader is based on his ability to satisfy the needs of the members of the group.¹

In a classroom study done recently, Martin Gold and his co-workers gathered data which, when analyzed, identified the "higher power" children, or leaders, as being those most friendly, most helpful, and most outgoing in social relationships. Their investigation included 152 boys and girls, from kindergarten through the sixth grade, ages 5 to 12.²

A general "summing-up" of the work that has been done in the leadership field, as it involves the younger generations, was offered by Cornelia Morris Lancaster 2 years ago. She reviewed and analyzed 64 investigations. Her conclusions were: (1) evidence indicates that situational and environmental settings bring to the foreground the qualities necessary for leadership, but, to date, there have been only a limited number of research studies which were based on the interaction approach; (2) leadership can be identified at an early age, even though the exact qualities which make a leader are vague; (3) ability to initiate an activity and help a group move toward its goal is a necessary attribute of leaders at any age level; (4) since leadership is not acquired by mere possession of certain traits, but is given by a group to the individual,³ any program

¹Graham B. Bell and Harry E. Hall, Jr., "The Relationship between Leadership and Empathy," Journal of Abnormal Social Psychology, XLIX (1954), 156-57.

²Martin Gold, "Power in the Classroom," Sociometry, XXI (March, 1958), 50-60.

³Georg Simmel stressed the active reciprocity of orientation which characterizes situations of authority or leadership, and noted: "All leaders are also led; in innumerable cases, the master is the slave of

aimed at cultivating leadership must focus on the growth and development of the group.¹

McCuen reiterated this need for group-participation and acceptance: "The crowd seems to desire to be led by the average person. Evidently, in a democratic society the leader must not be too detached from the group."²

As can be readily discerned, none of these studies on leadership mentioned above, with the exception of Hollingworth's general portrait,³ has been aimed specifically at describing the gifted child in terms of leadership qualities, actual or potential. However, there are some such data available from the Gallagher-Crowder investigation.⁴ The other literature is reviewed here primarily to extend the reader's acquaintance with the current work being done in the area of leadership, to enable him better to understand the concepts involved in our attempt to link that trait with the gifted children.

It Is Posited . . .

We are stressing the importance of group relations, particularly

his slaves. Said one of the greatest German party leaders referring to his followers: 'I am their leader, therefore I must follow them',"
(Georg Simmel, "Forms of Domination," Sociological Theory: A Book of Readings, ed. Lewis A. Coser and Bernard Rosenberg [New York: Macmillan Co., 1957], 128).

¹Cornelia M. Lancaster, "Analysis and Synthesis of Research on Leadership Displayed by American Children and Youth from Pre-School Level up to and Including High School for a Period of Fifty Years 1904-54" (unpublished Ed. D. dissertation, Department of Education, University of Florida).

²Theron L. McCuen, "Leadership and Intelligence," Education, L (1929), p. 95.

³Supra, pp. 25, 32-33.

⁴Supra, pp. 28-30.

in the period of childhood, since it is then, with the developing mind, that the self begins to emerge. Essential to this process is the factor of communication; individuality develops in the process of cooperating activities.¹

The school has attained greater and greater ascendancy in modern society, to become a major primary group--Cooley's "nursery of human nature in the world about us."² It is here, in peer group relationships, as well as within the family (sometimes even more so) that the transmission of culture takes place. Thus does the child acquire the capabilities and habits that qualify him as a member of society. Thus does he learn his own role, so essential, as we have already pointed out,³ for positive behavior.

In the concept of interaction lies the process which can be considered as constituting the very core of social life and human behavior. It is impossible to fully understand the behavior of human beings unless we realize that social actions of individuals are almost always other-oriented. The simplest unit of sociological group analysis is necessarily at least 2, and it is the interplay between the action of Self and Others that occupies the center of the human stage. Norms, status positions, and reciprocal obligations, all are important.⁴

¹Anselm Strauss (ed.), The Social Psychology of George Herbert Mead (Chicago: University of Chicago Press, 1956), pp. 215-60.

²Charles H. Cooley, Social Organization (New York: Charles Scribner's Sons, 1909), p. 24.

³Supra, p. 14.

⁴Lewis A. Coser and Bernard Rosenberg (ed.), Sociological Theory: A Book of Readings (New York: The Macmillan Co., 1957) iii, 65-96.

The child of 8 or 9 years has begun to learn reality and all its laws. Now he is renouncing the myth of human impotence in an overwhelmingly complicated world. And he is becoming aware of the importance of interaction with others in his milieu. Socialization is replacing egocentricity with socio-centricity as a dominant behavior theme.

Georg Simmel contended that many and various patterns of interaction could be discovered to occur over and over again, despite concrete manifestations of the various elements, such as conflict, cooperation, and competition which might differ in each social situation. If true, as sociologists tend to agree, then we would expect to find that a group of classmates would fairly well follow a somewhat standardized pattern of interaction.

Znaniecki conceives a social role as a dynamic social system which involves several interacting components. Furthermore, each and every social role, according to this concept, presupposes the existence of a common bond, constituting a complex of positively appreciated values, shared by the social person and his social circle.¹ In accordance with this concept, it would appear that any accepted group member must, then, be said to "belong,"--to be a "part of the team."²

¹Robert K. Merton, "The Social Role of the Man of Knowledge: A Review," American Sociological Review, VI (1941), 111-15.

²The term "reference-group" is being carefully avoided here because of the current controversy regarding its exact meaning. Turner, in "Role-Taking, Role Standpoint, and Reference Group Behavior," (Coser and Rosenberg, pp. 272-88) notes that certain groups sometimes classified as "reference groups" might more usefully be termed "audience groups" to the individual. He states: "These are the groups by whom the actor sees his role performance observed and evaluated, and he attends to the evaluations and expectations which members of the group hold toward him. . . . An individual's relation with his identification groups may place the latter on some occasions as his audience and on other occasions not. The reaction to the audience may be that of uncritical acceptance of their

Interaction involves reciprocity. To be ignored, or rejected, can be assumed to prove failure in usual human association. This, in turn, implies a self-other relationship which ordinarily affords a directive to the individual in the formulation of what his own behavior should be within his social circle (what Merton calls his "effective audience").

Raymond Gold, referring to Mead's concept of the "generalized other" relevantly (to the above concept) states: "Social norms represented by generalized others are utilized by the individual to govern his own conduct. Self-control is exercised with reference to internalized generalized others of the groups to which he feels he belongs. It is then also possible for him to establish colleague relationships with others who consider themselves members of the same groups, for they govern their conduct by using essentially the same symbols and norms."¹ School is not a group, but a milieu where various groups can develop. It seems logical to assume that investigation into the peer status of the children, then, can legitimately be based on the child's method of functioning within the schoolroom, where he spends a very great part of his day.

As might be inferred from the literature reviewed above,² the stuff of leadership remains an elusive object of investigation. Studies have

evaluations and expectations toward him, or the responses of his audience may be interpreted in an interactive context or as directed by his identification group or self-conception." (p. 288) This description seems to fit quite well into our consideration of the child and his classmates.

¹Raymond L. Gold, "Generalized Other," (unpublished paper, Department of Sociology, Montana State University, 1958), p. 3 (typewritten). (Prepared for UNESCO Dictionary of Social Science Terms to be published in 1959).

²Supra, pp. 14-15, 25-30.

been able to report only failure in the search to determine the traits and characteristics of the leader.¹ Currently, social psychologists have turned from the "Great Man" theories to the "situational approach," which claims that leaders vary as groups and situations vary, and that leadership is a quality of the individual's role within a particular and specified social system.²

Accepting the "situational approach" will facilitate the research being undertaken here, since its conclusions will necessarily be based on empirical evidence of leadership tendencies as demonstrated within the dynamics of group interaction, and so recalled by the classroom teachers, as described in the next chapter.

Chapter 2, then, will be devoted to an account of the birth of the study and the methodology employed in investigation; in that chapter we will discuss the population and selection of the sample, the techniques and procedure used to gather data in the classroom, and the teachers' impressions of our group of third graders, most particularly, those identified as "gifted."

¹R. M. Stogdill succinctly presents this conclusion as a result of his survey of leadership studies--an aspect of a program of research on leadership conducted by the Personnel Research Board of Ohio State University--in "Personal Factors Associated with Leadership," Journal of Psychology, XXV (1948), 35-71.

²Edgar F. Borgatta, Robert G. Bales, and Arthur S. Crouch offer defense of the "great man" theory of leadership in "Some Findings Relevant to The Great Man Theory of Leadership," American Sociological Review, IX (1954), 755-59.

CHAPTER II

THE WAY OF THE INVESTIGATION

The unique opportunity which was presented in Missoula for investigation into the area of the social functioning of gifted children in the regular public school classrooms arose in the late spring of 1958. The boys and girls selected as subjects for the study all measured at IQ levels of 130 or above on the Revised Stanford-Binet. In most cases, the Binet scores (and consequent labeling as "gifted") were newly established. It is planned to remove some of the children from the regular classrooms, in order that they can participate in a program of acceleration scheduled for this coming fall.

My own appraisal of the proposed plan for testing and an accelerated curriculum for the mentally superior children came about indirectly. In short order, my plans were laid, and I was given an opportunity to address the various principals of the elementary schools, at the invitation of the Superintendent of the school system.

The group of men was responsive, after hearing my explanation of the purpose and plan for the research project. They agreed to give me the help and support necessary to acquire the data I needed. Thus, plans were made for administration of the sociometric test I had designed for the study, and for completion of the rating scales made up for the individual teachers, in reference to the sample children. The questionnaire and

its administration, the rating scales, and the report of the teachers' choices for sociometric preferences, are discussed at length below.¹ So, too, are the selection of the sample, some characteristics of the children themselves, and the procedure which was followed to gain data for the present report.

Selection of the Sample

When the program of acceleration was planned in the city school system, an attempt to locate the 90 third-graders at the very top IQ levels was initiated. The plan was to offer these children an opportunity to enroll in the special fourth grade classes which will begin this fall, and bring into just a few classrooms those children marked for the special accelerated curriculum. Obviously, full agreement with the parents was a necessary factor in implementing the plan. Not all parents have evinced such agreement. As things now stand, many of the children of the highest IQ's will not participate in the special classes; their numerical places will be assigned to others of lower IQ's, so that the full complement of 90 can be made up.

Screening

Initial screening of the children was based on their ratings on the Otis Quick-Scoring Mental Ability (group) Tests,² given routinely in the second grade of the local schools. Originally, the plan was to test individually on the Binet (abbreviated scale) any third grader who was

¹Infra, pp. 50 ff.

²A. S. Otis, Otis Quick-Scoring Mental Ability Tests (Yonkers-on-Hudson, New York: The World Book Co., 1939).

enrolled in the public schools of the city, and who (1) had scored above 120 on the Otis group test; and/or (2) was considered by his classroom teacher to be of superior aptitude, as demonstrated in his classroom participation and/or achievement. A further qualifying factor was that only those pupils whose families indicated no plans to move from the city within the near future were considered for the individual tests. This number was a very negligible one; to my knowledge, only 1 child was thus disqualified.

Location of the Gifted

As calculated on the basis of the normal curve distribution of IQ incidence among school children, 12.63 percent of them could be expected to attain an IQ score of 120 or better on the Stanford-Binet.¹ Fewer would be expected to have an equal score on the group test, as is empirically demonstrated by comparisons of scores from the two tests--scores taken from the school records.² Accordingly, the program for individual testing was launched in the late spring of this year; several qualified testers administered the Binets.

¹Merrill, Journal of Educational Psychology, XXIX, 650.

²The Otis tests follow a "spiral omnibus" arrangement of test items, whereby the easier items are offered first, followed by more difficult ones of the same type. Correlations with the Revised Stanford-Binet scale have been found to range from .58 to .88 on samples of older children (Anastasi, p. 218).

Altogether, within the schools surveyed, some 122 pupils wound up with scores on both tests by the end of the school year. Of these, 78 scored higher on the Binet, with the average or mean difference between scores from the two tests being +5.33 points on that scale. Two of the children received exactly the same scores on both tests (1 child, age 9 years, 8 months scored 125; the other child, age 8 years, 10 months scored 137). However, it must be pointed out that the methods of computation for IQ's differ on these 2 scales.

Children who were placed at 120 or above IQ on the group test numbered almost double the expected complement. This, of course, increased the number of Binet's to be administered; these, in turn, disclosed other surprising statistics as explained below. Meanwhile, time ran out, and the school term ended.

For that reason, all third graders who were eligible under the qualifications cited above were not given a chance at the individual Binet tests.¹ Thus, of the 14 public elementary grade schools within the corporate limits of the city, pupils from 9 (64.3%) were screened and individually tested. These specially examined children came from 16 of the 25 third grade classes in the city school system. The total number of pupils surveyed was 447, representing 71 percent of the city-wide public school enrollment in third grade (total city enrollment for that grade was 629 as of 1 May, 1958).

According to a percentile chart prepared by Percival Symonds of Teachers College, Columbia University, a child whose IQ is 160, is equaled or excelled by only 1 out of 10,000.² Two boys with IQ's above 160 (scores were 161 and 162) were located within the group of 447 surveyed here.³

¹Present plans of school officials include tests for these children during the summer or early fall.

²Rudolf Pintner, Anna Dragositz, and Rose Kushner, Supplementary Guide for the Revised Stanford-Binet Scale (Form L) ("Applied Psychology Monograph of the American Psychological Association," No. 3; Stanford, Calif.: Stanford University Press, 1944), p. 135.

³The report of the 162 IQ caused the expected flurry of excitement among school officials and others interested in the proposed program. Had I not tested the second boy myself (his side conversation was concerned chiefly with rainbow trout), my skepticism might have led me to considerable doubt as to the authenticity of the scores, and hence, my

Seventy-five children were found to be at an IQ level of 130 or above, as scored on the Binet;¹ the expected number, as predicted from Merrill's report,² would be **20**. The following table will serve to contrast the expected and observed incidence of IQ's as found in this population of third graders.

TABLE 1.--Incidence of expected* and actual IQ scores located

IQ Range	Percent of Standardization Group	Expected Number	Observed Number
129 and below	95.57	427.20	372
130-139	3.10	13.86	39
140-149	1.10	4.92	26
150-159	0.20	0.89	8
160-169	0.03	0.13	2
Total	100.00	447.00	447

*The expected numbers, and the percentages, are based on Merrill's same report, which included no figures concerning scores above 169.

Table 1 is offered to indicate to the reader the differences between the expected and observed IQ's located at the various levels. However, because of the small size of the numbers in the last 2 IQ ranges, it was felt advisable to base the chi square computation on a dichotomy

proposed data.

However, the SE_m (standard error of measurement) of the Binet scale at an IQ level of 130 and above is 5.24; this is increased 20 percent through use of the abbreviated forms. This means, then, that the chances are two to one that the obtained scores are within 6.28 points of the true scores on the scale (IQ range of 155-168). Furthermore, there is only 1 chance out of 20 that the obtained scores vary from the true scores on the scale by more than 12.6 points (Lewis M. Terman and Maud A. Merrill, Measuring Intelligence [New York: Houghton Mifflin Co., 1937], pp. 46-47).

¹These children will hereafter be referred to as gifted.

²Merrill, Journal of Educational Psychology, XXIX, 650.

of the scores, dividing these into scores of 130 and above, and scores of 129 and below, expected and observed.

Consequently, chi square was figured using 1 degree of freedom. At a ^{10⁻²³}~~.0005~~ level of confidence, a chi square equal to ^{90.}~~12.121~~ is significant. The chi square for our expected vs. observed frequencies is ^{158.336}~~14.867~~, thus exceeding that significant figure.

It is only natural to seek an explanation for the obviously very marked discrepancy between the real and the expected values, relevant to the numbers of high IQ's. What is the genesis of this exaggerated incidence of superior mental ability among our particular group of public school children?

From the available information, which is presented in the following paragraphs, we find little in the way of clues.

Background for the Universe

Missoula, Montana, is a city of approximately 30,000 population,¹ located on the Western slope of the Rocky Mountains. The hub of 5 western Montana valleys, it is known throughout the state as the "Garden City," and is generally considered to offer unusual attractions as a recreational and educational center. It is a favorite spot for retirement. Montana State University, with a teaching faculty of 350, is located in Missoula.² So, too, are the Regional headquarters of the United States Forest Service; the State Forest Service also headquarters in the city.

¹This figure was secured in a telephone conversation with the Missoula Chamber of Commerce, June 9, 1958.

²The only elementary grade school located within the university district was included in the surveyed group.

Employment is concentrated chiefly in the lumber industry, in construction, transportation, service industries, and in retail trade. There is some seasonal unemployment; there is little transient labor. Miller, in her recent criminological study, classified most wage earners in Missoula as being of either the middle, or the working (lower-middle and upper-lower) class.¹ Home ownership among Missoula residents is considerably higher than average, being slightly more than 60 percent.²

Inquiry into the occupations of the parents of the children proved unsatisfactory; the only source of information available to me was the school records. These were not sufficiently descriptive or complete to clearly identify the parents' work, precluding any attempt to classify them in terms of occupational status.

The Universe

Of the 447 youngsters surveyed, 218 were boys and 229 were girls. Their ages, as of 1 May 1958, ranged from exactly 8 years to 11 years, 4 months. Only 1 child was 11 years old; most were 8 or 9, with the majority (236) of them in their tenth year, i.e., 9 years of age.⁴ This relative

¹Verna Miller, "Crime in the Community," (unpublished Master's thesis, Department of Sociology, Montana State University, 1958), pp. 35, 38.

²Missoula Chamber of Commerce, Missoula, Montana: The Center of Western Montana, A Bulletin Prepared by the Missoula Chamber of Commerce (Missoula: C. of C., n. d.).

³Numerous studies, including those of Terman and Merrill, have found a relationship between intelligence of children and parental occupation.

⁴This age description is based on the same school records--inadequate, also, for calculation of exact ages for the entire group surveyed.

consistency in ages is not surprising, since the schools accept into the first grade only those children who have their sixth birthdays before October 31st of the year in which they enter school.¹

Range of intelligence quotients

Twenty-six children did not have recorded IQ scores. Those available indicated a range of 60 to 162 IQ, with the 2 extremes both being computed on the Stanford-Binet scale (cf. supra, pp. 41-42).

The Sample

Twenty-nine boys and 46 girls made up the group of gifted children whose IQ's were 130 or above. Their ages ranged from 8 years, 4 months to 9 years, 5 months. The average age was 8 years, 10 months.

The numbers of boys and girls of this group in each IQ range were as follows:

<u>IQ Range</u>	<u>Boys</u>	<u>Girls</u>
130-139	13	26
140-149	10	16
150-159	4	4
160 and above	2	0
Total	29	46

The mean IQ score of these children was 140.01. The average score for the boys was 141.72; for the girls, it was 138.94.

¹A child whose birthday occurs in the month of October is also required to pass certain readiness tests before being permitted to enroll in first grade.

Snakes and Snails: Sugar and Spice

It is hard, sometimes, to recall just which characteristics remark which phase of childhood. For that reason, the following paragraphs are offered to help the reader conjure up the image of this child of 9 years (approximately) who makes up the better part of our study population.

First, he is strikingly more integrated, in the sense of experience, than he was a year ago. The desultory expansiveness of age 8 has now become something of an extensiveness. He is self-motivated; he is self-propelled. As the child's individual status is reasserting itself, he is achieving a semblance of inner organization.

His moods are very variable; emotions and attitudes show new refinements, particularly in social situations in which he now detects refined little differences, feeling out the small values and finer shades of meaning. Self-appraisal and criticism of others go hand-in-hand; as Gesell points out, following the same thought as was offered by Piaget, in the 9 year-old the very mechanisms of conscience are apparent.^{1,2} The sense of morality has blossomed quickly.

The 9 year-old is reasonable and factual; he is forthright. He wants to know "why," not out of his former curiosity as much as a need to establish a sort of rationalism for himself. Much of this is related to locating his place in society as a whole. How should things be done? Why?

¹Arnold Gesell, M. D., et al., The Child from Five to Ten (New York: Harper and Bros., 1946), p. 196.

²Piaget, The Moral Judgment , pp. 195-418.

Where and what is his niche in this world?

He is a great talker, and a great justice-seeker, for himself as well as everybody else. He listens (when he feels like it) and absorbs what he hears--ideas for further pondering. Pre-occupied in demeanor, his busy mind now is mature enough to concentrate for even 2 or 3 hours on a single absorbing task. He likes to plan in advance, and to contemplate problems which, if not solved at first attempt, he will often try again in his new perseverance.

He likes to be trusted, and, above all, he loves to be chosen. To this embryo citizen, life seems simpler, now that it is getting a pattern of organization that he can appreciate. There is so much to do and to understand, and all must be planned and categorized and mentally catalogued, often with reassuring confabulation with "the gang."

Nine is an age of inventories and check-lists, of confidences and candid estimates of the world (including one's friends and their strengths and weaknesses!). It is an age of budding friendships which will last for more than a few days.

With his progressive socialization, and crystallization of the Me, the 9 year-old finds that the more gregarious teens are closer than the egocentrism of babyhood.¹

¹Forty-five of the gifted children were not yet 9 as of 1 May 1958; the youngest had a chronological age of 8 years, 4 months, the oldest 9 years, 4 months. To attain an IQ of 130 on the Binet scale, a child whose age is that of the youngest mentioned (8-4) must have a mental age equal to that of the average child of 10 years, 10 months, or almost 11 years.

But this "mental age" refers to intellectual ability, and it is sometimes hard to remember that, as far as experiences and many emotions are concerned, that child is still in only his ninth year (age 8). Thus: half an hour after testing the chubby, volatile, day-dreaming Pam, who easily solved the problem presented by Binet at the Year XIV level, I

Investigative Procedure

At the meeting of the school principals described above,¹ packets which I had prepared for each elementary school were distributed. Each of these manila envelopes contained (1) a typewritten letter to the principal, giving him instructions for the use of the other material provided, and expressing my appreciation for his help in securing the research data;² (2) several copies (in some cases 5 or 6) of the "Classroom Teacher's Report" to be checked for each gifted child; (3) other sheets entitled "Teacher's Judgment of Sociometric Status," 1 copy for each classroom teacher who numbered a gifted child amongst her pupils; (4) explicit instructions for administering the sociometric questionnaire, with the choice-preference questions.

All of the materials handed to the classroom teachers were of original design and composition, and had been multilithed. These data will be explained individually and in detail within the next few pages of this chapter.

Two envelopes, addressed to me, were also included for each

came upon the 8 year-old (IQ 135) enroute home to lunch. The girl had stopped, entranced, to admire a lone and resplendent early dandelion, growing close to the curb. She appeared to be considering, then dismounted her bike, carefully measured for a long stem, plucked the weed's blossom, and, cautiously holding it aloft in one hand, remounted, other hand on the handlebars, to pedal off home slowly with her surprise for mother. Such behavior would be conspicuously unsophisticated for our modern young lady of almost 12 years--Pam's mental age.

¹Supra, p. 40.

²A copy of this letter appears in the Appendix, p. 113, as do samples of all other material which was contained in the packets (Appendix, pp. 113-117).

teacher. One of these, for her use in designating the children she opined would be most chosen, bore a stamp.¹ The other envelope was unstamped, and was provided for the "Classroom Teacher's Reports," which I later collected, along with the results of the sociometric questionnaire given to the children.

The principals carried these packets back to their schools, and the project was underway. Within a few days I had received through the mails the completed Teachers Judgment sheets. According to the instructions I had given, each classroom teacher administered the sociometric questionnaire to her own group;² I later picked up these answer sheets from the 14 classrooms (containing a total of 390 third graders), which included 1 or more gifted children.

As can be readily inferred, some 57 children were in classrooms, 2 in number, which could not claim a gifted child among their members. These 2 groups, therefore, are not included in the computation of the comparative sociometric ratings found, although their numbers are a part of the total group surveyed.

There were two complicating factors which could be considered to be of import as regards the sociometric test: (1) the question of absenteeism in the classroom, and (2) the inclusion of 2 amalgamated groups, both of which combined the brighter pupils of the second and third grades.

¹This was Dr. Gold's suggestion, to avoid putting the teacher "on the spot" by having her "ballot" reviewed, before it got to me, by anyone in the school system. The teachers appeared to appreciate the gesture, as evidenced by their prompt replies.

²It seemed to me that the teacher, who had spent almost 9 months with these children, would be better able than myself, a stranger, to elicit spontaneous answers of choice-preference.

As regards the first of these factors: it was impossible to schedule any questionnaire for a day in which there was perfect attendance in the classrooms. However, this meant only that all of the 447 children were not present to state their choice-preferences; absenteeism did not preclude any youngster from being chosen, and such was announced by the teacher in accordance with the instructions for giving the test. It was assumed that his absence would not in any way affect the reports made by her on each gifted child.

In handling the combination rooms, I have ignored the second graders--that is, considered them as though they were not in the same classroom with the other children. This method of treatment was not in line with my original intentions or instructions, but became necessary because of the way the sociometric questionnaires were administered in these 2 rooms (i.e., the second graders were told to ignore the questionnaire when it was presented, and the third graders were instructed to limit their choice-preferences to members of their own class).

The comparative sociometric ratings presented in the next chapter, therefore, refer to those based on the choices of only the third graders. All other data presented in the study have a similar basis.

The Data Forms

Classroom Teacher's Report

My intention was to keep all data as objective as possible. By building a sheet for rating of possible leadership qualities as based on observed behavior, I hoped to keep the element of subjectivity on the part of the teacher to a minimum.

Accordingly, specific information was sought from each teacher as to certain empirical demonstrations she had noted, relative to the gifted children, throughout the past 9 months in the classroom.

The demonstrated qualities or traits selected to provide the basis for the rating sheet were those which have been most consistently persistent in the reviews of leadership studied.¹ These include ingenuity; a consideration and awareness of the feelings and needs of others; ability in performance and communication, including social acceptability; initiative, and individual assertiveness; and a "we-feeling," coupled with a strength of motivation, which seemingly would tend to be reflected in the very fact that he does appear to be in a leadership role, organizing and originating activities.

It was hoped to avoid any atomistic rating on the part of the teacher, and for this reason she was asked to check each gifted child in her room on 6 points relative to the child's usual performance within the class group. The rating scale, which is reproduced on page 114 in the Appendix, copied the Likert system; in this, following a simple extension of mental testing technique, degrees of "endorsement" are obtained in the data.² Results of these rating scales are presented in Chapter III.

Validity and Reliability of the Teachers' Ratings

Little inference was involved in the ratings, so the validity must

¹Supra, pp. 32-35.

²Clyde H. Coombs, "Theory and Methods of Social Measurement," Research Methods in the Behavioral Sciences, ed. Leon Festinger and Daniel Katz (New York: The Dryden Press, 1953), xi, 471-535.

be considered to be established by content. Since there was only 1 judge involved, the chief claim to reliability must rest in the fact that the teacher, playing the role of observer, was thereby performing in her usual and accepted role, and thus did not unusually influence the behavior of the group.¹ The element of subjectivity in making the ratings of course must be recognized.

Sociometric Questionnaire

The sociometric procedure was standardized, in that the instructions for the administration of the 3 test² questions were explicit, and the questions themselves were designed to be both meaningful and clear. These were all questions of affirmative choice, and were cognitively experimental; that is, the children were assured that nothing would transpire as a result of the findings. Each choice aspect was specifically defined to provide a concrete and realistic choice situation.

Furthermore, each choice preference was aimed at investigating a different aspect of what Cervinka terms "group-gen," that is, "anything that acts as a group-generating stimulus."³ In this way, data were sought

¹Roger W. Heyns and Alvin F. Zander, "Observation of Group Behavior," Research Methods . . ., ix, 381-417.

²The terms "questionnaire," "sociometric preference," or "preferential choice situation" are favored by many sociometrists who fear a premature application of psychometric concepts because of the use of the word "test." Moreno described a sociometric test as a "measure [of] the conflict between the actual structure of a group which the members maintain at the time when the test is given against the structure of the group as revealed by their choice." (J. L. Moreno, M. D., Who Shall Survive? [New York: Beacon House, 1935], p. 719).

³Ake Bjerstedt, The Methodology of Preferential Sociometry: Sociometry Monographs, No. 37 (Lund, Sweden: H. O. Boktryckeri, 1956), p. 42.

concerning quasi-personal and semi-personal preferences, which referred to the chooser's own system of values (questions 1 and 2), and those involving more formalized activities, which depend on a common value-system, or frame of reference. This latter, more formalized, aspect considers the so-called "goal-directed" activities and those involved in "socio-criteria."

Questions 4 and 5 were simply questions of opinion, added to the questionnaire proper to discover what recognition of superior intelligence there might be among the children,¹ and to what extent they were aware of the omnipresence of the generalized other. A copy of the questionnaire, or sociometric test, and the directions for its administration, appears in the Appendix on pages 115-16.

Each child was requested to write on his sheet of paper a choice for each question. As previously stated, he was also told that an absentee might be named, if desired, and that the same name might be given for more than one choice. The whole procedure took less than half an hour (some third graders write slowly; some have trouble with spelling, so difficult names had to be written on the blackboards). No child was forced to choose on any question, nor was any arrested while making more than one choice for each. Very few did, most following the "Pick 1" method. In tabulating and scoring, only the first choice was used.

Sociometry is a true hybrid of the two parents, sociology and psychology. It can be described as a quasi-quantitative technique which

¹Three eight year-olds, 2 boys with S-B scores of 133 and 147 respectively, and 1 girl whose Otis score was 113, chose themselves as the "smartest, brightest person in the class."

provides a needed tool for psychological research, aimed at analyzing the status of the individual as a member of a group, rather than an isolated entity.

There have been many criticisms leveled at the validity and reliability of sociometric tests, capably answered as follows by the psychologist, Pauline Pepinsky:

An operational definition of a psychological test would involve a statement to the effect that it is one in which an individual responds to a number of items, these responses being taken to be indirect evidence of the possession of certain characteristics to a certain degree. A sociometric test, on the other hand, requires the selection by each individual in a specified group of one or more other individuals in that group on the basis of stipulated criteria of choice.

In the first instance, interpretation of an individual's quantitative score is usually made by reference to established norms. In the second, the individual's "score" is the number of choices he receives from other members of the group, . . . and interpretation is limited to a statement of his "status" (in the case of choices given) in terms of that choice number only and for that group only. As Jennings¹ has said of the sociometric test, "it does not attempt to measure behavior of a certain type by eliciting related responses, but employs a sample of the actual behavior studied." . . . In other words, choice behavior is being studied, and choice behavior is what is elicited by the test.²

Pepinsky further states that inferences about the results of the tests are oftentimes made, and that such are usually suggested. But, as pointed out, these are only inferences; their proof must be demonstrated through use of other methods. The sociometric test is not a substitute for psychological tests.

Jennings has noted that the concept of validity has a particular

¹Helen Hall Jennings, Leadership and Isolation (New York: Longmans, Green & Co., 1943), p. 27.

²Pepinsky, "The Meaning of 'Validity' and 'Reliability' As Applied to Sociometric Tests," Educational and Psychological Measurement, IX (1949), 39-49.

relevance: "It may be considered, however, whether a sociometric test is valid in the sense that the behavior which it was intended to elicit actually appeared without falsification on the part of the subjects."¹ This would be dependent upon the rapport established by the examiner, as well as the motivation which prompts the choice selection by the group members. The sociometric test is designed to measure choice behavior; its results are choice behavior, regardless of the "honesty" of the stated preferences.

Originally, Moreno insisted that, to obtain adequate motivation on the part of subjects, it is important to make the choice situation meaningful to them by promising that the choices would be put into effect. Then the investigator is no longer a "scientific spy"; rather, he has assumed the role of "auxiliary ego."² Obviously, reorganization of groups, which was Moreno's great interest, is oftentimes extremely impractical, if not impossible. According to Bjerstedt, "most research workers have the impression that empirical differences between the investigations with and without choice utilization are negligible. . . . On the whole, the burden of demonstration now seems to rest with those claiming that only a situation with promise of choice utilization can disclose social preferences."³

As regards the concept of reliability, Pepinsky points out that the question is not so much one relating to reliability as to stability,

¹Jennings, p. 27.

²J. L. Moreno, M. D., "Sociometry in Relation to Other Social Sciences," Sociometry, I (1937), p. 210.

³Bjerstedt, pp. 50-51.

since the behavior is based on social interaction and experiences, and thus is very complex. There is more involved than an individual's report on himself, as stated above: instead, in denoting choice-preferences for social interaction, he is reporting on N-1 others, and N-1 others are reporting on him.

Pepinsky states: "Among the instruments most familiar to the psychologist, it may seem, then, that the rating scale is most nearly analogous to the sociometric test."¹ There are two big differences in the methods used by each of these: (1) "qualified judges" of a psychological rating are replaced by peers on the sociometric test; (2) the number of raters is increased from the usual few "experts" on the psychological rating to N-1 on the sociometric.

Furthermore, with sociometry, no attempt is made to control more than one criterion--that of choice; the behavior material consists of interpersonal relationships, and varies with each "judge." This furnishes the basis for the rating. In contrast, with a psychological rating scale, an attempt is made to control experimentally both criteria and performance, i.e., the behavior on a certain job, in a certain situation, etc. This leads to varying opinions on the part of the judges. However, on a sociometric test, the basis of the test itself (interpersonal relationship), on which the rating is based, also varies.

Reports on the "reliability" of sociometric tests have been based on "test-retest" correlations. But, because of the groups involved, and the factor of changing behavior, this basis would appear to be one of

¹Pepinsky, Educational and Psychological Measurement, IX, 46-47.

dubious worth. Authentic high correlations of reliability have been offered, obtained thus, but such could reflect a group stability rather than a function of the instrument. It is not possible to speak of test reliability independent of the influence of the choice behavior itself, with a sociometric-type of instrument.

A split-half reliability coefficient to estimate the internal consistency of the sociometric test would be equally inappropriate: how could the group be divided into equivalent halves? And even if it could be done, as would seem impossible, then a low correlation between halves could mean that the individual's role within his group is an inconsistent one. Such a situation, too, would give a low "r."

Thus, it seems, especially in view of the confusion extant about the measurement of reliability for psychological tests,¹ that it might be preferable to approach the factor of internal consistency through content, while building such a test.

"The concepts of 'reliability' and 'validity' as traditionally used--and misused--by psychologists, seem to have little direct meaning or application to the field of sociometry," Pepinsky concludes.²

Teacher's Judgment of Sociometric Status

Each classroom teacher was asked to indicate on this sheet which children she thought would be most frequently chosen for seating companion, for play companion, for work companion, and as the "smartest child in the room." Three choices of rank order were requested. Only the first of

¹Ibid.

²Ibid., p. 48.

these was used, however, in comparing teacher choices with those of the children, because, in some cases such as those of the combination rooms, the group numbers were small.

As previously stated, a stamped envelope was provided for mailing each sheet directly to me. The teachers were assured that their choices would be treated as confidential, and this promise has been respected. The report, presented in Chapter 3, of the relationship between teachers' judgments and children's choices, is based on an over-all correlation of total choices.

To contribute to the "validity" of the teachers' judgment of choices, they were urged to make these and fill out the judgment sheets before giving the sociometric questionnaire to their classrooms. The prompt responses, as borne out by the postmarks on the mailed envelopes, lead me to believe that this recommended procedure was conscientiously followed.

Validity and Reliability of the Teachers' Judgments of Sociometric Status

Here again, little inference was involved in the choice criteria, which were clearly stated. In an effort to maximize their motivation, the teachers were informed that their judgment choices would be of considerable importance in the research. The promise of confidential treatment of their choice-judgments, plus effects of some personal interviews, are felt to have been of aid in establishing rapport, and thus, it is hoped, subjective honesty of the choices. Since there was no re-test, the "reliability" of these choices on the part of the teachers is unknown.

In considering a relationship between the teachers' judgments of

the sociometric choices, and the preference choices designated by the children, the question put by Bjerstedt merits earnest attention: "How 'real' are the relationships disclosed by means of a sociometric preference situation?"¹ Which is more "real"?: observed group interaction, or the expressed wishes for such?

The reality of observed behavior and interaction can hardly be denied. But observation necessarily involves a time-space point, causing uncertainty as to whether the noted interaction is or is not typical. This would always apply, although it should be possible to reduce it to a minimum, over a rather lengthy period of observation involving an extended situational context.

The wishes expressed in a sociometric preference situation deal with a different kind of reality. Certain barriers which are purely "situational" may prevent interaction, especially in the complexities of human group life. Thus, A may reject B, and B reject A, or one may be indifferent, or shy. There would be no manifest interaction in the latter case (as an example) without the lowering of this barrier of shyness, possibly through the agency of a third individual. And then such interaction would be possible.

In this way, choice wishes can give information different from that supplied by observed interaction, information which can be of considerable importance in both interpreting and predicting changes in group dynamics.

¹Bjerstedt, p. 44. The reader is referred to Bjerstedt's section "Interaction Vector and Interaction: Introductory Comments on the 'Reality' of the Choice" (The Methodology . . .), pp. 44-48) for an interesting treatment of this concept.

It is apparent, then, that there is a sharp distinction between empirical reality of observed behavior, and the chosen, or expressed "reality" of wishful thinking. Sometimes the 2 types of interaction are the same, the factual and the longed-for. At other times the interaction vectors (in the Lewinian sense) intersect, but do not agree. Accordingly, that category of persons wishing for interaction with an individual, and those actually interacting with him, are not necessarily the same.

The choice preferences named by the children represent choice-preferences, nothing more. They are a form of wishful thinking. Therefore, it should not be expected to find a complete correspondence between the teachers' judgments of sociometric status, which are based on empirical observation, and the actual choice-preferences as named by the children for hypothetical interaction.

Also, Bonney has found that the teachers tend to rate their pupils on the basis of how the children affect them, regardless of attempts at objective rating.¹ Considering these various factors which can influence the teachers' ratings, then, it is not difficult to understand the wide variety of differences and correlations which have been reported between the teachers' judgment of sociometric status and results of the choice-preference tests. Gronlund, in 1956, placed the extremes of the correlations between such judgments of status and actual results of choice-preference at .268 and .838.²

¹Merl E. Bonney, "Sociometric Study of Agreement Between Teacher Judgments and Student Choices," Sociometry, X (May, 1947), 133-46.

²Norman E. Gronlund, "Generality of Teachers' Sociometric Perceptions: Relative Judgment Accuracy on Several Sociometric Criteria," Journal of Educational Psychology, XL (1956), 25-31.

Data based on the teachers' appraisal of the sociometric status of the children involved in the present investigation are presented in Chapter 3, with the results of the tests.

1937 vs. 1958

The chapter now being concluded has been aimed at clarifying various aspects of the investigation undertaken here in Missoula. However, a notable fact which has been brought out in the course of the research and which was reported earlier in the present chapter has been left hanging in mid-air. I refer to the very great discrepancy which exists between the number of high IQ's located, and those expected, on the basis of the Merrill report.¹ No explanation so far has been attempted for this discrepancy, which marks a deviation that has a probability of occurring, through chance alone, considerably less than one time in a hundred thousand.²

Gallagher and Crowder, in their 1957 study,³ located 8 to 10 times the number of high IQ's they calculated could be expected. By way of explanation for this excessive number of mentally superior children in their population, they stated "this community had a highly favorable social, economic and educational level (the major industry of the community was a university)."⁴ Furthermore, they felt that their study had not exhausted

¹Supra, pp. 43-44.

²Supra, p. 45. The chi square calculated for the expected vs. observed frequencies of IQ scores of 140 and above, calculated in a similar manner, is 153.45.

³Supra, pp. 28-30.

⁴Gallagher and Crowder, Exceptional Children, XXIII, 306-07.

the possibilities which might have been located in that university city.¹

In Missoula, 59 children were enrolled in the 2 third grades of the single elementary school located in the university district. Of these, 16, or some 27%, were identified as gifted. But, another school, located in a different section of the city, produced exactly the same number and the same percentage of these mentally superior children. So the concept of "university location" cannot be said to obtain here. We must search further for an explanation.

Some 20 years have elapsed since the incidence of intelligence quotients was plotted by Merrill. During these 20 years, society has undergone many changes. One of the most important of these changes lies in communication, radically affected by television. It was in the 1930's, after the introduction of the all-electronic systems, that the entertainment value of television began to rise.² Now, more than 7½ million TV sets are in use in over 83% of the nation's homes.³ It would be foolish to deny the effect of this medium on the enlargement of funds of information and the extension of frames of reference now being imparted to viewers. It would be equally unrealistic to overlook the effects of television-viewing on vocabulary.

Most intelligence tests are highly weighted with the verbal factor. In Measuring Intelligence, Terman and Merrill state:

. . . Like other investigators we have found that it is extremely

¹Ibid., 306.

²Vladimir K. Zworykin, "Television," The Encyclopedia Americana, ed. A. H. McDonald, XXVI (1948), 600a.

³The World Almanac (New York: New York World-Telegram [1958]), p. 84.

difficult to devise non-verbal tests for the upper levels which satisfy the requirements of validity, reliability, and time economy. At these levels the major intellectual differences in the ability to do conceptual thinking, and the facility in dealing with concepts is most readily sampled by the use of verbal tests. Language, essentially, is the shorthand of the higher thought processes, and the level at which this shorthand functions is one of the most important determinants of the level of the processes themselves.¹

It seems logical, then, that part of the reason for the discrepancy between actual and expected incidence might be the factors of date and sample used by Merrill in drawing up the table of IQ range of occurrence. Possibly the test items themselves share some responsibility.

Galton's idea of "sinking the shafts at critical points" in an effort to obtain a general knowledge of the capacities of a subject² is not in any way being questioned. But I should like to suggest that there is a possibility, even a probability, that the ore might assay differently now from what it did in 1937.

In the pages of the present chapter we have discussed the conception and birth of this study, the investigative procedure used to locate our 75 gifted children, and something of the socio-economic background of them, as well as of their third grade classmates. A sketch of the "ideal" 9 year-old was included, to orient us to some of the characteristics of our population.

In addition, details were presented concerning the methods utilized in obtaining data. Descriptions of the forms were also included, to preclude any uncertainties about either our approach to the problem, or the specific information sought.

¹New York: Houghton Mifflin Co., p. 5.

²Ibid., p. 4.

Since this study is aimed primarily at investigating the social acceptance and status of the gifted child within his own peer group, a rather lengthy discussion of the sociometric method of choice preference, including its validity and reliability, has been presented.

In the following chapter, we shall look at the data collected, and try to find in it answers to some of the questions posed in the Introduction (page 6). Within each group we are bound to note a certain percentage of children who are overly-chosen, or stars.¹ There will also be a certain number who are neglected, in that they receive no votes of choice. And there will always be some who appear as leaders. Are any of these listed among our gifted? That we expect to learn.

Since the gifted children are in a decided numerical minority, as a categorical group they may not differ at all from their more typical classmates.² An analysis of the data elicited should serve to establish any unique status of preference or neglect which belonged to the gifted child as he functioned within the classrooms here represented at the end of the school year in 1958.

¹The term star is commonly used in sociometry to indicate an individual who is highly accepted by his group. In this study, a star is any child who receives a number of choice votes significantly in excess of that expected by chance.

²A child who is not a member of the gifted group will hereafter be designated as typical.

CHAPTER III

THE FINDINGS OF THE INVESTIGATION

As described in the preceding chapter, a Teacher's Report was completed for each of 74 gifted children.¹ Before administration of the questionnaire to her class group each teacher was asked to name the children she thought would be most chosen on each of the first 4 questions of the questionnaire. This was administered to every child in attendance in the 14 classrooms which numbered a gifted child amongst their members. All but 1 of the 9 schools surveyed were thus represented.

The analysis of these data gave a description of the gifted children, relative to certain traits of behavior,² and a comparative description of the gifted group and the typical group as regards social acceptance or neglect. It was also possible to note the correlation between the teachers' judgment of sociometric statuses and the choice-preferences indicated by the boys and girls themselves.

This present chapter, then, will be devoted to a discussion, chiefly comparative, of some of the characteristics of the third-graders studied, as disclosed through the data obtained from classroom and school records.

¹The rating for 1 boy was overlooked by his teacher, a fact not made known to me until after the close of the school term.

²Supra, p. 53.

Analysis of Data

Sociometric Questionnaire

Analysis

The sociometric questionnaire was administered to every child in attendance in the 14 classrooms which included a gifted child. No one day was set aside as "test day"; instead, such dates were dependent upon the convenience of the various teachers. Some of the classrooms had to await the identification, on the Binet test, of 1 or more gifted children within their groups. Thus, the dates of the choice-preference tests varied within a range of approximately 2 weeks, at the end of the school term.

With 20 children absent on the days the questionnaire was presented to their various groups, some 370 boys and girls were given the opportunity to denote their choice-preferences on each of the 3 social criteria included. The questions of social preference were (see Appendix, page 115):

1. We don't have to move, but just suppose that we did: which classmate would you most want to be sure to move with you and sit next to you in the new classroom?
2. If we had an extra holiday, and your mother said you might invite one classmate over to your house to play, whom would you choose to invite? Someone from this class, remember!
3. If you were appointed to plan a picnic for our room, which child from the class would you most like to have help you?

Each child was also asked to respond to each of the last 2 questions which followed the above on the questionnaire, by naming someone

from his class. These questions, also presented on page 116 in the Appendix, were:

4. If you were asked to name the smartest, brightest person in your class, who would it be (not counting the teacher)?

5. Whom do you think most of the other children would name as being the smartest child in the class?

Since there was no way of determining the extent or intensity of each choice-preference, it was assumed that all were equal. Consequently, no weighting of scores was required. Each child received a score of one each time his name was given as a first choice on any of the 5 criteria. A child who received no choice vote at all was considered a neglectee. No questions of positive rejection were offered to the children.

As described in Chapter 2 (p. 55), only the first 3 choice-preference questions were considered to make up the sociometric questionnaire proper. Consequently, in the analysis of the data gathered, choices made on these "social" questions were treated separately from the choices denoted for questions 4 and 5.

Since an absent child was declared equally eligible to be chosen, the matrix for selection of possible choices on each criterion was made up of the names of every member of the total enrollment of the participating classrooms, or 390. Of course, the 20 absences decreased the number of possible choosers. In this way, a total of 370 children could be expected to choose on each criterion.

In fact, 1,840 answers were tallied, rather than the expected 1,850. Here are the apparent reasons for these discrepant figures: (1) 1 boy said he didn't know which child was smartest by class consensus; (2) 4 girls each gave once the name of another who was not a member of her

class group; (3) 3 choices by boys could not be precisely identified without a last initial (not given); and (4) 2 choices by 1 boy were illegible. In calculating and analyzing the data, these omissions have all been taken into account as regards scoring on the criterion or criteria involved.

Table 2 on the next page shows the composition of the classroom groups which provided the data for the analysis of the questionnaire results. To maintain the anonymity promised to the school officials, use of a code was adopted to identify, for purposes of analysis, the classes and schools responding. (This same code applies in the same way throughout the study.)

It is impossible to know whether the absence of the 20 children did or did not qualitatively affect the choices named. For purposes of analysis, it is assumed that it did not. Quantitatively, recognition must be given to the fact that absences in his room decreased very slightly the probability of each child in that room to be chosen, since the number of choice candidates remained constant. However, this decrease in chance selection was considered to be too small to be meaningful.¹

When planning this research, I decided to use a method of macro-differentiation in computing the classification of choice status. This relatively crude method avoids the complexities of a more differentiated scale, and at the same time yields results which are adequate for the survey made here--an attempt to discover the number of gifted children

¹In the 8 classrooms reporting absentees, there were 28 children who would have qualified for stardom (a status explained on page 66 /infra/) in the unlikely event of any one of them having received all choice preferences from all of their absent classmates.

who are overly- or under-chosen.¹

TABLE 2.--Distribution of gifted and typical children in classrooms where sociometric questionnaire was administered

Room	Classroom			Gifted			Typical		
	N	Boys	Girls	N	Boys	Girls	N	Boys	Girls
A	39	12	27	5	2	3	30	10	24
B	30	15	15	1	0	1	29	15	14
C	35	15	20	5	0	5	30	15	15
D	31	15	16	8	5	3	23	10	13
E	28	16	12	8	5	3	20	11	9
F	28	13	15	3	0	3	25	13	12
G	31	15	16	13	5	8	18	10	8
H*	15	7	8	8	4	4	7	3	4
I*	16	3	13	3	1	2	13	2	11
J	28	15	13	4	0	4	24	15	9
K	28	15	13	12	6	6	16	9	7
L	26	17	9	1	0	1	25	17	8
M	28	13	15	1	0	1	27	13	14
N	27	12	15	3	1	2	24	11	13
Total	390	183	207	75	29	46	315	154	161

*These 2 classrooms were the combinations rooms, which included both 2nd and 3rd graders. Only the latter were administered the sociometric questionnaire, and they were instructed to limit their choices to fellow 3rd graders (see supra, p. 52).

Bronfenbrenner has found certain raw score ranges which represent the expected scores in various situations, depending on the number of choices and of criteria used. He also has noted:

¹Bjerstedt, pp. 89-92.

Provided the number of criteria and choices allotted are held constant from group to group, levels of significance are little influenced by variation in size and any given score below the upper limit of significance represents about the same degree of deviation from chance expectancy. Consequently . . . within the indicated limits the raw status score affords a fairly reliable index of sociometric status.¹

The table "Critical Raw Score Values for Diverse Sociometric Situations"² constructed by Bronfenbrenner has been used in this investigation as the basis for determining expected score values, as well as upper and lower limits of significant, or critical, scores. The table resulted from both mathematical and empirical study on Bronfenbrenner's part. Levels of significance for the critical scores vary slightly, from .02 to .05, depending upon the size of the groups. In the present study, the extremes would be represented. One of such would be the combination room which netted only 15 third-graders; the other extreme would be the largest of the classes, which consisted of 39 pupils.

In accordance with the values given in Bronfenbrenner's table, a total choice score of 8 or above (based on 1 choice being allotted each chooser, for each of 3 criteria) would indicate star status for the chosen child. The lower limit would be zero. These numbers, then, were those adopted to identify the stars, as well as the neglectees. (The reader will understand that the score thus used represented the summed preferences indicated for each child, individually, on all 3 of the social criteria.)

¹Urie Bronfenbrenner, The Measurement of Sociometric Status, Structure and Development ("Sociometry Monographs," No. 6; New York: Beacon House, 1945), p. 70.

²Ibid., p. 71.

In considering any single criterion alone, a score of 4 or above was taken as being significant (again referring to Bronfenbrenner's work). There will be further discussion of scores on the various single criteria later in this chapter, as we proceed to examine the results of the questionnaire.

Social acceptance

Jennings found that the primary grades usually are made up of several chains of one-way relations, as the children are still relatively self-centered, and not overly-conscious of the impressions they are making on one another.¹ Data from the present investigation would seem to lend support to Jennings' findings: only 33, or 10.48% of the total number who were choice-prospects (all children in the 14 rooms), achieved star status. Only 14 of the 183 boys were overly-chosen (8 or more preferences on the 3 social criteria combined); girl stars numbered 19, out of the 207 girls in the groups choosing.²

Some 93 boys and girls, representing 24.76% of the total number of children in the classes, received no votes of social preference. Thus, 44 boys and 49 girls were identified as neglectees. Every room claimed at least 1 star and 1 neglectee; and the number of children receiving no votes, in each room equalled or exceeded the number who were chosen as

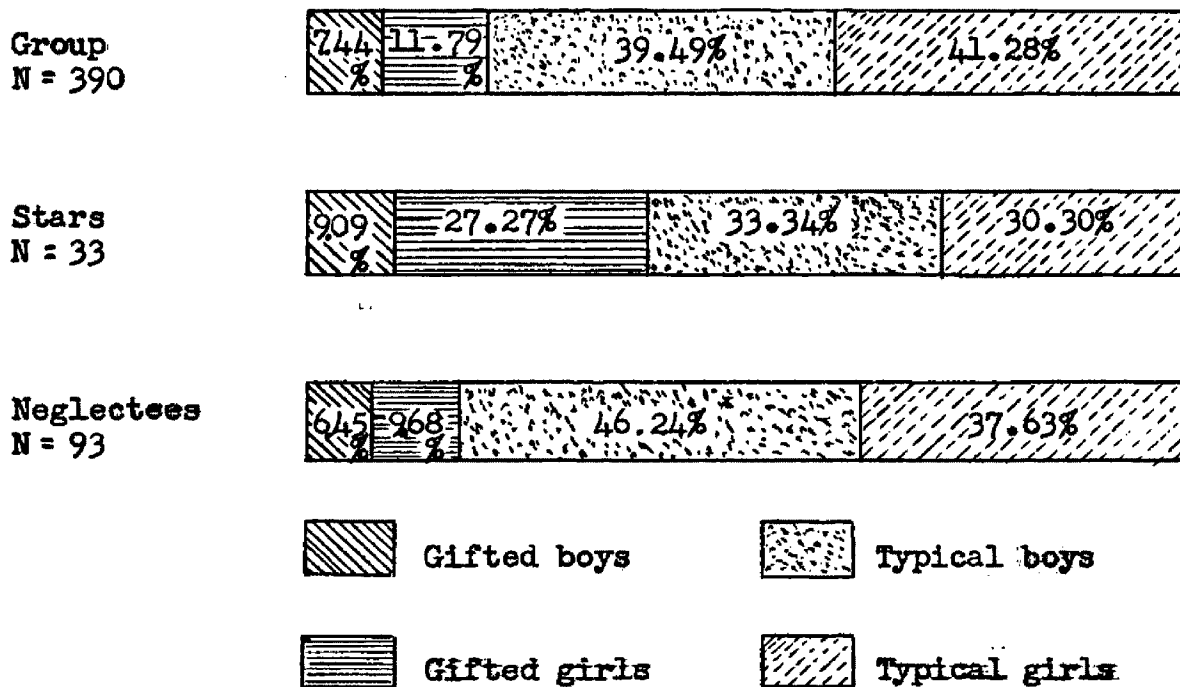
¹Helen H. Jennings, Sociometry in Group Relations (Washington: American Council on Education, 1949), p. 70.

²Absences and other factors noted on pp. 51-52 (supra) served to decrease the theoretical mean acceptance score to 2.831 on the combined 3 social criteria. In fact, 2 children, both gifted, received top scores of 22 points. (The boy's IQ was 150, that of the girl, 138.) Table 3 on page 117 in the Appendix reports the total social acceptance scores received on the social criteria, in terms of boy-girl and gifted-typical groups.

stars. An examination of the composition of the classroom groups (see Table 2, page 71) disclosed no pattern, as to size or structure, to explain the seemingly inconsistent combinations of stars and neglectees.

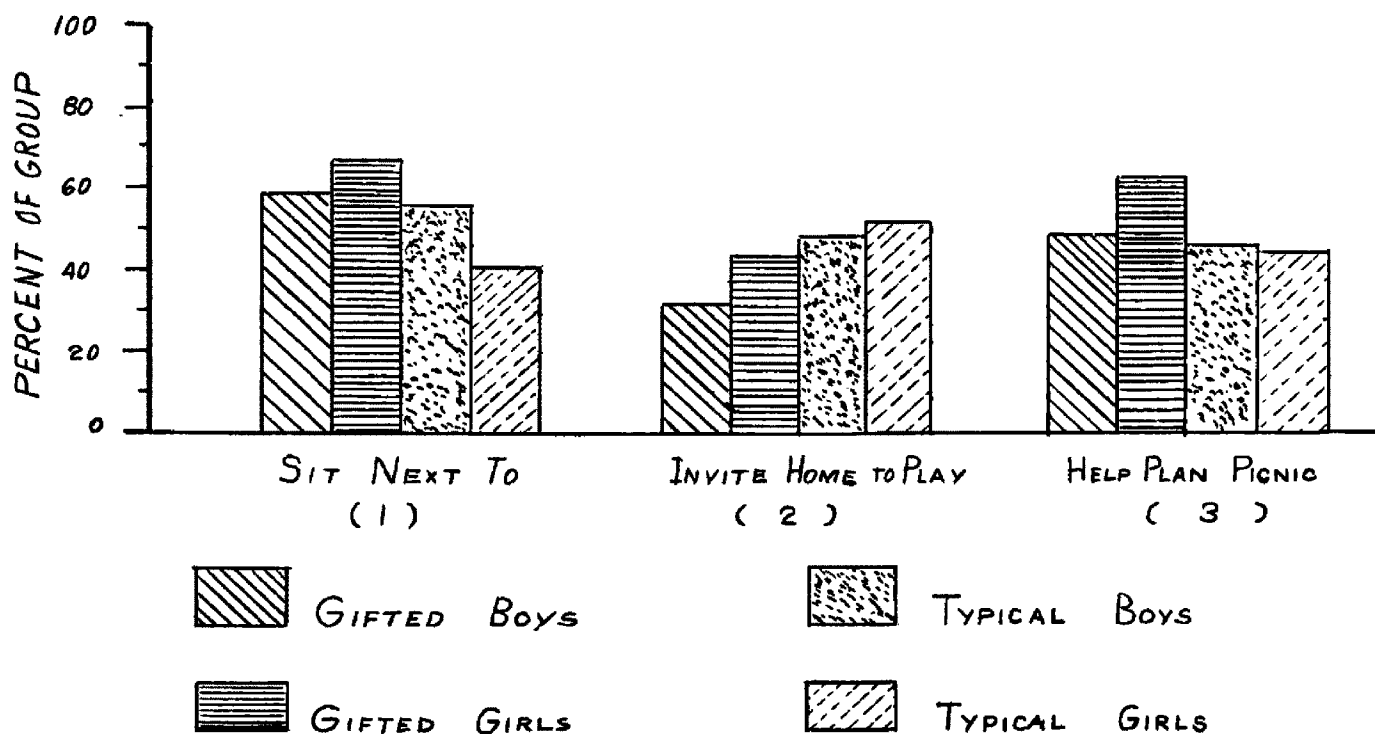
Figure 1 shows the distribution of the gifted and typical children within the classroom groups which were given the sociometric questionnaire. The boy-girl composition of the star and neglectee groups is also presented for comparative purposes.

Fig. 1.--Percentages of gifted and typical boys and girls in total group to which the questionnaire was administered



Eighty-nine children received only 1 vote of choice. Figure 2 on the following page indicates the sex and group (gifted or typical) of each child who was chosen at least once on any one of the social criteria. Sixty-eight children named the same choice for all 3 social criteria.

Fig. 2.--Distribution of the children, as to sex and group, who were chosen at least once on any of the social criteria



Stars and Neglectees

As can readily be seen by referring to Figure 1 on the previous page, although the gifted children numerically represented less than one-fifth of the total number of children in the classrooms, they made up more than one-third of those chosen to star status. Also, the gifted boys and girls were unchosen (neglected) to a lesser degree. Here, we are given a clear indication that this group of mentally superior youngsters were well accepted socially by their classmates in the regular public schoolrooms. The gifted boys and girls were chosen almost twice as

frequently as their relative incidence might lead one to expect.

The 2 most highly gifted goys (above 160 IQ) were not chosen as stars. Nor were they neglectees. The other 3 ranges of 130 and above, categorized on page 47 (supra), were almost equally represented in the star group:

<u>IQ Range</u>	<u>Boys</u>	<u>Girls</u>
130-139	1	4
140-149	1	2
150-159	1	3

In examining the incidence of boy and girl stars within the gifted and typical groups, we find fairly comparable percentages between the typical boys and the typical girls. The gifted boys were more highly chosen, and the gifted girls very much more so--over 3 times as frequently, percentage-wise, as the other group of girls. Table 4 exposes this relative incidence:

TABLE 4.--Incidence of stars within gifted and typical groups

	Gifted (N=75)			Typical (N=315)		
	N	n	%	N	n	%
Boys	29	3	10.34	154	11	7.14
Girls	46	9	19.57	161	10	6.21
Total in group	75	12	16.00	315	21	6.67

It is hard to resist a temptation to speculate on the reasons for this disproportionate popularity of the gifted girls. Was it a personal "charm," evidenced in personal attractiveness and/or adeptness at role-playing? Was it their intelligence, recognized and valued by their

classmates? Did a social maturity accompany their mental superiority? But these same traits might as well be thought of as applying to the gifted boys, who were chosen only little more than half as much.

It is interesting to note in table 5, offered here, that, within the neglected group, too, the gifted girls showed greater social acceptance than did either their male counterparts or their typical classmates. That is, in proportion to their total number, fewer gifted girls were neglectees. However, here the differences among percentages were chiefly with the typical boys, who received substantially fewer choices proportionately.

TABLE 5.--Incidence of neglectees within gifted and typical groups

	Gifted (N=75)			Typical (N=315)		
	N	n	%	N	n	%
Boys	29	6	20.69	154	43	27.92
Girls	46	9	19.57	161	35	21.74
Total in group	75	15	20.00	315	78	24.76

Basis for Choice

The total numbers of children chosen on each social criterion were approximately the same--190, 191, and 188, respectively. But in the selection of stars, criterion 1--"to sit next to"--appears to have played an important part. By recognizing a choice-vote of 4 or more on any 1 criterion as denoting a critical score (see page 75), it was possible to analyze the acceptance scores of the stars, and thus learn who amongst them had been overly-chosen on any one of the 3 criteria.

A tabulation of these results is presented here in the following

table:

TABLE 6.--Incidence of critical scores on each social criterion, among children chosen as stars

	N	"Sit Beside"		"Invite Home"		"Help Plan"	
		n	%	n	%	n	%
Gifted	12	8	75.00	3	25.00	6	50.00
Typical	21	15	71.43	15	71.43	12	57.14

A graphical presentation of the relative incidence of the stars from both the gifted and typical groups who received 4 or more votes of choice preference on the various criteria of the whole questionnaire (5 questions) is presented in Figure 3, on page 118 in the Appendix.

In referring to the scores given for social preference, it is possible to only speculate as to why certain children were favored for "sitting next to," for "inviting home," or for "helping plan a picnic for the class." It would seem logical that the brighter children might be chosen on the basis of their ability to help. But the incidence of critical scores on the stars on criterion 3 does not seem to indicate that such was the case. Nor did the observed strict discipline in the visited classrooms suggest that there might be any help, other than moral, gained with the proximity of "sitting next to."

Jennings found that children in primary grades offer little to help in understanding their choices. The reasons offered are seemingly inconsequential, like "she has pretty curls," or "he lives near me."¹ Very possibly the child himself is unaware of his reasons for liking a

¹Jennings, p. 33.

certain other boy or girl. Yet these bases of attraction appear to be fairly constant, according to the teachers who have reported on results of repeated sociometric tests.¹ It seems highly probable that investigation more subtle than direct questioning might serve to disclose real clues.

Previous mention has been made of the third grader's growing awareness of his status and role in society.² Could it be, then, that the children who seek out, through wishful choosing, their mentally superior peers, are hopeful that some of this "giftedness" will rub off on them through spatial proximity? Or, do the choosers seek to become identified, in the eyes of the class groups, with those to whom they attribute some kind of prestige (which may or may not be due to intelligence)?

The low incidence of critical scores on the second criterion could be construed as lending support to this last idea--identification before the group. Why weren't the gifted children preferred as playmates, to invite home for the day? Were their interests too different to qualify them as congenial companions over a full day's time? It might seem so, especially in view of the fact that, since the attendance to the various schools was allocated on the basis of location within the city, most of the children within a classroom came from very similar socio-economic

¹One teacher informed me that she had given a sociometric questionnaire monthly throughout the school year. She found that the children's answers did vary somewhat, but always within a given range, or circle of selected peers. That is, a child might express for another on a certain criterion at the time of one test, then later shift the chosen one to another place in the preferred circle.

²Supra, p. 48.

backgrounds. Thus it was unlikely that the gifted children would be "unacceptable" in the homes.

Northway and Detweiler have premised: "We perceive people in terms of their social value to us. . . . One will perceive one's friends as possessing desirable qualities to a greater degree than one's self."¹ This, then, would offer aspiration as a basis for choice; the concept appears to be deserving of consideration, especially in the light of the data reviewed here.

Gifted to gifted.--Of the total number of choices made by the gifted children on the 3 social criteria, 79 (38.16%) of them went to other mentally superior youngsters. This number represented 25.73% of the preferences which were directed toward the gifted group on the 3 social preference questions.

Turning back to Table 2 on page 71, we find that 3 of the classes had only 1 gifted child within their groups.² Therefore, any empirically demonstrated intra-group attraction noted in these data would be subject to criticism, since all of the children were not given opportunities to choose others of high IQ's, or to be chosen by them.

Bearing this in mind, only the most salient points of the gifted-to-gifted expressed choice-preferences will be discussed here.

Recently we premised that, possibly, the gifted children had interests too different from those of their more typical classmates to make

¹Mary L. Northway and Joyce Detweiler, "Children's Perceptions of Friends and Non-Friends," Sociometry, XVIII, 4 (1955), 529.

²The number of pupils in these rooms totaled 84. One of the gifted achieved star status; none were neglectees.

the former congenial companions for an extended interval of play. The gifted children were not much favored "to invite home to play," as we have seen. It would be easy, then, to theorize further: we might consider that these mentally superior children possess interests which are unusual, as far as their typical classmates are concerned, but which are mutual to each other.

That being the case, the mentally superior children might, then, quite logically enjoy each other in play. It might seem that the gifted children would choose each other as day-long companions.

But such a mutual attraction for extended play was not apparent in findings yielded by this study. Among themselves, too, the gifted preferred each other more "to sit next to." Possibly their interests were too diverse. Again, maybe the children themselves exhibited too much individuality for smooth and amiable play activities.

The criteria scores showed less contrast here, however. The votes received by the gifted children from other gifted youngsters on each of the criteria were as follows:

<u>Criterion</u>	<u>Boys</u>	<u>Girls</u>
to sit next to	8	22
to invite home to play	8	16
to help plan a picnic	<u>6</u>	<u>19</u>
total intra-group scores	22	57

Most of these choices of the gifted boys and girls for other mentally superior children were given to those of either a higher IQ range (41.77%), or those in the same range as themselves (39.24%). Only

15 gifted-to-gifted preferences (18.99%) were given to mentally superior children of a lower IQ category.

Intra- and extra-sex choices.--Of the gifted-to-gifted choices just discussed, the boy-girl choices numbered 15, and the girl-boy, 2 (both by the same girl for the same boy). Outside their gifted group, these youngsters gave only 7 extra-sex preference votes--3 to girls, and 4 to boys.¹

Although, because of their higher mental age, these children might be expected to display a greater awareness of sex role and own-sex cohesion,² this distribution of their choices corresponded to the number of votes (11.05%) which the group as a whole gave to the opposite sex on the social criteria. The typical boys, also, were more inclined to choose girls than were the girls to select them, the ratio being almost 3 to 1 (73:25).

Noteworthy is the emergence of the gifted boys to receive 30.77% of the girl-boy choices made, with one gifted boy (IQ 150) being given 10 of these preference votes. All together, the mentally superior children were the recipients of 40.65% of the total extra-sex preferences denoted on the first 3 criteria.

Criterion 4--Choice of the "Smartest"

Only 5 children (1 boy and 4 girls), who actually did have the

¹The total extra-sex preference, expressed by the gifted group on the first 3 criteria, represented 11.59% of the choices they gave for these criteria.

²Among others, Alfred L. Baldwin, in a section entitled "The Development of Compliance in Children," discusses the development of the sex role in childhood (Behavior and Development in Childhood /New York: The Dryden Press, 1955/, pp. 229-37.

highest recorded IQ's in their room, were so chosen by achieving critical scores (4 or more) on this criterion. One of the boys who scored above 160 on the Binet received this recognition; 2 of the girls (IQ's of 141 and 134) who were the lone representatives of the gifted group in their classrooms also received critical scores on this criterion. The other girl (IQ 130) who was the only gifted child (identified) in her room, received only 3 votes from her classmates.

Thirty-one of the typical children were chosen (with critical scores) as "smartest." All of the IQ ranges were represented by the 18 gifted children who were acclaimed with critical scores on this question of opinion.¹ The distribution of range and numbers chosen was as follows:

<u>IQ Range</u>	<u>Boys</u>	<u>Girls</u>
130-139	1	6
140-149	2	5
150-159	1	2
160 and above	1	0

Again, we have evidence of the girls' being highly overchosen as compared to their "brothers" in mental superiority. And, again, there is much room for speculation as to the reason.

At the beginning of this study, I undertook to get some records of the school achievement of the children, but the grading system used in the elementary public schools is based on the "satisfactory vs. unsatisfactory" rating. No refined reports of achievement were available. Discussing the matter with Dr. Gold, he suggested that possibly certain of

¹The vote of gifted for gifted as "smartest" was 60.86%, vs. typical recognizing gifted, 56.29%.

the teachers publicly applaud scholastic performances, and thus stress achievement of some of the children. In cases where such is true, he further hinted, it would very likely influence the opinion of the children. This sounds highly plausible. It also appears to be true that, in our culture, oftentimes the girls are favored over the boys in the school-room. This could be because the girls, possibly, are more tractable at this stage of socialization. Without further evidence, these ideas must remain hypotheses for further research.

But another possibility for investigation here, and one which did have empirical evidence available, was the idea that the children might have tended to choose, for social interaction, those other youngsters they considered "smartest." And, they might also endow the children they liked best socially with the mantle of intellectual superiority.

We have seen that criterion 1--"to sit next to"--was the biggest factor in the selection of the stars (pages 77-79, supra). Accordingly, the choice-preference votes were examined to discover just how many children named the same choice on each of those 2 criteria--1 and 4.¹

Out of the total number of youngsters who made choices (370), only 42 girls and 14 boys expressed a preference to sit next to the child they considered the "smartest" in the room. This number of boys and girls represented 15.14% of the choosers. Thus, we are led to conclude that intelligence per se had little to do with the question of social acceptance.

¹The boy-stars so chosen (by 12 children) numbered 7; 13 girl-stars were named on both criteria, by 38 other boys and girls.

Recognition of the Generalized Other

Because we often ascribe to "they" ("they" think, "they" believe, . . .") opinions or ideas we hesitate to admit are our own, a similar comparison between the children whose choices on criterion 5--"whom do you think the other children will name as smartest?"--and the first social criterion was made. Here the number who made the same choices on both criteria was 1 less:¹ just 33 girls and 22 boys chose to sit next to the child they thought "smartest" in terms of class consensus. The number chosen on both criterion 1 and criterion 5 included 11 girl-stars and 6 boy-stars, all being selected by 41 other children.

This dimension of the evidence offered to determine a relationship between intelligence and social acceptance does not materially change the conclusion stated on the preceding page. For, although 21 of those chosen to stardom were deemed smartest,² the number of boys and girls who so considered them, and, at the same time, preferred to sit next to them, was still only one-sixth of the class group members. That is, not many of the choosers made their preferences on combinations of criterion 1 and criteria 4 and/or 5.

Incidence of Recognition

Some 217, or 58.91%, of the children indicated that other boys and

¹Four votes of choice-preference on criterion 5 could not be tallied.

²This figure of 21 represents the number of stars who were chosen by the same persons on a combination of either criteria 1 and 4, or 1 and 5. The gifted stars were more highly chosen in this manner, 83.33% vs. 61.90% of the typical stars.

girls had opinions which differed from their own. At least that number, then, can be said to have been aware of the fact of role behavior in social interaction. It is highly possible, too, that this recognition of the generalized other was even more extensive among the children, since some of them might have realized that their classmates could have differing opinions, but actually did not.

It would seem that the gifted children were either a bit more egocentric or somewhat more confident of their own opinions. For only 46.38% of them, vs. 61.26% of the typical, answered question 5--"whom do you think most of the other children would name as being the smartest child in the class?"--with a response different from their own choices.

Further doubt as to the ability of question 4 to provide an adequate description of the degree of socialization--the amount of progress along the path to social maturity--which might be said to describe these children, became evident with further data analysis.

For, seemingly paradoxical is the fact that of those children who were chosen to stardom on the basis of social acceptance only 16--fewer than half of the 33 stars--gave different responses to questions 4 and 5. And of these, the more intelligent, or gifted, numbered only 3. Since an awareness of others is necessary for reciprocity in successful group interaction, we can only conclude that the method and/or question used in this study to establish the extent of cognizance of role behavior was/were unsuccessful.

Intra- and extra-sex choices.--On the last 2 questions presented to the children on the questionnaire, their reluctance to choose from the opposite sex diminished considerably, with 35.09% of the choices going to

members of the opposite sex. Again, the boy-girl choices were greater: 204, as compared to 64 girl-boy choices.

This shifting of vote to the other sex in selecting the "smartest" child appears to corroborate the earlier conclusions. That is, there is little evidence offered here to stress any importance to sheer intelligence as an isolated factor leading to social acceptance among children.

Teachers' Judgments of Sociometric Status

The manner of obtaining these judgment sheets has been described in Chapter 2.¹ Each teacher was asked to decide which child she thought would be most chosen on the first 4 questions of the sociometric questionnaire. As indicated in sections which preceded this one, these decisions concerned preferences to (1) sit next to; (2) invite home to play; (3) help plan a picnic for the class; the fourth question, one of opinion, was a selection of "the smartest child in the room."

Scoring

The degree of correspondence between the children named by the teachers as most likely to be chosen on each of the above categories, and those boys and girls who actually were most chosen by their classmates, was calculated very simply, as described below.

Although the teachers were given 3 choices for each judgment, it was considered advisable to base any notion of "correctness" on only the first of these choices.² Accordingly, the numbers of correct selections

¹Supra, pp. 59-63.

²Ibid., pp. 59-60.

(i.e., those made by teacher and children alike) were summed for each criterion. The results are shown in Table 7, below.

Results of Teachers' Judgments

In a class of 39 children, the teacher, out of sheer chance, might make a choice which matches that of the children fewer than 3 times in 100 random guesses. Thus, the mathematical probability of making a correct selection purely by chance would be .026. In the class of only 15 children, this probability increased to .067. From the following table, it can be seen that the teachers were fairly cognizant of the relative statuses of their children, particularly as regards classroom popularity ("to sit next to") and children's choices of the "smartest." The latter correspondence between teachers' and children's choices might serve to support our speculation that certain children were receiving public acknowledgment of their intelligence, or their achievement, or both.¹

TABLE 7.--Teachers' correct selections of children's choices on first 4 questions of sociometric questionnaire (N=56)

Criterion for Choice	No. Correct Selections on Each (N=14)	% Correct on Each Criterion
1. Sit next to	9	64.29
2. Invite home to play	5	35.71
3. Help plan picnic	2	14.29
4. Smartest child in the room	9	64.29
Total number correct selections	25 (N=56)	44.64

¹Teachers' correct selections of the children's choices on the first 3 questions, considered to have made up the sociometric questionnaire

Halo Effect

The teachers were aware of the identity of the gifted children at the time these reports were made out. This fact may have colored the judgment of the teachers and influenced them to favor those children as choices. If such was the case, the net effect may have been to lower the teachers' scores. For, with 56 opportunities offered 14 teachers to name the children's choices, the teachers replied 33 times with the names of members of the mentally superior group. Only 15 of these were correct choices, when compared with those made by the children.

In noting any accuracy of the teachers' selection of the children's choices, I should like to point out again¹ that wishful choices for, and empirical demonstrations of, relationships, are more matters of differences in kind than of degree. Hence, the correspondence noted here appears to be moderately substantial.

Classroom Teachers' Reports

As described in Chapter 2, each teacher was requested to rate each of the gifted children individually, on the report forms distributed to the schools. With the exception of 1 boy, who apparently was overlooked by his teacher, all of the children identified as having IQ scores of 130 and above were thus "judged" on the 6 categories proffered. When completed, these forms were picked up from the various schools, along with the "test"

proper, numbered 16. With N equal to 42 choices made by teachers on these questions, their percentage correct here became 38.10%, less than the over-all percentage of correct choices made by the teachers.

¹Supra, pp. 61-62.

answer sheets, toward the end of the school term.

Scoring

In scoring these rating scales,¹ a concept of the relevancy of all items was considered to be self-evident, since each item was chosen specifically, and concerned a particular point of behavior.² Thus, there was no claim made to their existence on a single continuum, nor was there any attempt to establish internal consistency of the scale as a whole.

The assumption was made that there is equal distance between the responses which indicated choice. In this way, each answer, or rating, was assigned a similar weight of one. That is to say, the interval between "fairly often" and "very often" (to cite an example) was considered equal to the distance between "very seldom" and "once in a while" (quoting another example). It was felt that the range of 5 intensities of the rating-statement was sufficient to give a logically-satisfactory scale for use here, with alternate answers giving equal-appearing intervals, which ranged from the strong to the weak.

The ratings varied, then, from 1 to 5 on each category, with the highest numerical score going to the lowest intensity. According to this scheme, the highest rating score was the lowest numerical one. The highest rating possible, then, was 6, representing a numerical score of one on each of the 6 phases of reported behavior. The lowest rating score possible was 30.

¹A copy of this scale appears on the Teachers' Report Sheet, reproduced in the Appendix, pp. 114-15.

²Supra, p. 53.

To facilitate the reader's understanding of the material immediately following, the categories for rating observed behavior are presented here:

1. Frequency of original contributions.
2. Participation in discussions.
3. Participation in group activities.
4. Recognition and display of concern for group needs.
5. Offers of help to others when possible.
6. Frequency of others' deferring to his ideas.

TABLE 8.--Mean ratings given by classroom teachers to the gifted boys (N=28)

IQ Range	n	Criteria					
		(1)	(2)	(3)	(4)	(5)	(6)
130-139	12	2.33	2.00	2.17	1.83	2.42	2.08
140-149	10	1.50	1.50	1.50	2.40	2.10	2.60
150-159	4	1.30	1.50	1.50	1.50	2.00	1.80
160 and above	2	1.50	2.00	2.50	3.00	2.50	3.50
Mean rating for boys		1.82	1.75	1.85	2.07	2.25	2.64

Table 9 presents the same kind of information, relative to the 46 gifted girls. The mean rating for the total gifted group is also included.

Mindful of the range of intensities available for the teachers' check-marks, a glance at the mean ratings given to both boys and girls appears favorable for associating "giftedness" with leadership.

However, once again it is well to note the possibility of the halo effect, again due to the awareness, on the teacher's part, that she was judging the behavior of mentally superior youngsters. Another factor which might have influenced her judgment was the scholastic achievement of the child. Behavior in the schoolroom, too, could be influential in

TABLE 9.--Mean ratings given by classroom teachers to the gifted girls (N=46) and to total group of gifted (N=74)

IQ Range	n	Criteria					
		(1)	(2)	(3)	(4)	(5)	(6)
130-139	26	1.92	1.96	1.73	1.88	2.00	2.27
140-149	16	1.56	1.94	1.50	1.69	1.81	2.81
150-159	4	2.25	1.75	2.00	1.50	1.75	2.50
Mean rating for girls		1.83	1.93	1.69	1.78	1.91	2.48
Mean rating for gifted group		1.82	1.87	1.74	1.89	2.04	2.54

swaying the opinion of a harrassed instructor at the end of a 9 months' term! None of these is impossible as a factor of prejudice; unfortunately, their extent cannot be calculated from present findings.

Considering all of these, and noting the only mild deviation upwards from a score which could be considered to be representative of most children in most schoolrooms--namely, the mid-rating score of 3--there is not too much really offered by way of encouragement, in the mean scores obtained by these gifted children. That is, not if the behavior we are hunting truly is connected with leadership.

There appears to be no clear pattern of relationship between scores and IQ levels, for either the boys or the girls. The girls' scores were somewhat higher than those of the boys, but not to a degree which might be meaningful. This is especially true when we recall the seeming "popularity" of these girls--a status which connotes favorable behavior in the form of proper responses made to the expectations of the group.

And, thus, very likely to the teacher, too.

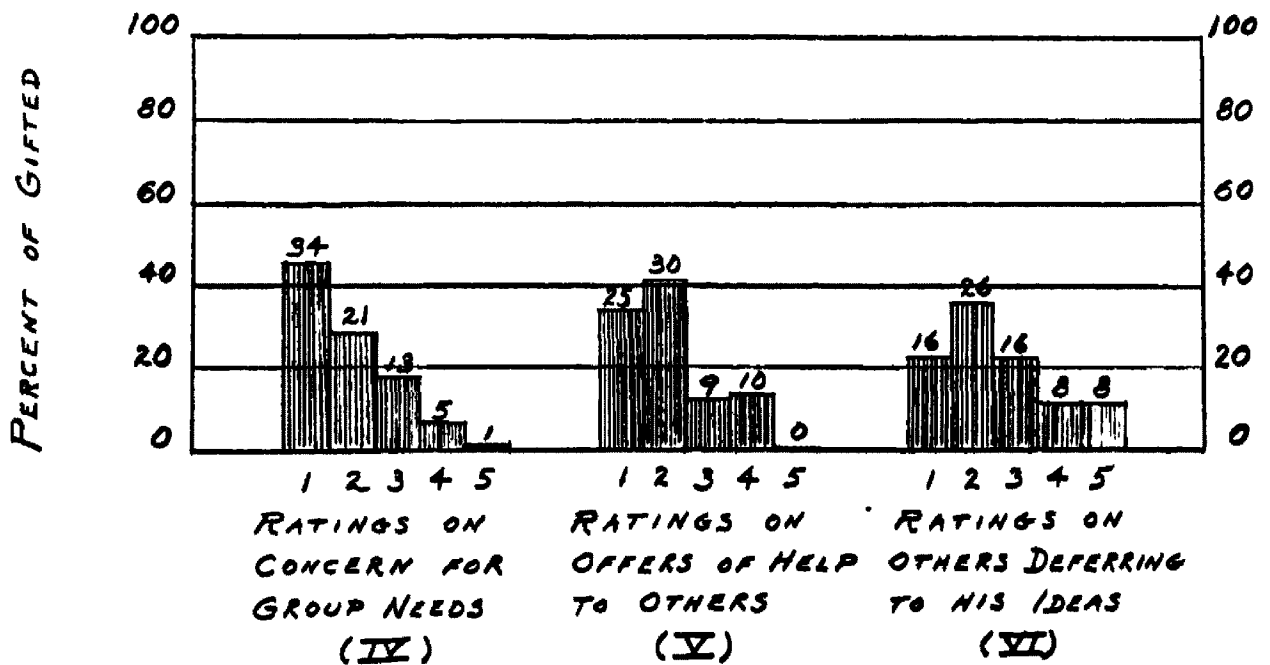
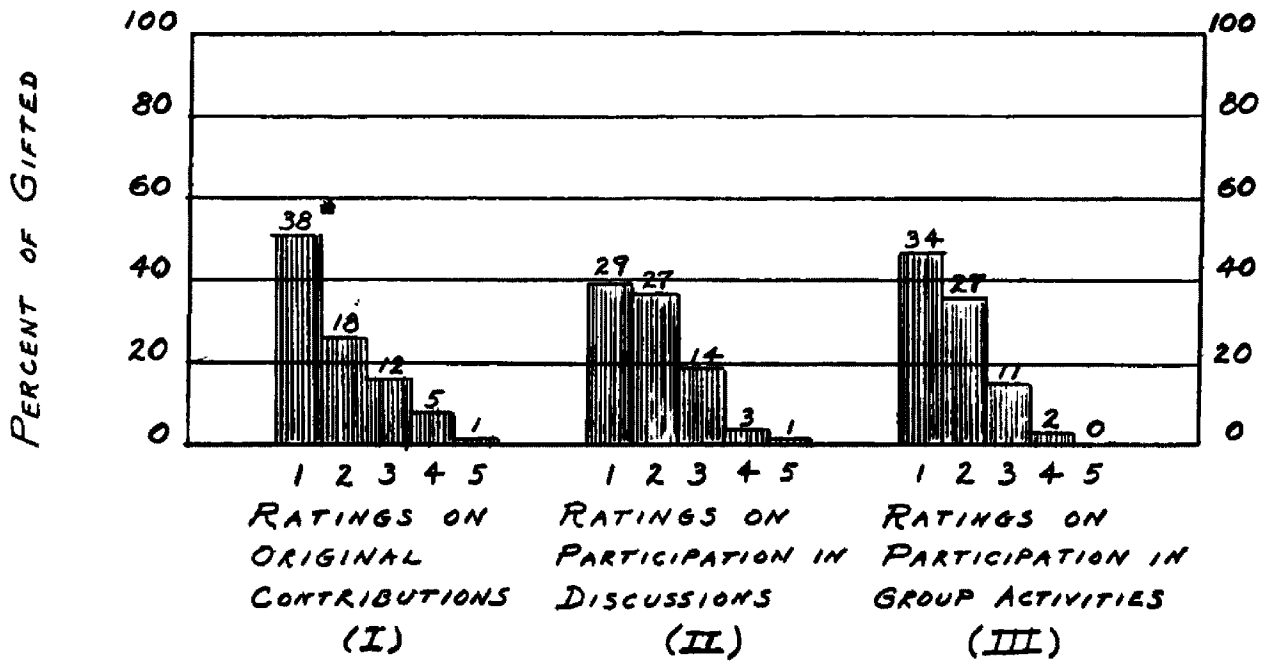
There does appear to be some trend toward originality apparent in the scores of both boys and girls. This could provide something of a clue to the greater recognition given to the girls (vs. the boys) on the scales of social acceptance. For, a boy of third grade age, filled with his own notions and ideas, is unlikely to rate highly with other boys his age who are very much dedicated to organized group activities. The mentally superior boy might find these boring, over prolonged periods. And he might be too impatient to develop his own athletic potentialities to any great extent.

On the other hand, the girl of 8 and 9 years is still concerned with "playing house," and make-believe. Ingenuity in the form of original ideas provides a welcome contribution to this sort of play, and tends to give prestige to the donor, even though she, too, might easily tire of prolonged sessions. The gifted girl would be less looked to for prowess or skills in the organized games, as she still enjoys the role of "little lady."

This same notion might serve to explain, somewhat, the rather marked lack of empirically demonstrated leadership, as it refers to controlling the behavior of others. On the school grounds, organized play is pretty much the rule. And it was the school grounds and the school-rooms which provided the frame of reference for the teachers' ratings.

To show the percentages of children who received scores of each intensity on the certain points of observed behavior, Figure 4, on the following page, presents a graphical description of the distribution of these ratings on each category.

Fig. 4.--Distribution of teachers' ratings of gifted group on each category (N=74)



*Denotes numbers of gifted children.

From the data collected in this investigation, it would be unrealistic to attempt to justify a positive answer to the question posed at the beginning of the study: "Does the status of the gifted child give any evidence to support a promise of developing leadership abilities?" Nor did the data supply any clear indication of his inclination to accept such a role.

Somewhat more optimistic, however, is the realization that, as yet, this child is something of a neophyte in group relations and interaction, and that, apparently, he is successful in getting along with others, at least. That can provide a foundation. Perhaps with proper socialization, his qualities of intelligence and originality will develop to the interests of the group, and, eventually, society at large.

The soil is rich; it awaits cultivation.

CHAPTER IV

SUMMARY AND CONCLUSIONS

This study arose out of a very rich and unusual opportunity which was presented for research in the area of the social acceptance of the mentally superior child. The investigation was aimed at establishing his social status, and thereby, through deduction, his social role, in terms of peer group acceptance. Knowledge of the gifted child's social attitudes, still in the process of formulation, was sought also.

The Universe and the Sample

Children from 9 public elementary grade schools were surveyed in an effort, on the part of the city school system, to locate the most highly intellectually-endowed children in the third grades. The school term expired before the testing program had been completed.

However, by the end of the 1957-1958 school term, some 447 children had been surveyed in this effort. Included were 16 of the 25 third grade classes of the system, located in 9 of the 14 public elementary schools in the city. There is no school for gifted children in Missoula; there are 2 parochial grade schools which were not a part of the surveyed group.

Within the group of 447 children, the boy-girl proportions were approximately equal. The children ranged in age from 8 to 11; most were

9 years old.

Seventy-five children, who tested at 130 or above on the Revised Stanford-Binet scale, were found within the study group. These gifted children, who comprised the sample for this study, included 29 boys and 46 girls, all 8 or 9 years old. Their IQ's were spread over a range of 130 to 162; only 2, both boys, were above 160. All of these children were enrolled in the regular third grade classes; 3 of them, all girls, were the only gifted children located in each of their separate classrooms. Two of the surveyed classrooms numbered no children who tested at 130 or above among their members. Thus, 14 classes, from 8 schools, were left to be represented in the sample.

Investigative Procedure

The 14 classes just referred to included 390 boys and girls, again almost equally divided. It was to that group, that is, each classroom which claimed a gifted boy or girl in its enrollment, that the sociometric questionnaire, originally constructed for the study, was administered.

Other information about the entire group was obtained through school records. Additional, and more specific, details concerning certain descriptive characteristics of the sample, were collected through use of teachers' ratings. These were based on the individual judgments of each classroom teacher, and related to the observed behavior of each of the gifted children within her group.

Further information concerning the interactions of the various groups was sought through the use of a "teacher's judgment sheet." The

sheet requested each teacher to name the child she thought would be most chosen by the other youngsters in her class, in response to each of the questions presented on the sociometric questionnaire. Thus it was hoped to learn something about the degree of variance between the wishful interaction choices made by the children, and the empirically demonstrated roles played by the various individuals within the group.

Theoretical Concepts Involved

The concept of reciprocity, an essential factor in any successful social interaction, underlay both the planning and the execution of this study. Actually, the information sought included and also stretched beyond that of group acceptance, and the status attributed to certain of the youngsters (the sample) by their more-average classmates. For the prime concern was with the social attitudes of the gifted children themselves, one facet of this referring to their possible future development into leaders within our society.

Keeping to objective methods as closely as possible, the reaction of other children to the gifted children, as they functioned within the regular public school classroom, appeared to offer a valuable index to the social attitudes of, as well as toward, that mentally superior group of boys and girls. For, acceptance by the group usually mirrors acceptance of the group, at least to a suggestive extent. This seems especially true at the unsophisticated ages of most third graders. And both kinds of acceptance are important to successful realization of a satisfying social role.

Results of the Investigation

Social Acceptance of the Gifted Children

Data collected through the use of the sociometric questionnaire yielded answers, on the whole adequate, to the first 2 questions posed at the beginning of the study.¹ In addition, several other facts connected with their peer group relations emerged. The most salient pieces of information which emerged from analysis of the data are summarized briefly in the following paragraphs.

1. The gifted children were accepted socially, in excess of their more typical classmates. This was especially true of the gifted girls, who were favored as social preferences more than 3 times as frequently as were the other (typical) girls.

The gifted group as a whole was accepted to an extent more than 100% greater than were the other children. This finding lends support to the controversial opinion that there is greater social acceptance for the more intelligent child.

Also supporting this same idea was the tendency noted here for the intellectually superior children to notice and attract each other. However, the sample was considered inadequate to offer quantitative data on this point, chiefly because of the uneven distribution of the sample throughout the various classes.

2. By process of deduction,² it can be claimed that these gifted

¹Supra, p. 6.

²Ibid., p. 98.

children accepted quite whole-heartedly their membership roles amongst their classmates.

3. There was nothing to support any notion that the status of the mentally-superior child differs in any way, other than degree, from that of his more typical classmates. Data from the study support Kerstetter's findings.¹

Opinions: Gifted vs. Typical

1. The gifted children were only slightly more cognizant of the mental superiority of the various members of their group than were their typical classmates. (This gives added support to number 3, above.) Again, the mentally-superior girls received greater recognition.

2. Results from the data collected in answer to question 5 of the questionnaire² led to the conclusion that this question, pointed at ascertaining the degree of awareness of the generalized other on the part of these children, had been inadequate. Such inadequacy was pointed up particularly by the fact that the most chosen children--the stars--who certainly, by virtue of their successful social acceptance, would be expected to possess awareness of others, scored very low on question 5.

Wishful vs. Actual Group Interaction

A comparison of the children selected by the teachers as being most likely choices of the children themselves, on the various questions included in the questionnaire, corresponded relatively highly with the

¹Ibid., p. 28.

²Ibid., pp. 85-86.

choices made by the boys and girls.

Possible interpretations, or meanings, of that fact are several: (1) the teachers were well aware of group interaction as it actually existed in their classrooms; (2) the teachers knew the children well enough to be cognizant of the desired, or wished-for, patterns of social interaction within their groups; or, (3) the desired interactions and the factual, or real, interactions, were one and the same.

Emerging Leadership

The third question posed at the beginning of this study was one concerning a promise of developing leadership in the gifted children. It would be unrealistic to interpret any data collected here as being optimistic on this score, except in the Simmelian concept that the leader is also led.¹

The teachers' ratings pointed toward a definite trend of originality as being characteristic of the sample children. However, any leadership per se, if present, was still in a latent phase.

Suggestions for Further Research

In analyzing the data collected in this investigation, we have repeatedly felt the inadequacy of the sample number, even though it was far in excess of what might have been expected according to the incidence reported by Merrill (see page 44). Another factor which was complicating to adequate analysis was the varied distribution of the sample children

¹Georg Simmel, The Sociology of Georg Simmel, trans. Kurt H. Wolff (Glencoe, Ill.: The Free Press, 1950), pp. 181-186. Also, see discussion on pp. 14-15 and 32-35 supra.

within their classrooms. That is, sometimes there were many, sometimes only one. Such conditions of distribution make any sweeping statements of a generalized nature completely unacceptable, even illegitimate.

It is axiomatic that many small samples do not make a large one. And the very fact that they are mentally superior to the greater part of the juvenile population means, ex termini, that we can never hope for large samples in studying gifted children.

Following the same line of reasoning, the use of controlled variables to further more precise investigation and study would make it impossible, again ex termini, to learn more about gifted children as they function within the regular classrooms throughout the nation. Obviously, if these children are under controlled conditions, then such children cannot be said to be functioning under regular, or normative, circumstances.

These factors would make it look as though we are defeated before we even begin any worthwhile studies, similar to that undertaken here, but possibly developed to a higher degree of meaningfulness. And such would be the case, if we were to seek numbers per se. However, what is possible is more in the way of documented research. Some of it could be based on investigations similar to that reported here, but enlarged in the sense of "digging deeper" and extending over a longer period of time. Longitudinal studies, involving guidance and encouragement for the gifted children when necessary, appear to be indicated.

Such recognition of the value of extended studies does not mean that those of cross-sectional nature, such as that reported here, cannot offer valuable contributions. In the area of investigation of gifted children, a pooling of facts gained from analyses of such data can serve to

aid in identification of certain common factors which appear to continually emerge. That is, of course, if these data do reveal any such commonage.

Observed and reported common traits or characteristics could, in turn, aid in the early identification of the superior youth, so that the guidance and encouragement mentioned above could be offered to these youngsters when and if they need such. For, about the time a gifted child enters fourth grade, he is inclined to show signs of lacking purpose and spirit. He often loses interest in school, becoming bored and restless. Such attitudes result in poor achievement. The old axiom holds: success breeds success. Its counterpart is relevant to the present discussion: failure breeds failure.

Fuller knowledge of psychological and sociological characteristics of the gifted children can be expected only after implementing systematically interrelated studies of such matters. The sociometric method provides a simple and very useful tool for probing into these matters. A sociometric study, of the kind done here, also yields valuable information about the social functioning, and thereby, attitudes, of this breed of children. However, other tests aimed at learning more about the personal and behavioral characteristics of these gifted individuals are needed, to be used with, or follow, those of the sociometric type.

One possible tool might be found in the form of some modification of the "Guess Who" technique, introduced by Hartshorne and May.¹ Such a method could prove useful in studying the children's ratings of each other. Time sampling, for periods of field observation, also could be

¹H. Hartshorne, M. A. May, and J. B. Maller, Studies in Service and Self-Control (New York: Macmillan, 1930), pp. 87-91.

valuable. Automatic recordings provide good empirical clues to group interaction. And interviews, properly handled by well-trained sociologists, can result in a wealth of information about the children and their peer relationships. All of these are practical ways to gather data concerning the child's social functioning.

It is recognized that personality testing is still in a formative stage.¹ Perhaps a greater demand on the part of society would precipitate more and further work in that phase of testing, and result in more adequate methods for personality and behavior analysis. There is so very much to be learned about the gifted children before we can efficiently guide them into a realization of their full potential of innate mental ability. Nor has anyone yet established any reason why such achievement should not also result in full personal fulfillment for the individual, in terms of happiness and self-satisfaction.

Recommendations for Specific Areas for Research

The reader is aware that many hypotheses have been suggested and mentioned throughout the whole of the analysis presented in this study. With the paucity of information now available concerning gifted children, any investigation such as the one reported here is bound to stir up more and more questions, and probably more and more conflicting notions.

Several of the problems of uncertainty relevant to the various concepts and characteristics of gifted children appear to be particularly demanding of immediate further research. Some of the most obvious of these will be cited here. It is hoped that the importance of these uncertainties

¹Anastasi, p. 660.

will be recognized, and that such recognition will provide a stimulus for further investigation. We, here, will be most interested in being apprised of such, or of any data so collected.

One of the most fundamental of the problems raised concerns the efficiency of the tool commonly used in identifying gifted children. That is, just how dated is the Stanford-Binet scale? There are several dimensions to the question, ranging all the way from the adequacy of test items to the assumption that incidence of intelligence levels still approximates Quetelet's curve of probability as regards spread (notable in Merrill's report).

The number of high IQ's found in a city the size of Missoula, even without exhaustion of the possible population (e.g., as was explained earlier, all third graders were not given a chance at the individual test), is truly remarkable. The IQ's found here at and above 140 could occur by sheer chance only once out of some astronomical number (not computed) of chances (see page 44).

Gallagher and Crowder also reported an extremely high incidence of superior intelligence in their study group.¹ And Kerstetter, in New York, located 25 children, ranging in IQ's from 160 to 202, in selected groups of children which totaled 422. All were within an hour's transportation of Washington Square. Two of these 25 were above 200 IQ; at least 234 of the 442 tested were 130 or above. And, although earlier it took Dr. Hollingworth 23 years to locate, in this same area, her dozen or so juvenile geniuses, who were of varying ages, Dr. Kerstetter recently

¹Supra, pp. 28-30, 63-64.

found 7 children of 180 or above in the groups mentioned in her study. All of her children were within the age range of 7 to 13 years.¹

Probably children of high IQ can be somewhat more easily located in a densely populated area like New York and its immediate environs. New York has special committees whose function is to find such children. Still, that explanation cannot be said to obtain for Urbana, Illinois, the scene of the Gallagher-Crowder study, nor for Missoula, Montana. Furthermore, in itself, the finding of the children in no ways explains the incidence of these supposedly-extreme intelligence levels. Why do they even exist in such numbers?

There would appear to be 3 obvious possibilities for explaining the noted high frequency of such IQ's. The possible reasons include: (1) changes in difficulty of the test items; (2) faulty test administration; and (3) incomparability of present populations with that used for standardizing the test norms. Any one of these would invalidate IQ's recently located by the test; all of them together would make it impossible to use the Binet for precise location of gifted children.

Of course, there is the very, very slight chance that no fault lay in either the test or its administration and scoring. This would mean that the IQ values found do truly represent really significant mental superiority. However, the latter possibility, of a very rare occurrence of high mental ability located nation-wide and pin-pointed by the studies mentioned, is hard to accept. Nor does it seem likely that children nowadays are so much brighter than they were 20 years ago. That concept

¹Letter from Anne L. Corbitt, Reference Librarian, New York University Library, July 26, 1958.

would further confuse things; for then IQ norms would have to be recalculated, and some children we now consider mentally superior would have to be redefined as not so unusual after all.

This critique does point to a need for a survey of other ascertained IQ's on the Binet, as recorded throughout the country. Such data as those obtained through comparison of recorded incidence of various IQ's might lead to the restandardization of the out-of-date incidence frequency. Or, such data could show, if they do fall into the pattern described by Merrill 20 years ago, that, truly, in the studies we have just discussed, our findings do identify a very sizable, and thus remarkable, group of mentally superior children, within only a few very small populations.

Accepting the idea that the IQ scores were valid, several other areas of research demand attention.

We discovered that the gifted children were highly accepted, but we did not learn the reasons for such acceptance. It appeared evident that intelligence per se was not a basis for the children's choice preferences of their peers. At least, consciously the children were not aware of such a reason, as evidenced by their rather weak selection of the same child to "sit next to" and as choice for "smartest." The latter choice refers to both criteria 4 and 5; that is, to the children's individual opinion as to the "smartest," and to the opinion each child had ascribed to his fellow classmates, relevant to the "smartest, brightest."

One obvious question comes to mind: did the children really think the gifted children were smartest, without realizing that they thought so? In that way, an unconscious cognizance of the mentally superior child's talents could color the choices made. Further investigation,

probably through interviews, might provide an answer. Also, observation in the classroom might show whether the gifted child is publicly applauded by the teacher, as we have suggested, thereby gaining group prestige, which could be a factor influencing his acceptance.

What are the social logics involved in wanting to sit next to someone, in a disciplined schoolroom? Again, desultory conversation, in the way of subtle interviewing, might explain the reasons, possibly not even recognized by the choosers themselves. Northway and Detweiler advanced a provocative idea when they suggested admiration as a basis for choosing one's friends.¹ If it is true that "one will perceive friends as possessing desirable qualities to a greater degree than one's self," then, through techniques like the "Guess Who," through interviews, portrait ratings, and through observation, such feelings of admiration should not prove too difficult to locate. The traits, too, which evoke such admiration should be capable of identification and labeling. In this way, we would learn something more of the moral and social values which are extant nowadays among our children.

Analysis of mutual choices might further such an investigation. Attitude scales of demonstrated validity could probably ferret out much information concerning the condition of this "soil" which we must look to for future harvest. Goals, role acceptance or rejection, either conscious or unconscious, and motivation--all of these could become clarified to those interested in guiding the children to individual maturity, both social and psychological.

¹Northway and Detweiler, Sociometry, XVIII, 4, 527-31.

Another point: do children somehow hope that, by sitting next to those they admire, some of the "personality"--in many cases, giftedness, as we have seen--will rub off onto them? Such a belief might well be a lingering, tenacious manifestation of the pre-socialized child's faith in the great magic which, in the eyes of the small child, appears to rule this world. The concept should prove interesting to students of culture, as might that of the children's wish for identification, before the group, with those classmates to whom they attribute certain, as yet unidentified, traits.

Why does a given child appeal to his peers as a choice helper in planning a picnic? No evidence from the data collected here points to any relationship between intelligence and capacity for helpfulness. What is the basis, then, for preference of a helper in group goal-seeking activities? Is it a factor of socialization, in that adeptness with use of the social skills is important here, also? Maybe such adeptness can be considered sufficient basis for choices made on any or all criteria which involve social interaction.

If such is the case, again we are confronted with the evident preference for girls. Does such a sex preference point to a difference, possibly an acceleration, in their social training? Possibly the pattern for the teaching and learning of social roles and skills varies with sex, to a degree we do not recognize, because of its inherency in our culture.

All of these questions and notions appear worth investigation. So, too, should an inventory of the attitudes and behavioral traits of the neglectees be very worthwhile, particularly to the sociologist. Is a neglectee one who is simply temporarily unsuccessful at role playing?

Or does he have other traits or characteristics which foredoom him to failure in social relationships, and, very probably, his own self-fulfillment? Answers to such questions are of prime importance to a society which is as highly complex and organized as our own.

It has already been stated that the attempt to learn of the awareness of the generalized other which characterized this group appeared to be unsuccessful. Another method might be found to give a clue to this important aspect of the self-other concept. Further studies, too, are indicated before we can positively conclude anything as regards the relationship of intelligence to social acceptance. Such a relationship did exist in our group, as was empirically demonstrated. But no clear recognition of such on the part of the children was evident. Does this mean that the Binet actually measures aspects of so-called social intelligence, but does not evaluate the form of intelligence which appeals to children as mental superiority? Further work of an investigatory nature relevant to such a concept should prove of interest to test builders, and other psychologists. If such a notion proves to be true, we have enlarged our reasons for concern about a possible ambiguity of status felt by the gifted children. For, if they are bright in school, quick in thought, and their minds are racing 'way ahead of those of the contemporaries with whom they must associate, then those who are treated as dullards by their less intellectual companions must, indeed, find it hard to play so stultifying a role.

Again, this brings us back to the gifted neglectees. Why have they not developed the traits, probably of social behavior, which would make them better liked? No apologies are offered for introducing this

problem once again; the subject is too important to be overlooked. Neglectee or star, the child still represents too much in the way of a natural resource to allow him to assume only a negative role. In particular, we have found that the boys, to whom we most logically look for leadership, in accordance with the patterns of our culture, are not, insofar as our study determined, showing much interest in potentially more congenial roles. The situation demands attention.

In considering the effect of social acceptance of and by the group as possibly being a factor which influences achievement, recognition must be made of an undermining force which, like an ogre, exists in our society. This force is particularly evident among American youth. We refer to the publicly-acknowledged rejection of intelligence per se as a prestige-claiming attribute. Very likely, such rejection is merely a facet of the American's seeming love for mediocrity, which is somehow confused, in many minds, with democracy. The recent turn of Americans on this god of mediocrity, as evinced in the about-face which has been directed now at technological and scientific training, is heartening.

But all of our gifted children may not be destined to follow those paths to fulfillment. Certainly, some of us hope not. Regardless of the path, it seems only logical that a society which is aware of the tremendous stake it holds in the priceless resource of intellectual ability as represented in the gifted children, must feel compelled to offer opportunity, as well as guidance (academic, psychological, and social) to these children. The time is ripe for sociologists to join forces with psychologists and educators. All together, they can conceive, expound, and initiate some systematic, practical plan for the tilling of the fertile

soil which is represented by our gifted youth.

If this study has done nothing more than call attention to the urgency of a plan such as that outlined above, a major reason for its existence has been satisfied. We have scarcely scratched the surface of the great sociological problem which is inherent in recognition of the very fact of our gifted children. It is hoped that the meager contributions of this study will at least serve to whet the appetites of other investigators.

APPENDIX

To the Principal:

This packet contains three forms, plus two envelopes, one of which is stamped, for each third grade, or combination third grade, teacher in your school. The forms meant for each teacher are: (1) Classroom Teacher's Report (several copies); (2) Teacher's Judgment of Sociometric Status (one copy); and (3) Sociometric Test (one copy).

The Classroom Teacher's Report should be made out for each of the children from the third grade who has been or will be given the Stanford-Binet test as part of the selection program. Thus, some teachers will have more than one child who would qualify; one report is needed for each of these. Only one of each of the other sheets is requested from each teacher, i.e., one from each classroom.

To make this research prove most fruitful, it is asked that the teacher fill out the Classroom Teacher's Report first, place it in the accompanying unstamped envelope, and deposit it with you.

Step two in the study will be the completion of the Teacher's Judgment of Sociometric Status form, by the teacher. This sheet carries its own directions; it should be mailed directly to me in the stamped envelope included in this packet.

The third and final step will be the teacher's administration of the Sociometric Test, which bears full directions. Probably the simplest procedure will be for her or him to leave the sheets bearing the children's test preferences, or choices (no tally sheet necessary) in your office, along with the unstamped envelope containing the Classroom Teacher's Report. It is not necessary for the teacher to score the sociometric test. I shall pick up all of this material, then, from your office.

Your cooperation is very much appreciated. Without it, this research study would not be possible. My sincere thanks.

Mary G. Huffine
May 19, 1958

Classroom Teacher's Report

To the teacher:

Your report is solicited concerning the usual observed behavior of _____ within the class group.

Specifically, information is sought concerning his or her creativity and/or ingenuity (Group I); extent and kind of group participation (Groups II and III); insight into group needs, as evidenced by his attempts to help solve these (Group IV); consideration and awareness of feelings and needs of others (Group V); and, assertiveness (Groups VI).

Please consider carefully, and check the statement which, based on your observations, most adequately measures the child's usual performance within the class group. Kindly date the report, and place in the envelope.

Report

- I. Frequency of Original Contribution (note that these may sometimes appear to be irrelevant to the immediate educational objectives).
 1. Often
 2. Fairly often
 3. Occasionally
 4. Once in a while
 5. Very seldom

- II. Participates in Discussions.
 1. Always
 2. Often
 3. Occasionally
 4. Seldom
 5. Never

- III. Participates in Group Activities (both formal and informal).
 1. Always
 2. Often
 3. Occasionally
 4. Seldom
 5. Never

- IV. Recognizes and Displays Concern for Group Needs.
 1. Very often

2. Fairly often
3. Occasionally
4. Once in a while
5. Very seldom

V. Offers to Help Others When He Can.

1. Always
2. Often
3. Occasionally
4. Seldom
5. Never

VI. How Often Do Other Pupils Defer to His Ideas?

1. Often
2. Fairly often
3. Occasionally
4. Once in a while
5. Very seldom

Date _____

Sociometric Test

To the teacher:

Directions for giving the questionnaire follow and we believe are complete.

Please stress to the children the fact that these questions describe purely hypothetical situations, so as to avoid any misunderstanding or disappointment on their part when the choices and situations fail to materialize.

Also, it is important to assure them that their replies will be confidential; no one else in the room will see them. A sufficient explanation might be something like this: "Someone over at the university is interested in children and would like to find out how all of you feel about some things and some people in our classroom".

Directions for Giving the Questionnaire

1. Each child is to take a sheet of fresh paper from his desk, and put his name and his age, plus either "boy" or "girl" (whichever applies) in the upper right hand corner.

2. No mention will be made of the number of allowable choices. One is the expected number for each question, but if the child wishes to

make more, he may do so.

3. Tell the child to number a vertical column from one to five on his paper.

4. Ask the class to be perfectly honest in their answers, since no one in the class will know what choices they make.

5. Slowly read the questions, and allow sufficient time for each child to "think out" his response. Repeat the question if you deem it advisable or necessary.

6. Tell the children to write the name and last initial (full last name if necessary to distinguish him) of their choices.

7. Instruct the children that if a child is absent that day he may still be named, if desired. Also, they may choose a child for more than one thing if they wish.

The Questions:

1. We don't have to move, but just suppose that we did: which classmate would you most want to be sure to move with you, and sit beside you in the new classroom?
2. If we had an extra holiday, and your mother said you might invite one classmate over to your house to play, whom would you choose to invite? Someone from this class, remember!
3. If you were appointed to plan a picnic for our room, which child from the class would you most like to have help you?
4. If you were asked to name the smartest, brightest person in your class, who would it be (not counting the teacher)?
5. Whom do you think most of the other children would name as being the smartest child in the class?

Teacher's Judgment of Sociometric Status

To the teacher:

It is planned to use the accompanying sociometric test in some of the grades. Of considerable value in this research, too, is the teacher's judgment concerning the relative acceptability of the children on the separate criteria. Some children will be highly accepted, receiving many choices; some will remain unchosen; the remainder will fall between these two extremes.

You are being asked to indicate which three children you think will be most frequently chosen as seating companion, play companion, work companion, and "the smartest child in the room."

Please name your three choices in the order in which you think they will be designated by their classmates. Kindly rank the children as one, two, and three, accordingly.

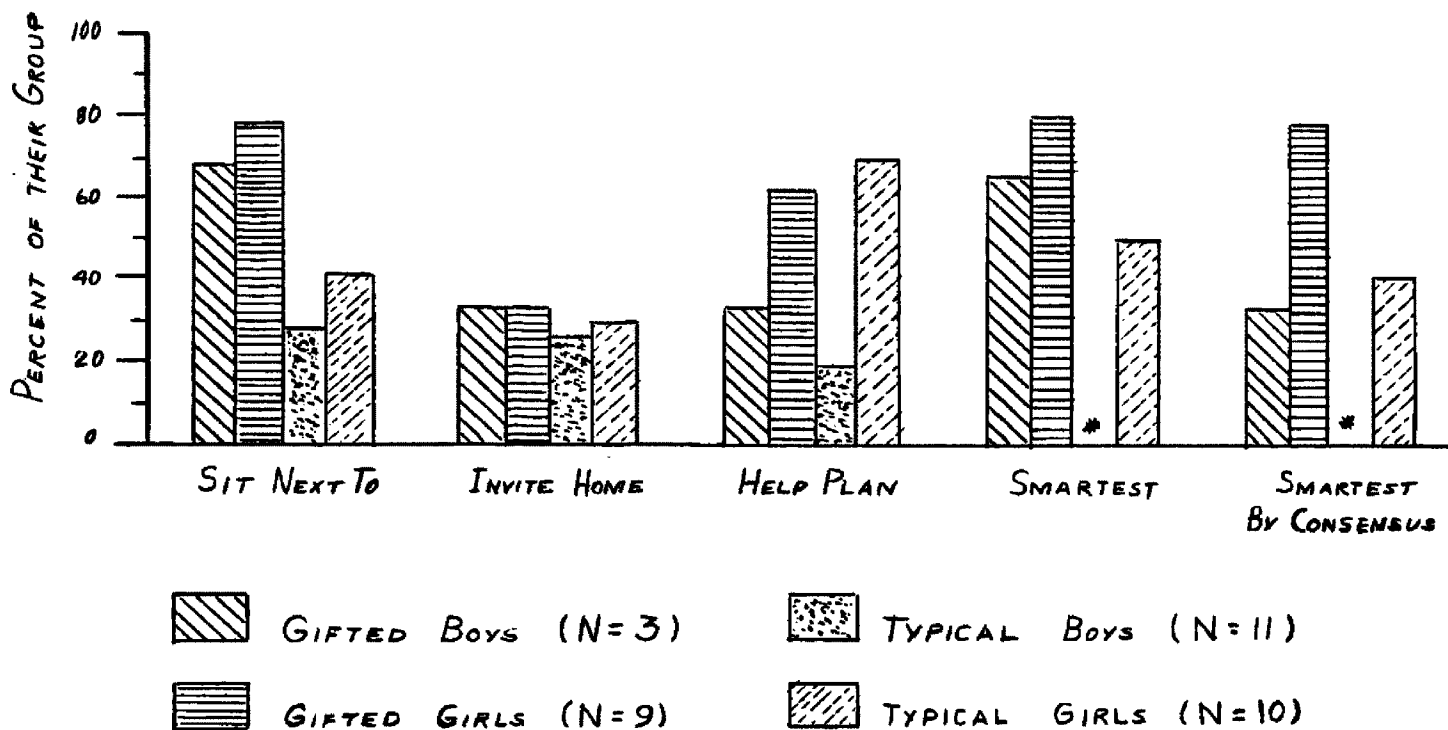
TABLE 3.--Distribution of the total preference choices on the 3 social criteria, as to sex, and groups (gifted vs. typical)

	Group N	Score	\bar{x}	Group N	Score	\bar{x}
Boys	29	101	3.48	154	367	2.38
Girls	46	208	4.52	161	428	2.66
Total	75	309	4.12	315	795	2.52

Mean score for the group was 2.830.

The gifted received 79 votes on the social criteria from each other. This represented 25.73% of the preferences given to the gifted group on these 3 criteria.

Fig. 3.--Percentages of stars in gifted and typical groups who attained critical scores on the various criteria



*No typical boys obtained critical scores on these 2 criteria.

Although both gifted and typical girls achieved exactly similar scores on criteria 1 and 5, only 33 children chose these girls on this combination, i.e., giving the same girl a vote of preference on both criterion 1 and criterion 5.

Two typical boys achieved no critical score on any one criterion, but did receive 8 choices on all 3 social criteria combined.

SELECTED BIBLIOGRAPHY

Books

- American Association for Gifted Children. *The Gifted Child*. Edited by Paul A. Witty. Boston: D. C. Heath & Co., 1951.
- Anastasi, Anne. *Psychological Testing*. New York: The Macmillan Co., 1954.
- Baldwin, Alfred L. *Behavior and Development in Childhood*. New York: The Dryden Press, 1955.
- Bjerstedt, Ake. *The Methodology of Preferential Sociometry: Sociometry Monographs, No. 37*. Lund, Sweden: Hakan Boktryckeri, 1956.
- Bronfenbrenner, Urie. *The Measurement of Sociometric Status, Structure and Development: Sociometry Monographs, No. 6*. New York: Beacon House, 1954.
- Cartwright, D., and Zander, A. *Group Dynamics: Research and Theory*. Evanston, Ill.: Row, Peterson & Co., 1953.
- Cooley, Charles H. *Social Organization*. New York: Charles Scribner's Sons, 1909.
- Durkheim, Emile. *Education and Sociology*. Translated with an introduction by Sherwood D. Fox, and a foreword by Talcott Parsons. Glencoe, Ill.: The Free Press, 1956.
- Faris, Robert. *Social Psychology*. New York: The Ronald Press, 1952.
- Gesell, Arnold, et al. *The Child from Five to Ten*. New York: Harper & Bros., 1946.
- Gordon, Hans C. *The Specific Nature of Achievement and the Predictive Value of the IQ: An Investigation of the Limitation Placed Upon the Predictive Values of Otis IQ's by the Variation in the Achievements of Twelfth Grade Students in Their Different Subjects*. Published Ph. D. Dissertation, University of Pennsylvania, 1931.
- Guilford, J. P. *Fundamental Statistics in Psychology and Education*. 3rd ed. New York: McGraw-Hill Book Co., Inc., 1956.

- Handbook of Social Psychology. Edited by Gardner Lindzey. Vol. II, Special Fields and Application. Cambridge, Mass: Addison Wesley, 1954.
- Hemhill, John K., et al. The Effects Upon Attempts to Lead of Tast Motivation and the Expectancy of Accomplishment of the Task (Personnel Research Board of the Ohio State University: Leadership Acts, Vol. III). Columbus, Ohio: The Ohio State University Research Foundation, 1955.
- Hollingworth, Leta S. Gifted Children: Their Nature and Nurture. New York: The Macmillan Co., 1926.
- _____. Children Above 180 IQ, Stanford-Binet. (Measurement and Adjustment Series. Edited by Lewis M. Terman.) Yonkers-on-Hudson: World Book Co., 1942.
- Jennings, Helen Hall. Leadership and Isolation. New York: Longmans, Green & Co., 1950.
- Linton, Ralph. The Study of Man. New York: Appleton-Century-Crofts, Inc., 1936.
- Mannheim, Karl. Essays on Sociology and Social Psychology. Edited and with an introduction by Paul Kecskemeti. New York: Oxford University Press, 1953.
- Manual of Child Psychology. Edited by Leonard Carmichael. New York: John Wiley & Sons, Inc., 1954.
- Methods of Psychology. Edited by T. Andrews. New York: John Wiley & Sons, Inc., 1948.
- Moreno, J. L. Who Shall Survive?: Sociometry Monographs, No. 29. New York: Beacon House, 1953.
- Piaget, Jean. The Child's Conception of the World. New York: Harcourt Brace & Co., Inc., 1929.
- _____. The Moral Judgment of the Child. Glencoe, Ill.: The Free Press, 1951.
- Research Methods in the Behavioral Sciences. Edited by Leon Festinger and David Katz. New York: The Dryden Press, 1953.
- Sociological Theory: A Book of Readings. Edited by Lewis A. Coser and Bernard Rosenberg. New York: The Macmillan Co., 1957.
- Terman, Lewis M., et al. Genetic Studies of Genius. 4 vols. Palo Alto, Calif.: Stanford University Press, 1925-47.

Terman, Lewis M., and Merrill, Maud A. *Measuring Intelligence*. New York: Houghton Mifflin Co., 1937.

The Social Psychology of George Herbert Mead. Edited by Anselm Strauss. Chicago: University of Chicago Press, 1956.

Toward a General Theory of Action. Edited by Talcott Parsons and E. H. Shils. Cambridge, Mass.: Harvard University Press, 1951.

Articles and Periodicals

Beaman, Florence N. "The Value of Group Experience in the Normal Educational Process," *Group Psychotherapy*, VIII (1955), 242-46.

Bell, Graham B., and Hall, Harry E., Jr. "The Relationship Between Leadership and Empathy," *Journal of Abnormal Social Psychology*, XLIX (1954), 156-57.

Borgatta, Edgar F., Bales, Robert G., and Crouch, Arthur S. "Some Findings Relevant to the Great Man Theory of Leadership," *American Sociological Review*, IX (1954), 755-59.

Cattell, Raymond B., and Stice, Glen F. "Four Formulae for Selecting Leaders on the Basis of Personality," *Human Relations*, VII (1954), 493-507.

Gallagher, James, and Crowder, Thora. "Gifted Children in the Regular Classroom," *Exceptional Children*, XXIII (April, 1957), 306-12, 317-19.

Gronlund, Norman E. "Generality of Teachers' Sociometric Perceptions: Relative Judgment Accuracy of Several Sociometric Criteria," *Journal of Educational Psychology*, XL (1956), 25-31.

Grossman, B. and Wrighter, J. "The Relationship Between Selection-Rejection and Intelligence, Social Status, and Personality Amongst Sixth Grade Children," *Sociometry*, XI, 346-55.

Hollingworth, Leta S. "What We Know about the Early Selection and Training of Leaders," *Teachers College Record*, XL (April, 1939), 575-92.

Merrill, Maud A. "The Significance of IQ's on the Revised Stanford-Binet," *Journal of Educational Psychology*, XXIX (1938), 641-51.

Miller, Robert V. "Social Status and Socioempathic Differences Among Mentally Superior, Mentally Typical, and Mentally Retarded Children," *Exceptional Children*, XXIII (December, 1956), 114-19.

- Moreno, J. L. "Sociometry in Relation to Other Social Sciences," *Sociometry*, I (1937), 206-19.
New York Times. 1950-58.
- Pellegrin, Roland J. "The Achievement of High Statuses and Leadership in the Small Group," *Social Forces*, XXXII (October, 1953), 10-16.
- Pepinsky, Pauline. "The Meaning of 'Validity' and 'Reliability' As Applied to Sociometric Tests," *Educational and Psychological Measurement*, IX (1949), 39-49.
- Stogdill, R. M. "Personal Factors Associated with Leadership," *Journal of Psychology*, XXV (1948), 35-71.
- Taylor, Edward A. "Some Factors Relating to Social Acceptance in the Eighth Grade Classroom," *Journal of Educational Psychology*, LXIV (1952), 257-72.
- Tumin, Melvin W. "Some Principles of Stratification: A Critical Analysis," *American Sociological Review*, XVIII (1953), 387-94.

Reports

- Missoula Chamber of Commerce. "Missoula, Montana: The Center of Western Montana." A Bulletin prepared by the Missoula Chamber of Commerce. Missoula, Montana (n. d.).

Unpublished Material

- Gold, Raymond L. "Generalized Other." Unpublished paper, Department of Sociology, Montana State University, typewritten, 1958. (Prepared for future publication in UNESCO Dictionary of Social Science Terms, to be published in 1959.)
- Johnson, Orville. "A Study of the Social Position of Mentally-Handicapped Children in Regular Grades." Unpublished Ed. D. dissertation, University of Illinois, 1950.
- Kerstetter, Leona M. "A Sociometric Study of the Classroom Roles of a Group of Highly Gifted Children." Unpublished Ph. D. dissertation, New York University, 1952.
- Lancaster, Cornelia M. "Analysis and Synthesis of Research on Leadership Displayed by American Children and Youth from Pre-School Level up to and Including High School for a Period of Fifty Years 1904-54." Unpublished Ed. D. dissertation, University of Florida, 1956.

Williams, Meta F. "Classmate Acceptance in Relation to the Performance of Intellectually Gifted Children in Certain Elementary Schools." Unpublished Ph. D. dissertation, New York University, 1956.

Other Sources

Missoula City Schools. Personal interviews with the Superintendent, the Director of Curriculum, the principals, and the teachers of the third grades surveyed. April-June, 1958.