A study of differentials in a small community in matters of behavior preferences and behavior ratings among pupils, parents, and teachers

Forbes Bottomly

The University of Montana

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A STUDY OF DIFFERENTIALS IN A SMALL COMMUNITY IN MATTERS OF BEHAVIOR PREFERENCES AND BEHAVIOR RATINGS AMONG PUPILS, PARENTS, AND TEACHERS.

By

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B. A. Montana State University, 1948

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MONTANA STATE UNIVERSITY

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CHAPTER I
THE PROBLEM

"My children are well behaved at home and how they behave at school is your business." This direct quotation of a parent interviewed in the course of this investigation probably best verbalizes the historic schism that endlessly plagues both parent and administrator in a small school. This schism makes ineffectual any realistic attempt by school people to develop the celebrated "whole child", because it forces the child to live two lives - one at home; the other at school - and oftentimes to breach a gap of such dichotomous values as would jeopardize even a mature person's wholeness. In small communities, where the incidence of advanced education is low there is a danger of an ipso facto cultural gap between the idealistic, and often haloed, aims of education as expounded by the school people and the hopes, aspirations, sentiments, and traditions of the local folk. It is a function of the small school administrator to study these differences in educational philosophy so that he might arrive at an equitable system of values - values which would not on the one hand over exercise the youngster's emotional ability to reconcile the home and the school, nor on the other make intolerable the relationship between either the parents or the teachers and the youngsters.
Statement of the problem. One of the elemental points of disagreement between home and school is a conflicting interpretation given child behavior by those involved - namely, the child, the parents, and the school people. In a particular small community (politically, a high school district of considerable size, but inconsiderable population) naive observation indicated a mild, yet stubbornly persistent, disinclination for cooperation among these three principals whenever need for home-school behavioral discussion arose.

The problem appeared to be not one of pinning down behavioral actions of the community as such, then using an interpretation derived therefrom for establishing a behavioral norm, and thence establishing a compromising school behavioral philosophy. Such a procedure, although anthropologically important, overlooked a salient attitude of many, if not most, parents that their youngsters should act not as the parents act but as the parents prefer that they act. This concept could be explained in terms of the superego which is influential in determining a person's behavioral values. As a conscience, the superego directs the individual's preferences for behavior, but not always his actual behavior. A father naturally wants his son to behave not necessarily as the father does, but necessarily as the father, dictated to by his own superego, would prefer to behave. This is the familiar idea of the parent's superego becoming in large part the child's superego through the process of introjection.
Nor did the problem seem to be one that would require an extensive evaluation of general behavioral philosophies as expounded by educational 'authorities'. The results of such a particular endeavor would tend to make the response to child behavior a one-sided affair, projected from the sanctuary of the school and aimed at making the youngster behave because the book says so.

The problem seemed more one of determining whether or not preferences of behavior of parents were in agreement significantly with preferences of behavior of their youngsters, and with those of the local school people. By defining the problem in such a manner it was hoped to devise a study that would make apparent any lack of agreement, if such lack of agreement existed, as to what behavioral values should be paramount in this particular community. The hypothesis of this study, then, was that in this small community, although by virtue of its membership in a greater culture—a culture abounding in customs, habits, traditions, religious concepts, laws, quasi-legal pressures, interpersonal socializations, mass infliction of superego from parent to offspring, and authoritarian educational systems—there was very small, if indeed at all detectible, agreement between home, youngster, and school in the matter of preferred behavior.

The purposes of this study were: (1) to discover if, in this particular situation, there existed any significant
difference between; (a) the behavioral preferences of the youngsters and the behavioral preferences of the parents, and (b) the behavioral preferences of the youngsters and the behavioral preferences of the teachers; (2) to determine whether there is any lack of correlation between youngsters and parents in matters of preferred behavior; and (3) to learn whether there is any absence of homogeneity in rating the youngsters on behavioral traits by parents and teachers.

This problem deals with a highly confined geographic and cultural area. None of the data or conclusions drawn herein should be extended to apply to geographic, cultural, or any other limits beyond the studied area, nor should the results of the study be generalized beyond the limits herein described.

Importance of the study. No school purposes are sound unless they are adaptable to the community situation. The purposes of education in the subject school appeared to the investigator to be inadequate in this respect. It follows that a thorough study of the community is a necessary prelude to formulating a sound local philosophy of education. Melby recognized a deficiency of studies which should be directed at learning more and more about the communities when he wrote: "We have not made these educational leaders superintendents and principals students of American communities either as to their structure, organization or functioning."¹

This investigation of behavior was but a small segment of a comprehensive community study. Its importance lies in its vital contribution to the whole, but it also may give clues as to the procession of activities needed for the ensuing studies. Then too, it may set parents, teachers, and youngsters to thinking on the problems of behavior with the result of obtaining a greater tolerance of one another's peculiarities.
CHAPTER II

REVIEW OF RELATED LITERATURE

It is conceivable that concern for childhood behavior preceded historically the advent of formal education; but it is doubtful that behavior of youngsters became cause for study until they were subjected to the frustrations of confined learning. Benedict\(^1\) has shown in her study of three primitive societies that there existed in each, genuine and powerful forces for controlling and channeling childhood behavior. The importance of role and cultural values in determining adolescent behavior of primitives is clearly shown by Mead,\(^2\) who, incidently, also quite convincingly, analyses modern society in terms of education by role-seeking. She examines the frustrating circumstances that arise from the pressures and bewilderments of role-seeking in modern education and the resultant problems of behavior.

Historical literature brims with bitterness toward the sadistic teacher who urged by various relatively savage means the children under his care toward "normal behavior". It is remarkable that nowhere is "normal behavior" defined. St. Augustine reflecting upon his Latin education bemoaned


-6-
the fact that in his wayward youth he had little use for:

"memory or capacity, -- of which,... we possessed enough for our age,-- but we delighted only in play; and we were punished for this by those who were doing the same things themselves. But the idleness of our elders they called business, whilst boys who do the like are punished by those same elders..." He pointedly continued, "... will anyone of good sense approve of my being whipped because, as a boy, I played ball, and so was hindered from learning quickly those lessons by means of which a man, I should play more unbecoming-ly?"3

Comenius in his Great Didactic thought the childhood behavior of his time should be controlled not in such a way as to make "... our schools resound with shrieks and with blows," but with "...such frankness and sincerity of purpose, that even the pupils may feel..." that the teacher is but merely "...exercising paternal authority."4 Certainly no one who is acquainted with Charles Dicken's immortal Mr. and Mrs. Squeers; or with James Joyces' Mr. Fleming; or Evelyn Waugh's Captain Grimes would propose that school child behavior has not been historically a favorite topic for writers.

Writers of the past have satirized the schism that has always separated the so-called learned or educated from the laymen. It appears to have been and to be an incurable


concomitant of the interval between the pragmatism of layman endeavor and the idealism of the bookworm. Rabelais depicts the distrust of the ordinary man of the conspicuous scholar -- the user of big words. He tells of a Limousin scholar who used such elegant words that Pantagruel was unable to understand.

"Midden and dung!" Pantagruel roared, "What does this lunatic mean? I think he is forging some diabolic tongue and laying a spell of witchcraft upon us."5

The American frontier found in its violent pragmatism a crystalized apathy to classroom education. Lena Davis Murray describes the attitude of a frontier lady who speaks, "I don't know how to talk in public, fur I ain't never done none of it. But I just want to say that my young-uns has trouble with the teachers, and the teachers is allus a-beatin' on 'em. But I reckon the trouble is we jist ain't never had one before that knowed noth'... My young-uns is mean and you'll have to whoop' em, but you're welcome to it. Hit ain't that I don't want 'em learnt."6

Recent educational literature shows a great deal of concern about behavior and the reactions of parents and teachers to schoolchild behavior. Behavior prediction has been a favorite theme of many behaviorists. Sarason examined


6Fuess and Busford, op. cit. 659, From Ella Enslow and Alvin F. Harlow's Schoolhouse in the Foothills.
a number of researches into predictability of behavior and concluded "... research in the problem of prediction has neglected important determinants of behavior." He goes on to lament the lack in behavioral research of "... a systematic theory of behavior."7 Speaking on the fallacies of establishing any specific laws by which behavior prediction can be made, Graubard, in his comprehensive survey of the relationship of physiology to behavior, says: "Behaviorists fail to realize that new situations create qualities of their own which are different from either the components of that particular event or the forces that caused its coming into being"8

Although critical of past studies concerned with prediction of behavior, some authors believe that it is possible to reasonably establish normalcy in behavior. Both Benedict and Mead, heretofore cited, gave a configurative idea of normal behavior for each of the particular primitive societies studied. Benedict, particularly, elaborated upon the idea that culturally normal behavior could be studied only on a configurative basis -- a type of Gestalt theory applied to the entire culture. Lanzer implies the same theory:


One must be creative if one is to fulfill himself as a human being; and a society is inadequate to the extent to which it makes possible and facilitates such creativity among its members. Also from the viewpoint of social organization, one might note that the most universally and easily available sources...of creativity for human beings...is interpersonal creativity. Interpersonal creativity requires self-fulfillment in and through and with reference to, the creativity of other human beings. Purposive interpersonal creativity, operating in terms of one's unique characteristics, but socio-cultural in origin, definition, resources and orientation, is thus man's major means of personality fulfillment - that is, of achieving emotional balance and personal happiness, while at the same time accepting and being accepted by one's fellow man.9

It seems to follow from these investigations that prediction of behavior, or even, as this study is essentially concerned -- with establishing an adequate philosophy of behavioral control of school children, is dependent upon bracketing a realm of normal, or preferred behavior. Because behavioral preferences vary not only from culture to culture, but within a large culture from community to community a cultural 'type' of behavior is an illusion. Benedict in summing up her study of the nature of society states: "Nor are these configurations... 'types' in the sense that they represent a fixed constellation of traits. Each one is an empirical characterization, and probably is not duplicated in its entirety anywhere else in the world."10 Any study


10 Benedict, op. cit., pp. 219-220.
of normalcy in behavior must necessarily be on the community level, and must thusly consider the preferences for behavior of the individuals living in that community and of persons dealing with that community.

The question then arises: do teachers in small communities understand the behavior preferences of the local people? They must, of course, in order to deal effectively with problems of behavior as they arise in school. Studies in the past have aimed mainly toward studying pupil behavior per se, and the teacher reaction to it, rather than embracing the whole community situation. Stiles studied behavior on the elementary school level by testing children's reactions to story behavior situations. Children indicated on written ballots their preferences for one of the possible methods of dealing with behavior, and why. The findings showed that: "Changes in the child's approach to the behavior and in his understanding of that behavior can be made on the elementary school level provided appropriate influences are brought to bear."11

A study to see how competent elementary school teachers meet selected behavioral situations was carried out by Slobetz.12 Two hundred ninety teachers were chosen because of their competency and maturity. They were asked to indicate

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how they met certain behavioral challenges in their school situations. These teachers met the problems in a number of ways from spanking, tying in seats, to non-promotion and extra work and shaking of the head in negation. He concluded that generally the teachers acted in a constructive way, often searching for reasons of behavioral actions. These same teachers rated behaviors of morality, recessions and withdrawing most serious; most annoying were behaviors related to classroom decorum.

Gaier and Jones also asked the question: do teachers understand classroom behavior? To answer it they had ninety-six teachers list 690 behavior problems. They found on a scale value interpretation of the problems "... That the areas considered most important were lack of academic adjustment and violation of class order." They found that the responses of men teachers differed from those of women "... in that the former gave less weight to academic adjustment and more to violation of school rules." An analysis of the reasons the teachers gave for choosing certain behavior problems "... showed that those considered most important were that the behaviors (a) disturbed the class and other students, (b) denoted attitudinal inadequacies, (c) interfered with physical, social or emotional growth of the pupil." It appeared to the investigators from specific examples taken from the questionnaire that there was an indication of: "... both inadequate understandings of child behavior, and of the
reasons for the seriousness of certain types of behavior problems." 13

Certainly these latter two studies are important contributions to the study of school people's interpretation of and preference for behavior, but studies of classroom behavior will continue to resist profundity until they glance outside the classroom and consider the cultural configuration of hopes, aspirations, traditions, and mores leading to community behavioral codes -- or values -- or preferences. This type of consideration would entail an intense sociological study of a particular community. Then the results would apply only to that community, but numerous studies of community life will reveal a sounder understanding of national life than will a multitude of large area studies.

This professional paper intended to fill a small but important gap left in other studies of schoolroom behavior by (a) studying the behavior preferences of the parents and the youngsters as well as the teachers and by (b) being intensively concerned with a particular community and its own ideas of behavior arising out of its own unique culture. (The numbers of responses were small but should give a better overview of the particular community's ideas on behavior than many more extensive studies have on larger groups.)

In studying preferences of behavior the question naturally arose: was there significant relationship between stated preferences of behavior of an individual and that individual's actual behavior? It would have been presumptive to study behavior preferences of a group without some expectancy that those preferences falling within the first standard deviation would have been indicative of an actual behavior normalcy for that group. Birge studied the relationship between behavior preferences of 827 subjects on the Kuder Preference Record - Personal and sociometric ratings of those subjects for the trait of dominance. Conclusions show that the highly dominant person, as rated, "(1) prefers to take the lead and be in the center of activities involving people; (2) he prefers activities involving the use of authority and power; (3) he prefers activities ordinarily chosen by people trying to make a good impression."^14

CHAPTER III

THE MEASURING DEVICES USED, AND TECHNIQUES OF ADMINISTRATION

This chapter is divided into two main units. Each unit revolves around the device used, the methods of sampling and the administration. The first unit is devoted to the measurement of behavioral preferences of youngsters, parents, and teachers. The purpose of this measurement is to establish whether there is any marked differences among these three concerning preferences of behavior. Also, there is an attempt made to answer the question: How well does the parent understand his younger's behavioral desires? The device used in the first unit was the Behavior Preference Record.

The second unit dealt with an attempt to determine whether there was any significantly different rating of children by parents on the one hand and by teachers on the other. The device for the second unit was the Behavior Rating Scale.

UNIT I

THE BEHAVIOR PREFERENCE RECORD

The Behavior Preference Record was developed by Hugh
B. Wood\(^1\) and the present publication was the result of nearly fourteen years of development and standardization. It was designed to "... (a) provide a systematic analysis of some behavior situations to determine the individual's understanding of democratic ideals, (b) to determine his stated preferences for various types of behavior, (c) to determine his rationalizations (critical thinking) for his preferred behavior, and (d) to stimulate discussion and decisions about desirable social behavior."\(^2\) In the \textit{Behavior Preference Record} certain characteristics of behavior were selected for emphasis:

\begin{itemize}
  \item \textbf{Cooperation} - The individual is adaptive, conformative, and helpful in his dealings with others.
  \item \textbf{Friendliness} - The individual has an attitude of 'right-doing' toward others, is sympathetic and tactful.
  \item \textbf{Integrity} - The individual is truthful, has a sense of justice, and practices fair play.
  \item \textbf{Leadership} - The individual has initiative, inventiveness, understands people, and is constructively critical.
  \item \textbf{Responsibility} - The individual is dependable, efficient, prompt, self-reliant, controls his own behavior, and
\end{itemize}


Reliability and Validity. This device makes no claims as to absolute measurement; rather it attempts to measure broad characteristics, and these characteristics are merely tendencies or inclinations. Because of the very nature of the characteristics and the subjective, emotional rationalizations involved the reliability and validity of the Behavior Preference Record could only be approximated by statistical methods. Its reliability was estimated by correlating its two forms, A and B, which were similar, but not equivalent, on each of its three levels (Elementary, Intermediate, and Advanced). "The reliability coefficients for individual characteristics range from .912 to .654; for Critical Thinking, from .871 to .814; and for Form A vs. Form B, .876 to .871. For all characteristics the reliability coefficients were: Elementary, .814; Intermediate, .843; Advanced, .871.

Correlations of teacher estimates of the students on the five characteristics plus critical thinking with their Behavior Preference Record scores was the method used to determine the validity on Form A, for the three levels, correlation coefficients on all characteristics were as follows: Elementary, .445; Intermediate, .414; Advanced, .621.

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3 Ibid, p. 3.
The Behavior Preference Record makes a consistent attempt to involve the individual emotionally in a situation the solution to which requires a high degree of selective evaluation. Then, after indicating his preference of a method for solving that situation, the individual marks his reasons for his choice of action. The methods and the reasons are "canned." In other words, although great pains were taken to include most possible methods and reasons, they are nevertheless fixed and rigid. In the course of this investigation it was noted that on not infrequent occasions the examinees protested that they would prefer not to act in any of the stated ways or, if they did prefer a stated method, the reasons were inadequate. Those protesting were requested to indicate the method or reasons stated which were as nearly compatible as possible with their own unstated views.

The following is a sample of a behavioral situation found in the Behavior Preference Record:

Sample:

Jack is reading a library book, and you see him tear a page accidentally. Later he tells the teacher that he didn't tear it, but that you did.

What would you do? (Mark only one)

A. Tell the teacher you didn't tear it, and don't know who did.

B. Tell the teacher you didn't tear it, but you saw Jack do it.

C. Tell Jack privately to tell the truth or you will tell on him.
D. Do nothing.

Because: (Mark one or more)

a. There's nothing you can do about it.
b. It's not right to tattle.
c. You aren't to blame.
d. Jack should be given a chance to tell the truth.
e. The teacher has a right to know who tore it.
f. You wouldn't want Jack to tell on you.
g. Jack was careless.

Scoring. As it was unlikely that an individual would mark courses of action consistently that would indicate him to be perfectly cooperative or perfectly friendly, the Behavior Preference Record was scored in each of its categories by subtracting from the number of those courses of action indicating a particular characteristic the number of course of action dichotomous to that particular characteristic. The result is the score on that characteristic. To score critical thinking in choosing reasons for a particular course of action, the number of "right" answers are divided by the total of "right" plus "wrong" answers to give a percentage score of critical thinking.

Administration. There was no evidence that the author of the Behavior Preference Record had any intention that it would be used as it was in this study; yet it was difficult to see how the instrument's validity or reliability could be adversely affected by such use. In fact, the ease of
administration, the simplicity of instructions and context, and the scope of the instrument all combined to suggest that it was ideal for this purpose. Directions for administration were followed in all possible cases and scoring was computed exactly as the manual indicated.

An attempt was made to include in the study all the children between and including the ninth and the twelfth grades, and their parents or guardians. Children of transient workers were excluded because it was felt that their behavioral values might contrast enough with those of the relatively permanent inhabitants to significantly affect the outcome. For the purpose of this study, one year of residence was required to establish an inhabitant as a permanent resident.

Of the thirty-six boys entered between the ninth and twelfth grades, six were classified as transitory. Four of these dropped out during the course of the investigation and two entered after it began. Parents of two of the permanent boys refused to fulfill the requirements of the study. The numbers of cases used then, were twenty-eight boys, twenty-seven mothers, and twenty-seven fathers. The difference between the number of boys and the number of parents was due to the death of one parent and the separation of another couple.

At one time or other during the year there were twenty-nine girls in school. Three of these were classified
as transient and one was unable to participate in the study because of chronic illness. Twenty-five girls, twenty-four mothers, and twenty-two fathers performed the necessary chore of filling out the Behavior Preference Record.

The entire classroom teaching staff of both high school and elementary school, a total of nine teachers, participated. It was decided to have all the teachers included because all twelve grades were in one building and necessarily all teachers were armed with disciplinary authority over youngsters of all the grades. They were, therefore, concerned with high school behavior and, of course, their preferences were included.

The populations from which this sample was drawn would be an undefined population of youngsters of school grade nine through twelve, their mothers, their fathers, and their teachers. Sampling deficiencies were apparent. For example, selection took place in the elimination of the two parents who refused to participate. Both of them being boys' parents, the results of their combined participation might well have affected the mean differences enough to cause significance or lack of significance. The fact that three girls' fathers and one mother did not participate (for one reason or another) added difficulties to the sampling problem. Also, a hindrance to interpretation was the fact that the populations were no well-defined composite groups; they were, rather, a somewhat unwieldy set that, although linked together by the
common bondage of the school, could scarcely be expected to give answers of a predictive sort for similar populations of this community in the future.

Administration. A note was sent each parent requesting cooperation. Willingness to help was signified by all except the two parents heretofore mentioned.

One Behavior Preference Record was then mailed to each parent couple with a stamped, self-addressed, envelope enclosed. Because it was thought that the sight of an answer sheet might repel some parents, they were requested to mark their answers in the test booklet in a manner prescribed by some simple directions sent along with them. It was decided that each of a parent couple should mark in the test booklet and that there should be no instructions discouraging any collaboration between the two regarding the answers. This was done for two reasons: first, the cost of the test booklets made duplication impractical; and secondly, by collaborating and discussing the behavior problems in relation to their children perhaps parents might come to think seriously about their own, and their youngsters' behavioral values.

The parents were each asked to not only mark in the booklet (1) their own individual preferences of behavior but also to indicate (2) how they thought their youngsters would prefer to act in the stated situations.

Of the fifty-three booklets mailed, twenty-two were returned by pupils, seventeen were returned by mail, and
personal contact accounted for the rest.

To minimize the possibility that other than the parent might mark answers in the booklet, parents were asked to sign the booklets and these signatures were later compared with report card signatures. The several questionable signatures were later verified by personal contact with the parents concerned. Also, identification was necessary for identifying measures with the pupils' scores on the same test.

As soon as all the parents' booklets had been accounted for, the pupils were given the identical Behavior Preference Record sent their folks. It was administered in a classroom situation using regular answer sheets. At the same time the classroom teacher was asked to fill out a booklet. In all cases, Form A, Advanced, booklets were used.

Scoring was completed by first transferring all the parents' scores on to their corresponding youngsters' answer sheet. This was a tedious job, but necessary in order to use the scoring keys provided. It would be simpler, for any larger number of cases, to use answer sheets exclusively and have them machine scored. Using the score key there are twelve different operations required for each answer sheet.

Finally, all the scores were tabulated listing each parent's score on each characteristic opposite the score of that parent's youngster. Teacher scores were tabulated separately.
UNIT II

THE BEHAVIOR RATING SCALE

The behavior rating scale used was schedule B of the Haggerty-Olson-Wickman Behavior Rating Schedules. Its primary function was to "stimulate, direct, and improve research in the behavior problems of children".²

Schedule B was a scale upon which youngsters were rated by others, teachers or parents, along lines indicating intellectual, physical, social, and emotional traits. There were thirty-five traits altogether and within each trait there was an opportunity for the rater to choose the degree to which that trait seemed most evident.

Example:

11. What is his physical output of energy?

| Extremely Slow in Moves with Energetic Overactive |
| Sluggish action required vivacious Hyperkinetic |
| speed Meddling |
| 5 3 2 1 4 |

Beneath each degree of manifestation of the trait was a number indicating a weight derived for that degree by the authors from data obtained in standardization. The summation

of those weights indicated the score given for the traits, or for the total scale. A high score implied undesirable tendencies; whereas lower scores suggested desirable tendencies.

Reliability and Validity. The authors admit that this device lacks much of being perfectly reliable or perfectly valid.

In general when the total scores of Schedule B are obtained from repeated ratings by the same teacher, the reliability of the total scores is .86 for elementary school children. The reliability of a single rating is .92 as obtained from the correlation between halves of the scale, with a prediction for the total.6

Various means have been employed to study the validity of the Behavior Rating Scale.

Scores on Schedule B correlate .60 with ratings from the direct approach followed in Schedule A. ... A composite score on Schedules A and B correlated .76 with the frequency with which a group of children were referred to the office of an elementary school principal.7

The authors point out other limitations of the scales. The person making the rating is subject to bias and possibly could interpret the actions of the youngsters in terms of his own prejudices and intolerances. This would tend to deviate the ratings from true objectivity. Another limitation was an emphasis in the scale on aggressive behavior and it was urged that methods other than this scale be used to locate non-aggressive disorders.

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6Ibid., p. 2.
7Ibid., p. 2.
In this study, the limitation of bias was reduced, or at least distributed, by having two teachers rate each child. The criterion for a teacher to be a rater was that he should have the pupils rated for at least two periods per day. The two teachers rating a group met as a committee of two and compromised on their ratings.

The limitation of emphasis on aggressive behavior placed no restriction upon this study. The essential aim of this investigation was not so much to unearth any behavior tendencies in individuals, although such knowledge would have been concomitantly useful, as to inquire: do parents and teachers interpret child behavior in the same light? Or, more technically, are parents and school people, in this community different populations in regard to rating the behavior of the youngsters in their charge?

The Behavior Rating Scale was administered much the same as was the Behavior Preference Record. All the twenty-seven boys who, along with their parents, took the Behavior Preference Record were rated by both their parents and their teachers on the Behavior Rating Scale. Five boys of junior high school age, not included in the Preference Record study, were added to the Rating Scale study.

Twenty-two out of the twenty-five girls participating in the Behavior Preference Record study were rated by their parents and teachers on the Behavior Rating Scale. Besides these girls, two junior high school girls were included as rated by their parents and teachers.
Administration. The Behavior Rating Scale was administered several months after the Preference Record was given. Therefore, again, parents were all sent notes asking if they would once more help in making the study of behavior complete. All the parents, except the reluctant two, signified their willingness to rate their own children.

One copy of the Behavior Rating Scale was given each youngster (not mailed, as was the Preference Record) along with a self-addressed, stamped envelope, and instructions to carry it home to his parents. Each parent was to rate his youngster, or youngsters, then seal and mail the scale in the self-addressed envelope to the investigator. The instructions given on the scale were to be followed exactly by the parent except that instead of the single (x) used to signify a particular rating, the mother was to mark (x) and the father was to mark ( ). No instructions were included that would infer that the father and mother should not confer or collaborate in rating their young one.

The fact that, excepting the heretofore mentioned cases, a hundred-percent of the scales were returned completely filled out was probably due not less to the methods of the investigator (however questionable to the more virtuous of educational researchers; nevertheless undeniably effective) than to the desire of the parents to cooperate. When the youngsters were given the scales to take home they were subject to a bribe. If ninety percent of the Behavior Rating Scales were returned within a week, ending Friday noon,
school would be dismissed at Friday noon. The scandalum magnatum lies in the fact that school was going to be dismissed Friday noon anyway for physical plant repairs.

Of fifty-nine scales sent, thirty-eight were returned by mail, eighteen were sent, sealed, via the youngsters, and three were not returned. Signatures were once more compared with those on the report cards, for verification, and the several questionable signatures were checked by personal contact.

Meanwhile the teachers were organized into committees of two. Membership on a committee was limited to teachers who had a particular group of students at least two periods per day. Each teacher on a rating committee, then, had every pupil assigned to that committee for rating at least two hours a day.

Next, each committee gave every pupil in its group a rating on his observed behavior. The scores were added up both within each of the four divisions of the scale and in total. The scores of the parents' ratings were also totaled.

All scores were then tabulated and listed with each pupil's ratings by teacher, father, and mother in each division, and in total aligned with each other respectively.
CHAPTER IV

THE RESULTS, CONCLUSIONS, AND SUMMARY.

This chapter is divided into three units. Unit I is concerned with the analysis of the results obtained through the Behavior Preference Record, and the conclusions drawn upon the basis of such analysis. Unit II is devoted to the analysis and interpretations of the results derived from the Behavior Rating Scale. Unit III is a summary of the combined findings and their relationship to the whole problem. Also, Unit III attempts to show how this study has suggested other potential investigations into the realm of behavior.

UNIT I

THE RESULTS AND CONCLUSIONS DERIVED FROM THE BEHAVIOR PREFERENCE RECORD.

The hypothesis of this study was, mainly, that a difference existed between parent and child, on the one hand, and teacher and child on the other in regard to behavioral values. It stated that there was, generally, a lack of agreement between these three in regard to behavior preferences—that parents and children represented different populations, in a particular small community, in the matter of behavior preferences; that teachers and youngsters also represented different populations in this matter.
To test this hypothesis the Behavior Preference Record was administered to a sampling of parents, youngsters, and teachers in the subject community. The results of the administration were compiled as numerical scores. It was necessary to treat the scores statistically in order to adequately test the hypothesis.

The scores were subjected to statistical analysis of four types. First, the means of the various groups were computed and the mean differences found. Secondly, the observed mean differences were tested to determine whether or not they were of such size that they could be attributed to chance factors or sampling variations. Thirdly, the groups were studied to determine to what degree, if any, they were associated in the manner described in the hypothesis. Lastly, each association, or correlation coefficient was tested to determine if such correlation was of such magnitude as to be significant when considered in terms of sample size. Tenable limits at the five percent level of confidence were established for those correlation coefficients significantly different from zero.

Tests of significance applied to mean differences. Because of the smallness of the sample, small samples being "...(considered by some statisticians as samples under 30 cases and by others as samples under 100)" use was made

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of the "t-test" for significance and also of Fisher's tabled values of "t".\textsuperscript{2} In all cases boys and girls were considered separately because of the assumption that their behavior preferences, in view of the different roles they are expected to play in life, might differ enough to significantly alter the outcome.

The mean differences between (1) boy and mother, (2) boy and father, (3) boy and teacher were examined for significance in five areas of behavior preferences—namely, cooperation, friendliness, integrity, leadership, and responsibility. Also, an answer was sought to the question: do these parents have an understanding of their youngsters' preferences of behavior in these five areas? In response to the latter, it was necessary to dwell upon the mean differences between the boys' scores and the parents' scores when the parents complied with the request to indicate how they thought their sons would answer the situations in the Behavior Preference Record.

The mean differences between the girls and their parents and teachers were tested in the same manner as the boys and their parents, including the mean differences between the girls' preferences of behavior and the preferences of behavior attributed to them by their parents.

The mean in each case was determined by dividing the

sum of the scores of a particular group by the number of cases. The means of the various groups and the numbers therein are entered in Tables I and II, pages 35 and 36. The mean differences were obtained by subtracting the larger mean from the smaller mean.

To determine whether the observed mean difference was one that might occur frequently by chance was the next step. If the observed mean difference did not occur frequently by chance, it might be inferred that the difference was the product of a situation inherent in this community rather than in sampling variations. The term "significant" was used to describe a mean difference larger than could be reasonably attributed to chance sampling variations. Inasmuch as the main interest was merely finding out if the mean differences of the various groups studied were significant, a hypothesis was set up for possible rejection. This hypothesis was the null hypothesis that the population mean difference was zero or that there was no mean difference. The null hypothesis is a statistical hypothesis which can be contrasted with the hypothesis of this study which claims that there is a significant difference between these groups.

In testing the null hypothesis, if the observed difference was so large that it was statistically significant, the hypothesis was rejected; if the mean difference was not significant, the hypothesis was accepted.

How large a difference was necessary to be considered
significant? In order to subject the study to a rigorous test, if the observed t-statistic exceeded the absolute t-value, as entered in Fisher's t-distribution table, more than 1 per cent of the time, the null hypothesis was abandoned as untenable and the difference considered reasonably significant. When the observed value of "t" did not exceed the tabled value at the 1 per cent level of confidence, the difference was deemed nonsignificant.

The t-ratio for testing the null hypothesis was computed in the manner described by Edwards.\(^3\) The results of the calculations for testing the null hypothesis in the various cases were entered in Tables III and IV, pages 37 and 38.

The standard error of the mean difference was computed by extracting the square root of the sum of the squares of the standard errors of the means of the two groups being tested.

The standard error of the mean\(^4\) of any particular group was found by the division of the standard deviation by the square root of the number of cases minus one (N-1).

In finding the standard deviation the sum of the squared deviations of each score from the mean was divided by the number of cases minus one, and the square root of the result extracted. The standard deviations of the various

\(^3\)Edwards, op. cit., Chapter IX.

\(^4\)See table I and II for compilations of the standard errors of the means.
groups studied were listed in Table I, page 35, and Table II, page 36. It was apparent that in some cases, notably under Integrity, the standard deviation exceeded the mean. This was due to the fact that there were negative scores as well as positive scores in these situations.

Analysis of the results of examining the mean differences for significance. It was obvious from the results, that the hypothesis that there was little or no agreement between youngsters and, respectively, fathers, mothers, and teachers in matters of behavior preferences received neither affirmation nor negation from testing the mean differences. Table V, page 39, gives a comparative picture of the significance tests. No clear cut pattern was evident. Fourteen differences were significant; whereas thirty-four were non-significant. Very generally it appeared that significant differences emerged more frequently between boys and parents than it did between girls and parents. Also, in the matter of how the parents thought their youngsters might prefer to behave, it was discernible that significant differences occurred oftener in the mean differences of girls and parents than in the mean differences of boys and parents. It was noted that the characteristic of friendliness manifested only one case of significant difference—that of the mean difference of boys and mothers.

Since the confidence level of 1 per cent was admittedly rigid, and in view of the fact that a significance of
### TABLE I

COMPARISON OF THE NUMBERS, MEANS, STANDARD DEVIATIONS, AND STANDARD ERROR OF MEANS COMPUTED FROM THE SCORES OF BOYS AND FIVE OTHER GROUPS ON THE CHARACTERISTICS OF THE BEHAVIOR PREFERENCE RECORD

<table>
<thead>
<tr>
<th>Groups</th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cooperation</td>
<td>Friendliness</td>
<td>Integrity</td>
<td>Leadership</td>
<td>Responsibility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>Means</td>
<td>$\sigma$</td>
<td>$\sigma M$</td>
<td>Means</td>
<td>$\sigma$</td>
<td>$\sigma M$</td>
<td>Means</td>
<td>$\sigma$</td>
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<td>.45</td>
<td>1.16</td>
<td>3.12</td>
<td>.99</td>
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<td>3.28</td>
<td>.64</td>
<td>7.10</td>
<td>3.10</td>
<td>.59</td>
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<td>1.79</td>
<td>.35</td>
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<td>Mothers</td>
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<td>3.70</td>
<td>.60</td>
<td>7.70</td>
<td>2.74</td>
<td>.54</td>
<td>3.35</td>
<td>1.15</td>
<td>.49</td>
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<td>2.91</td>
<td>1.02</td>
<td>6.50</td>
<td>2.16</td>
<td>.77</td>
<td>5.00</td>
<td>1.05</td>
<td>.37</td>
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<td>4.83</td>
<td>.98</td>
<td>5.65</td>
<td>2.27</td>
<td>.45</td>
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<td>.34</td>
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<td>1.08</td>
<td>6.00</td>
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<td>.59</td>
<td>2.26</td>
<td>.45</td>
<td>7.45</td>
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</table>

*Note: "Father thinks" and "Mother thinks" pertains to the scores made on the Behavior Preference Record in which the fathers and mothers indicated how they thought their youngsters would prefer to behave.
TABLE II

COMPARISON OF THE NUMBERS, MEANS, STANDARD DEVIATIONS, AND
STANDARD ERROR OF MEANS COMPUTED FROM THE SCORES OF GIRLS
AND FIVE OTHER GROUPS ON THE CHARACTERISTICS OF THE
BEHAVIOR PREFERENCE RECORD

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Means</th>
<th>$\sigma$</th>
<th>$\sigma_M$ means</th>
<th>$\sigma$</th>
<th>$\sigma_M$ means</th>
<th>$\sigma$</th>
<th>$\sigma_M$ means</th>
<th>$\sigma$</th>
<th>$\sigma_M$ means</th>
</tr>
</thead>
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<tr>
<td>Girls</td>
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<td>3.02</td>
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<td>.53</td>
<td>2.20</td>
<td>.45</td>
<td>8.80</td>
<td>.58</td>
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<td>6.70</td>
<td>3.54</td>
<td>.75</td>
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<td>.79</td>
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<td>.86</td>
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<td>2.91</td>
<td>6.50</td>
<td>2.16</td>
<td>.77</td>
<td>5.00</td>
<td>1.05</td>
<td>1.12</td>
<td>1.24</td>
</tr>
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<td>3.64</td>
<td>5.50</td>
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<td>1.50</td>
<td>.49</td>
<td>6.50</td>
<td>2.62</td>
</tr>
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<td>Mother thinks*</td>
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<td>4.53</td>
<td>5.6</td>
<td>2.70</td>
<td>.56</td>
<td>1.30</td>
<td>.46</td>
<td>6.60</td>
<td>3.50</td>
</tr>
</tbody>
</table>

*Note: See Table I, preceding page, for explanation of "Mother thinks" and "Father thinks".
### TABLE III

**RESULTS OF OBSERVATIONS LEADING TO ACCEPTANCE OR REJECTION OF THE NULL HYPOTHESIS REGARDING THE SIGNIFICANCE OF MEAN DIFFERENCES BETWEEN SCORES OF BOYS AND OTHERS ON CHARACTERISTICS OF THE BEHAVIOR PREFERENCE RECORD**

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Observations</th>
<th>27 Fathers</th>
<th>27 Mothers</th>
<th>9 Teachers</th>
<th>25* Mother</th>
<th>26* Father</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>&quot;t&quot; at the 1 per cent level</td>
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<td>2.678</td>
<td>2.728</td>
<td>2.678</td>
<td>2.678</td>
</tr>
<tr>
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<td>Standard error mean diff.</td>
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<td>1.15</td>
<td>1.42</td>
<td>1.46</td>
<td>1.39</td>
</tr>
<tr>
<td></td>
<td>Observed &quot;t&quot;</td>
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<td>4.60</td>
<td>1.86</td>
<td>.24</td>
<td>.76</td>
</tr>
<tr>
<td></td>
<td>Null hypothesis</td>
<td>reject</td>
<td>reject</td>
<td>accept</td>
<td>accept</td>
<td>accept</td>
</tr>
<tr>
<td>Friendliness</td>
<td>Standard error mean diff.</td>
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<td>.70</td>
<td>.89</td>
<td>.74</td>
<td>.63</td>
</tr>
<tr>
<td></td>
<td>Observed &quot;t&quot;</td>
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<td>3.48</td>
<td>.84</td>
<td>1.01</td>
<td>.63</td>
</tr>
<tr>
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<td>Null hypothesis</td>
<td>accept</td>
<td>accept</td>
<td>accept</td>
<td>accept</td>
<td>accept</td>
</tr>
<tr>
<td>Integrity</td>
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<td>1.01</td>
<td>1.05</td>
<td>1.08</td>
<td>1.04</td>
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<tr>
<td></td>
<td>Observed &quot;t&quot;</td>
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<td>1.58</td>
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<td>2.02</td>
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<td>accept</td>
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<td>accept</td>
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<tr>
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<td>.80</td>
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<td>.90</td>
</tr>
<tr>
<td></td>
<td>Observed &quot;t&quot;</td>
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<td>3.04</td>
<td>3.20</td>
<td>.21</td>
<td>1.76</td>
</tr>
<tr>
<td></td>
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<td>reject</td>
<td>accept</td>
<td>accept</td>
</tr>
<tr>
<td>Responsibility</td>
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<td>Observed &quot;t&quot;</td>
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<td>2.68</td>
<td>2.07</td>
<td>1.99</td>
</tr>
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</table>

*Note: Read 25 Mother as 25 "Mother Thinks", and 26 Father as 26 "Father Thinks".*
TABLE IV

RESULTS OF OBSERVATIONS LEADING TO ACCEPTANCE OR REJECTION OF THE NULL HYPOTHESIS REGARDING THE SIGNIFICANCE OF MEAN DIFFERENCES BETWEEN SCORES OF GIRLS AND OTHERS ON CHARACTERISTICS OF THE BEHAVIOR PREFERENCE RECORD

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Observations</th>
<th>25 Girls vs.</th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>&quot;t&quot; at the 1 per cent level</td>
</tr>
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<td>Standard error mean diff.</td>
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</tr>
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<td>Null hypothesis</td>
<td>accept</td>
</tr>
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</tr>
<tr>
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<td>Observed &quot;t&quot;</td>
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<tr>
<td></td>
<td>Null hypothesis</td>
<td>accept</td>
</tr>
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<td>Integrity</td>
<td>Standard error mean diff.</td>
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</tr>
<tr>
<td></td>
<td>Observed &quot;t&quot;</td>
<td>.77</td>
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<td></td>
<td>Null Hypothesis</td>
<td>accept</td>
</tr>
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<td>Leadership</td>
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</tr>
<tr>
<td></td>
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</tr>
<tr>
<td>Responsibility</td>
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</tr>
<tr>
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<tr>
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TABLE V

SIGNIFICANCE AND NONSIGNIFICANCE OF THE MEAN DIFFERENCES BETWEEN THE SCORES OF BOYS AND FIVE COMPARATIVE GROUPS, AND GIRLS AND FIVE COMPARATIVE GROUPS ON FIVE BEHAVIOR CHARACTERISTICS

<table>
<thead>
<tr>
<th>Groups</th>
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<th>Leadership</th>
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<td></td>
<td>Girls</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Mothers</td>
<td>Boys</td>
<td>S</td>
<td>S</td>
<td>N</td>
<td>S</td>
</tr>
<tr>
<td></td>
<td>Girls</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Teachers</td>
<td>Boys</td>
<td>N</td>
<td>N</td>
<td>S</td>
<td>S</td>
</tr>
<tr>
<td></td>
<td>Girls</td>
<td>N</td>
<td>N</td>
<td>S</td>
<td>N</td>
</tr>
<tr>
<td>Fathers</td>
<td>Boys</td>
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<td>N</td>
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</tr>
<tr>
<td></td>
<td>think. Girls</td>
<td>S</td>
<td>N</td>
<td>N</td>
<td>S</td>
</tr>
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<td>Boys</td>
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<td>think. Girls</td>
<td>S</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
</tbody>
</table>

Note: S indicates significant mean differences; N indicates not significant mean differences.
mean difference, although it did reasonably eliminate chance
sampling variations, did not signify any degree of difference,
and in consideration of the possibility that at the 1 per cent
level of confidence a non-significance did not necessarily
indicate a population mean difference of zero, it was decided
to test the relationships between these various groups for
significance.

Testing for relationships. Correlation coefficients
(Pearson's $r$) were computed for the following pairs of
matched scores: (1) Boys vs. Fathers, Boys vs. Mothers,
Boys vs. Father's idea of how their boys would score, Boys
vs. Mother's idea of how their boys would score, and (2) the
same pairs for the girls and their parents.

The product-moment technique, as described by Edwards,\(^5\)
was used to compute the correlation coefficients and the re-
sults were tabulated in Table VI, page 42.

The correlation coefficients in Table VI were measures
of degree of agreement in the samples. In the absence of
additional information the observed $r$ becomes the best esti-
mate available of the true $r$. However, by employing Fisher's
$z$ transformation\(^6\) it was possible to set up tenable limits of
an observed $r$. Short interprets these tenable limits

\(^5\)Edwards, _op. cit._, p. 91.

\(^6\)Ibid., pp. 197-210.
... as the theoretical upper and lower limits of the range through which the observed correlation coefficients could be expected to vary due to chance factors alone, if the experiment were repeated an infinite number of times.7

Fisher's Table8 was used to transform the observed $r$ whose distribution was not normal, into a corresponding value of $z$, whose distribution, although "not strictly normal, ... tends to normality rapidly as the sample is increased, whatever may be the value of the correlation."9 The tenable limits of $r$ were found by reconversion from $z$ to $r$, reversing the process in the same table. The limits thus found were accepted at the 5 per cent level of confidence.

In finding the confidence level of tenability 1.96 standard deviation units were used because, as Edwards points out, "on each side of the (normal) curve between the mean and 1.96 standard deviation units lie 47.5 per cent of the scores," then "these two points will, in a normal distribution, define the zone which embraces the middle 95 per cent of the measures."10 The expectation was, in using 1.96 in figuring the tenable limits of $r$, that values would fall

8Fisher, op. cit., p. 210
9Ibid., p. 199.
10Edwards, op. cit., p. 145.
### TABLE VI

**COEFFICIENTS OF CORRELATION DERIVED FROM (1) STUDENT'S SCORES ON FIVE CHARACTERISTICS AND (2) THE SCORES OF THEIR PARENTS AND THE SCORES THEIR PARENTS THINK THE STUDENTS WOULD MAKE**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fathers</td>
<td>Boys</td>
<td>.229</td>
<td>-.110</td>
<td>.064</td>
<td>.008</td>
<td>.461</td>
</tr>
<tr>
<td></td>
<td>vs. Girls</td>
<td>.030</td>
<td>-.241</td>
<td>.284</td>
<td>.024</td>
<td>.143</td>
</tr>
<tr>
<td>Mothers</td>
<td>Boys</td>
<td>-.058</td>
<td>.200</td>
<td>-.348</td>
<td>.291</td>
<td>.368</td>
</tr>
<tr>
<td></td>
<td>vs. Girls</td>
<td>.105</td>
<td>.133</td>
<td>.256</td>
<td>.297</td>
<td>.370</td>
</tr>
<tr>
<td>Father thinks vs. Girls</td>
<td>Boys</td>
<td>.240</td>
<td>.273</td>
<td>.015</td>
<td>.330</td>
<td>.146</td>
</tr>
<tr>
<td></td>
<td>vs. Girls</td>
<td>.087</td>
<td>.083</td>
<td>.362</td>
<td>.145</td>
<td>.260</td>
</tr>
<tr>
<td>Mother</td>
<td>Boys</td>
<td>.510</td>
<td>-.255</td>
<td>.073</td>
<td>.251</td>
<td>-.024</td>
</tr>
<tr>
<td></td>
<td>vs. Girls</td>
<td>.117</td>
<td>.164</td>
<td>.611</td>
<td>.038</td>
<td>.398</td>
</tr>
</tbody>
</table>

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above or below those limits not more than five cases in a hundred. This would make possible the acceptance of the limits of the observed $r$ at a confidence level of .05.

As stated before, in absence of other information the observed $r$ is the best estimate of the true $r$—except where the $r$ is small and the cases are few. A minimum $r$ is then necessary in order to say that a correlation exists. The minimum $r$ used in this problem was found in Edward's Table 11 where for the appropriate number of cases the various values of $r$ were given at .05 and .01 levels of significance. Unless the observed $r$ was above minimum value of $r$ at the .01 level, the observed $r$ was considered not significantly different from zero. Under this criterion only two correlation coefficients were considered significantly different from zero. The two were entered in Table VII, page 44.

Analysis of the results of testing for association.

Of all the observed correlation coefficients computed from scores on the Behavior Preference Record only two met the criterion for significance at the 1 per cent level—namely, the scores of boys and the scores attributed to boys by mothers, on cooperation, with an $r$ of .510 as compared with a significance required of $r^* = .496$; and the scores of girls and the scores attributed to girls by mothers, on integrity, with an $r$ of .611 as compared with an $r$ required for significance of .515.

11 Ibid., p. 331.
<table>
<thead>
<tr>
<th>N</th>
<th>Observed</th>
<th>Minimum for significance</th>
<th>Lower limit</th>
<th>Upper limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>26</td>
<td>.510</td>
<td>.478</td>
<td>.100</td>
<td>.740</td>
</tr>
<tr>
<td>24</td>
<td>.611</td>
<td>.496</td>
<td>.290</td>
<td>.835</td>
</tr>
</tbody>
</table>
If the sample relationships were to be at all predictive of the population relationships there was little likelihood of general significant agreement between any of the groups tested—except perhaps, under the right conditions of pitch and toss, the above-mentioned two. The chances of even the highest correlations, either positive or negative, of exceeding, or even attaining, the significance level were so unfavorable that, coupled with the issue of so many very low correlation coefficients it seemed no departure from objectivity to declare that there was a general lack of significant agreement between these various groups. This tended to bear out the hypothesis that there was a lack of agreement between youngsters and parents in the matter of behavior preferences, but, of course, it said nothing about the relationship between youngsters and teachers in this matter.

With the possible exclusion of mothers and boys in the matter of cooperation, and of mothers and girls in the case of integrity, it was impossible to conclude with any optimism that parents understood, to any relatively significant degree, the behavioral preferences of their young ones.

The difficulties of drawing conclusions. The defects of sampling, the questionable reliability of the instrument, possible inconsistencies in administering the instrument to parents, and the small numbers involved, plus many other limitations on objectivity all multiplied to make little or no conclusive evidence either in support of the hypothesis or in its refutation. The only pattern to emerge from either
the testing of mean differences for significance or examining the relationships for significance is the not-too-decisive pattern of nonsignificant correlations.

UNIT II

THE RESULTS AND CONCLUSIONS DERIVED FROM THE BEHAVIOR RATING SCALE.

The second part of the hypothesis of this study was that there was a lack of agreement between home and school in interpreting the actual overt behavioral characteristics of the youngsters. To examine this hypothesis for validity the Behavior Rating Scale, Schedule B, was used.

This instrument was administered both to teachers of the youngsters and the youngsters' parents in the manner described in Unit II, Chapter II.

The scores were examined by correlating the ratings given the students by parents with those given them by teachers. The coefficients of correlation were tested for reliability and significance in the same way as outlined for scores on the Behavior Preference Record in Unit I, Chapter III. It was found that the $r$ of mothers' versus fathers' total scores when rating their boys was .996. The reliability of that $r$ was found to be within the limits of 1.00 and .990 with a 5 per cent level of confidence. The high correlation between father and mother in this case was doubtlessly enhanced by lack of instructions discouraging mutual assistance when rating their boys.
On the basis of this observation the parents of boys were considered the same population when correlating with teachers' scores. The coefficients entered in Table VIII, page 48, for Teachers vs. Mothers' ratings of boys, may be interpreted as Teachers vs. Parents.

The coefficient of correlation of the total rating scores of Fathers vs. Mothers on girls was .826. The tenable limits of such an observed \( r \) being .940 to .470, the two parents' scores were considered separately in relation to the scores of teachers. The coefficients of Teachers vs. Fathers and Mothers when rating girls were entered in Table IX also.

In the Behavior Rating Scale the larger the score the more unsatisfactory is the rating given. Almost consistently the teachers gave higher scores than parents. Especially this was true in the realm of intellectual characteristics. Whereas the coefficients were slightly positive in the realms of physical, social, and emotional characteristics, there was a negative coefficient on the intellectual qualities of boys.

With girls, although there, too, was evidenced no great agreement, it appeared that teachers and mothers tended to differ on physical and social more than on intellectual or emotional traits. Fathers and teachers tended to differ more on intellectual and physical ones.

Again, as in the results of the Behavior Preference Record, the observed correlation coefficients that did not meet the minimum criterion for significance at the .01 confidence level were considered not statistically different from
# TABLE VIII

**Correlation Coefficients of Parents and Teachers Ratings of Students on the Behavior Rating Scale**

<table>
<thead>
<tr>
<th>Groups</th>
<th>Values of $r$</th>
<th>Intellect.</th>
<th>Physical</th>
<th>Social</th>
<th>Emotion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratings of boys</td>
<td></td>
<td>Div. I</td>
<td>Div. II</td>
<td>Div. III</td>
<td>Div. IV</td>
</tr>
<tr>
<td>Teachers vs. mothers</td>
<td>$-$0.074</td>
<td>$0.419$</td>
<td>$0.226$</td>
<td>$0.246$</td>
<td></td>
</tr>
<tr>
<td>Teachers vs. fathers</td>
<td>$-$0.013</td>
<td>$-0.058$</td>
<td>$0.304$</td>
<td>$0.217$</td>
<td></td>
</tr>
<tr>
<td>Mothers vs. fathers</td>
<td>$0.788$</td>
<td>$0.652$</td>
<td>$0.820$</td>
<td>$0.801$</td>
<td></td>
</tr>
</tbody>
</table>
from zero. The six, however, that did were subjected to the $z$ transformation and the resulting tenable limits at the 5 per cent level of confidence, were entered in Table IX, page 50. These could be considered, within the limitations, statistically different from zero.

The results did not demonstrate any basis for concluding that a significant relationship existed between parents and teachers on any of the four rating divisions. There appeared to be enough agreement between fathers and mothers in their rating scores to permit the generalization that fathers and mothers seemed to agree on how their sons and daughters behaved in the panoramic characteristics of the Behavior Rating Scale.

It could also be generalized from the results that parents tended to rate their children as better behaved than do teachers. This would bear out any teacher's hypothesis. In fact, the evidence seemed to insist that there was not very much homogeneity between teachers and parents, in this community, concerning the overt behavior characteristics essential to the Rating Scale.

UNIT III

SUMMARY

The naive observation that led to the investigation was that there seemed to be a cultural gap between home and school in a particular small community, leaving the child
TABLE IX
TENABLE LIMITS OF OBSERVED CORRELATIONS THAT WERE
STATISTICALLY DIFFERENT FROM ZERO AT THE 1 PER
CENT LEVEL OF CONFIDENCE

<table>
<thead>
<tr>
<th>N</th>
<th>Values of r</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Observed Minimum for significance</td>
</tr>
<tr>
<td></td>
<td>.652 .496 .350 .830</td>
</tr>
<tr>
<td>24</td>
<td>.830 .496 .650 .920</td>
</tr>
<tr>
<td>24</td>
<td>.801 .496 .595 .905</td>
</tr>
<tr>
<td>24</td>
<td>.996 .436 .990 1.00</td>
</tr>
<tr>
<td>32</td>
<td>.826 .496 .645 .920</td>
</tr>
<tr>
<td>24</td>
<td>.788 .496 .578 .901</td>
</tr>
</tbody>
</table>

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somewhere between, pendulously shifting for himself. In particular it appeared that the youngster was buffeted on the one side by the behavioral values of the home and community, while on the other by the peculiar values of the school as an institution.

From the naive observation arose the hypothesis of the study that there was a lack of significant agreement between home and youngster, and school and youngster on behavioral values, and, further, that parents and teachers portrayed little similarity in their interpretation of the overt child.

To test the hypothesis the Behavior Preference Record was administered to a sampling of parents, youngsters and teachers in the community. The results were examined for significance of mean differences to see if the differences were large enough to be reasonably attributed to other than chance fluctuations due to sampling. It was found that some differences were significant--others were not, but nothing that seemed to bear approvingly or disapprovingly on the hypothesis. The scores were then subjected to correlation and it was found that only two resulting coefficients were significantly different from zero. Even considering those two and their tenable limits, the chances for any significant agreement on any of the preference characteristics, between parents and children, was unlikely.

The Behavior Rating Scale was then administered to parents and teachers to determine what similarity these two
had in their rating of the same children. The scores were correlated and the results examined for limits of tenability within which the \( r \) might rest, and the test for significance was made. It was found that where there was generally significant agreement between fathers and mothers in rating their children, there was a lack altogether, or at least a questionable chance of the observed similarity being significant, of relationship between parents and teachers. Teachers almost always rated youngsters as behaving less satisfactorily than did parents.

It cannot be deduced from the evidence that parents, pupils, or teachers are different populations in every respect as measured. On the contrary, nonsignificant mean differences in behavior preferences exceeded significant differences by thirty-five to fifteen. It can only be said that it appeared that the hypothesis was supported from the results of the correlative analysis of the scores on both the Behavior Preference Record and the Behavior Rating Scale. However, there is no evidence at all that there is a lack of agreement between teachers and children concerning behavioral preferences.

The real value of this professional paper lies not so much in the questionable results obtained statistically as in a more general understanding of the particular community by the investigator. It also aroused some parental and teacher reexamination of school child behavior and their relationship
to and responsibility for it. A slackening in unpleasant behavioral situations was manifest in the months during and immediately following the investigation. Many parents requested that the school inform them of the differences between their own children and themselves, or between the ratings given their youngsters by teachers and themselves. It seemed to bridge, somewhat, that still hypothetical cultural gap between home and school. Certainly, existing as they do in the same culture, subject to the same traditions, laws, and mores, cherishing, for the most part, common religious principles, the expectation of them having similar behavioral preferences is probably sound.

The deficiencies of this investigation which lent manifold inaccuracies, as enumerated in the text, to the results, pointed to the need of a widely distributed design for small-community research. The small school administrator ought to have in his hands a set of general principles and techniques by use of which he would be capable of exploring into a number of aspects of community life without having to undertake a time-wasting trial and error survey.

Today, especially, when the schools find themselves under considerable fire because of their various values and philosophies, there is a need for schoolpeople to reexamine their status in the community by studying as many phases of school-community disagreement, or lack of agreement, as possible. Educational sociologists could concern themselves with
fashioning reliable devices for use in studying those relationships.

There is a need for continuous intensive study of behavioral values in all small communities. It is suggested for future studies that this investigation be improved upon and changed and fitted to other communities.

Suggested home-school opinion investigations could include:

1. A study of the agreement between home and school over interpretation of specific behavior acts of youngsters.
2. A study of the influence of role in the behavior preferences of youngsters.
3. A study of the degree of agreement between fathers, mothers, parents, and youngsters on situations requiring chaperonage.
4. A study of the relation of behavioral values to sex, age, intelligence, social standing, and home environment.
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